

Phosphorus Pollution in Your Back Yard – Red Creek Watershed

Genesee Valley Golf Course

Genesee Valley Golf Course is located in northern reaches of the watershed, with East River Rd. running through it. Maintained lawns require fertilization and grooming which often flows into the nearest stream.

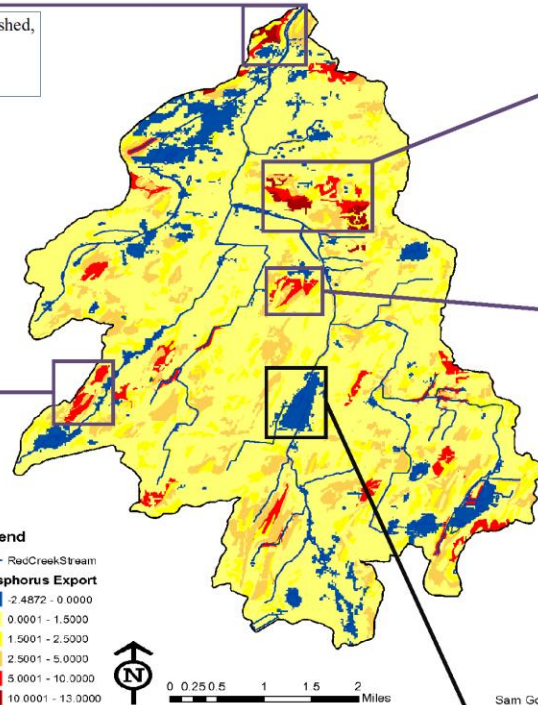


Agriculture

Agriculture practices, such as fertilization and tilling, often create debris and nutrient excesses in streams. Phosphorus is a limiting nutrient in ecosystems for plant growth, so logically farming practices are frequently sources for phosphorus pollution.



Total Phosphorus Export, Red Creek Watershed



Sam Gonzalez

Southtown Plaza, Malls

The shopping district of northern Henrietta is composed of vast expanses of parking lots and mega-stores. Because of the nearly complete cover of impervious surfaces, runoff is often an issue for phosphorus pollution.



Residential

New York state soils are already relatively phosphorus-rich, but that does not stop many Monroe County residents from over-fertilizing their lawns to get that bright green sheen. With the looming ban of phosphorus in fertilizer, these hot spots may soon decrease.



Rochester Embayment, Great Lakes AOCs

Red Creek is a 303(d) stream, meaning water quality is so damaged that it does not meet minimum water quality standards set forth by the EPA. Within New York State, there are well over 100 impaired water bodies. Red Creek flows into the Genesee River, which then flows into the Rochester Embayment, Area of Concern (AOCs). There are 43 AOCs across the Great Lakes, between both the US and Canada, areas with severe environmental degradation.



Wetlands as Sinks

Wetlands provide a natural, free ecosystem purpose of being sinks and filters for many pollutants and sediments. They also provide habitat for many birds, amphibians, and animals. While both the state and federal government regulate human impacts to wetlands today, filling and dredging occurred in the past. Additionally, invasive species such as phragmites and purple loosestrife are taking over the native environments and no longer performing those same ecosystem functions. Wetlands are incredibly valuable ecosystem tools in danger.

Eutrophication: A Global and Local Problem



The Dead Zone: Gulf of Mexico



The Caspian Sea



Chesapeake Bay

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