

The Nutrient Pollution Solution

Blue-green algae. Three words that to many Minnesotans are synonymous with a tainted or even ruined recreational visit to a lake or other waterway. This toxic and potentially dangerous algae, as well as similar forms of aquatic gunk, are natural occurrences throughout the state of Minnesota. However, human activity is a huge factor when it comes to the duration and scope of harmful algal events. Most lawn care products (namely fertilizers) contain large concentrations of nitrogen and phosphorus, two nutrients that are integral to plant growth. Unfortunately, while applying these to a yard would result in grass and other plants looking healthier than ever, the effect fertilizers have on waterways is decidedly detrimental. When these chemicals collect in lawn runoff that ends up in lakes, rivers, and streams, they contribute to a phenomenon known as nutrient pollution. This form of pollution consists of exorbitant amounts of plant nutrients (the same phosphates and nitrates that are in fertilizer) that once in water cause human health problems and provide almost limitless food for aquatic plants such as algae, causing excessive growth. As a community with many lawns and a river at its center, Northfield is a prime candidate for experiencing the effects of nutrient pollution. Many ponds such as Lyman Lakes on the Carleton campus are full of noxious algae almost year round, and over the last couple of years the Cannon River has turned completely green more than a few times, putting additional strain on delicate aquatic ecosystems already feeling the effects of climate change. However, while this is a definite problem it is fortunately a fairly simple one to remedy, as anyone who owns a lawn can contribute to the solution with a bit of mindfulness.

One big thing that anyone who owns property with a lawn can do to help prevent nutrient pollution is to responsibly use fertilizer or other lawn care products that contain plant nutrients. This ultimately comes down to either not applying fertilizer at all or doing so in a purposeful and careful way. The Environmental Protection Agency recommends to “apply fertilizer as close as possible to the period of maximum uptake and growth for grass and other plants, which is usually spring and fall in cool climates, and early and late summer in warm climates.” Other important considerations include filling fertilizer spreaders on a hard surface so that any spills can be easily cleaned up, not overwatering gardens (this can wash excess nutrients off lawns and into storm drains), and securely storing unused fertilizer. Another easy but often overlooked way to combat nutrient pollution is to always pick up and dispose of pet waste. Most animal waste, especially that of dogs, contains high concentrations of the same nutrients as lawn fertilizer. While there are much broader sources of nutrient pollution than this in Minnesota such as commercial agriculture, if every citizen of Northfield and towns like it with the means to personally fight this pollution does, we are well on our way to a solution.