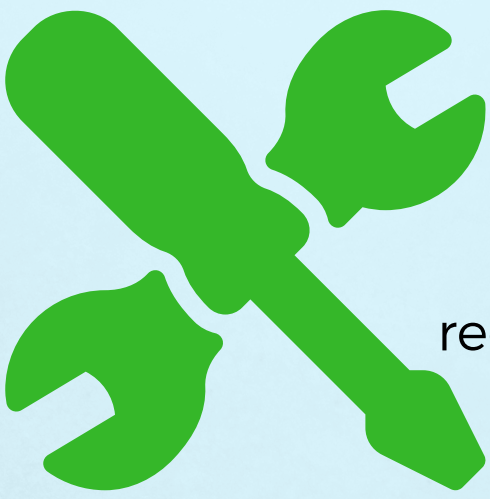
COVER CROPS AT WORK

Improving water quality through nutrient loss reductions

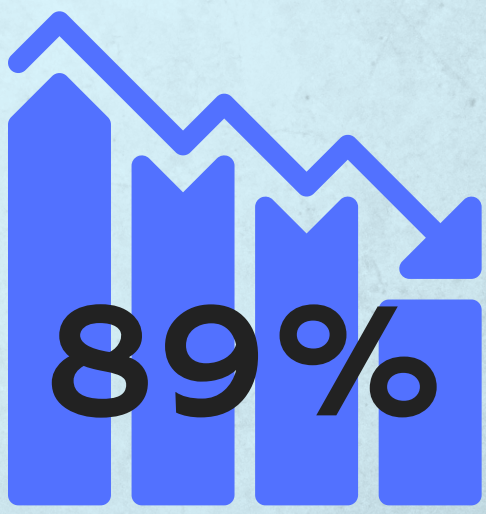


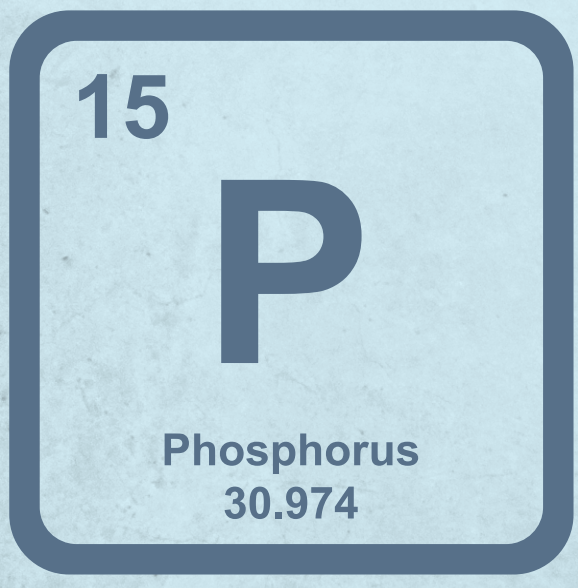
THE TOOLKIT

Cover crops are tools to keep the soil in place, improve soil health, and reduce nutrient pollution from farm fields. The cover crop toolkit includes grasses, brassicas, legumes, and other broadleaf species.

NITROGEN

Nitrogen is an important nutrient for plant growth but can become a pollutant when displaced to waterways. Cover crops reduced nitrogen losses from farm fields by up to 89%, with a median figure of 48% across 10 studies.





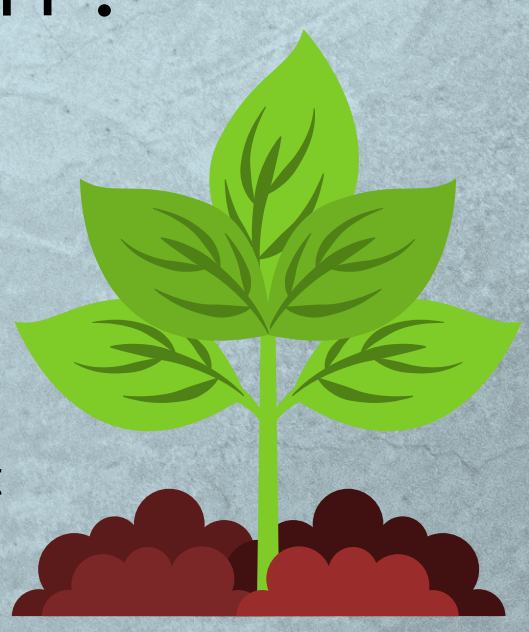
PHOSPHORUS

Though more research on cover crop impacts on phosphorus is needed, some studies demonstrated that cover crops reduced phosphorus losses by 15 to 92%.

HOW DO THEY DO IT?

Cover crops are able to reduce nutrient losses to the environment because they:

- Cover and protect the soil surface from runoff and erosion
- Scavenge nitrogen, keeping it within the soil profile and making it less susceptible to leaching
- Reduce the need for fertilizers by supplying nutrients naturally



When faced by problems such as eutrophication and hypoxia in our waterways, we can turn to cover crops as tools to mitigate pollution.

All data comes from a bibliography compiled by the Sustainable Agriculture Research and Education Program (SARE) and the University of Missouri.. This graphic was developed under Cooperative Agreement No.83695601 awarded by the U.S. Environmental Protection Agency. EPA made comments and suggestions on the document intended to improve the scientific analysis and technical accuracy of the document The views expressed in this document are those of the authors and EPA does not endorse any products or commercial services mentioned in this publication.