Nutrients, We all Need Them

So what's the deal with **nutrients**?

Plants and **animals** living in our waterways need nutrients to grow and survive just as you do. The two main nutrients needed for growth are nitrogen and phosphorus. Can you think of where you find nitrogen and phosphorus in your body?

Nitrogen is all around us making up 78% of the air we breathe. Once in the atmosphere, nitrogen binds to dust or water in the air and then can be deposited into waterways. Nitrogen in the soil runs off of the land and gets washed into waterways. Phosphorus is found in rocks and enters lakes and streams from soil and rock erosion. Nitrogen and phosphorus also enter lakes and streams from fertilizers, animal waste, and sewage. Laundry detergent is another way that phosphorus can enter a waterbody.

Fertilizers from farmlands are a large source of nitrogen into lakes and streams. PC: United States Department of Agriculture (public domain)

Both nitrogen and phosphorus are limiting nutrients in Flathead Lake. Limiting nutrients are nutrients that are either missing or in low supply. Limiting nutrients, like phosphorus and nitrogen, control the amount of plants that can grow in an area. Flathead Lake normally has very little phosphorus or nitrogen and this limits the growth of algae and other plants. Sometimes, there can be too much phosphorus or nitrogen in a waterway. A surplus of these nutrients can hurt an ecosystem and even be unhealthy for humans. Excess phosphorus and nitrogen can lead to algal blooms, clouding up the clear waters of Flathead Lake with a green layer of phytoplankton. Algal blooms can lead to oxygen reduction in the water and kill fish. The amount of phosphorus and nitrogen detected in Flathead Lake remains relatively low helping to keep Flathead Lake blue. We all need to do our part to make sure that our activities don't lead to more nutrients entering the lake.

Algal blooms caused by phosphorus cover the waters of Lake Erie.
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