Agricultural Runoff

Soil testing and minimizing disturbance to the soil are key components of nutrient management. Healthy cropland soil also retains carbon, which increases resilience to climate change. Photo Credit: Farmland.org

GLRI Demonstration Farm Networks

Demonstration farms showcase management practices that prevent nutrient runoff from farmlands. Participating farms host field days and tours for neighboring farms and resource professionals to share their successes and lessons learned in adopting new practices and techniques, including no-till planting, cover crops, low-disturbance manure applications and rotational grazing. Outreach and peer-to-peer learning motivates other farmers to try these approaches. Currently, GLRI is supporting eight networks involving dozens of farms in four states — and growing. Looking ahead, plans to add new farms to the networks are underway, including greater representation from women farmers and a broader range of farm types, such as smaller operations, vegetable and grazing farms and those representing greater socioeconomic diversity.

Share your thoughts on the Great Lakes and consider the following questions.

1. How can we improve outreach and engagement with farmers on nutrient management?
2. Are there more effective ways to manage the problem of excess nutrients that lead to algal blooms?

Overview

Phosphorus runoff from agricultural lands is a primary source of excess nutrients in the Great Lakes, which can cause harmful or nuisance algal blooms (HABs). The Great Lakes Restoration Initiative (GLRI) supports multiple activities to reduce nutrient runoff and prevent HABs in key areas such as the western basin of Lake Erie, Green Bay and Saginaw Bay. Efforts to date have focused on farmer education and assistance in adopting conservation methods like soil testing, keeping the ground covered with plants year-round and creatively planting seeds and applying fertilizer while minimally disturbing the soil. These simple practices are a win-win: They can help farmers save money while minimizing their impact to the environment.

GLRI leverages and builds on existing local soil and water conservation programs. Since 2014, GLRI has more than doubled the number of farmland acres enrolled in voluntary conservation programs in the Maumee, Fox, Saginaw and Genesee River watersheds. These programs have reduced phosphorus losses significantly, preventing more than 2 million pounds of phosphorus from washing off farm fields.

Continued support for conservation planning and assistance will be vital to sustaining and expanding on these accomplishments.

In the next five years, we intend to continue supporting direct farmer assistance and outreach to reduce nutrient losses in agricultural watersheds. We will do this by:

- Expanding outreach and demonstration farm networks to improve adoption of on-farm nutrient management practices.
- Promoting practices that slow down and filter agricultural stormwater runoff, such as expanding buffers to waterways, widening floodplains on drainage ditches and creating wetlands in receiving waterbodies.

In addition, we intend to continue monitoring nutrient conditions in nearshore areas and tributaries. We have supported dozens of assessments to better understand nutrient sources and transport within Great Lakes watersheds. These studies help us better target our resources where they will be most effective to protect water quality.

For more information visit,
GLRI.us/Action-Plan
Share your thoughts by email:
GLRIActionPlanIV@epa.gov

Great Lakes RESTORATION