



**ATTENTION DAIRY FARMERS:
LOOKING TO REDUCE PHOSPHORUS IN DAIRY MANURE?
PLEASE LET US KNOW!**

Trout Unlimited is currently working on a project to determine the feasibility of reducing soluble phosphate in dairy manure by using mine drainage residuals (MDR). The treatment of mine drainage creates solids – MDR - that contain iron, aluminum, and calcium minerals. These solids have a high capability for phosphate sorption. Land applied dairy manure can be a major source of phosphate pollution to receiving streams. A practice has been tested where dry powdered MDR is added to stored dairy manure before it is land applied. The MDR does not affect the manure's total nutrient concentrations. It transfers the soluble phosphate to an insoluble form that is less likely to wash away during precipitation or snowmelt. In 2009, MDR-amended manure was spread in a field subsequently planted with corn. There was no evidence that crop yield was affected by phosphate deficiency.

Trout Unlimited would like to expand this demonstration to other dairy farms in PA. The ideal farm is one where manure is stored in a tank and periodically applied to no-till fields. The dosing rate is approximately 120 lbs MDR per 1000 gallons of manure. The cost of the MDR is covered by the grant and IOR would work with cooperating farmers to minimize the inconvenience of MDR addition to the manure. Trout Unlimited is seeking 10-20 farms that are able to incorporate MDR into their spring 2010 manure spreading.

This project is one of many that Trout Unlimited has undertaken as part of its West Branch Susquehanna Restoration Initiative. Launched in 2004, this initiative is aimed at the restoration of coldwater streams and the ultimate recovery of the West Branch Susquehanna River. This is a win-win project for finding a beneficial use for MDRs, while at the same time providing a new, cost-effective way to reduce phosphorus levels in the Chesapeake Bay watershed.

The project is funded by a grant to Trout Unlimited by the USDA-NRCS Chesapeake Bay Conservation Innovation Grants program as administered by the National Fish and Wildlife Foundation. Project partners include Trout Unlimited, Iron Oxide Recovery, Oklahoma State University, and the PA Department of Environmental Protection.

If you are interested to learn more about this project and how you might participate, please contact Amy Wolfe at Trout Unlimited by email at awolfe@tu.org or by calling (570) 748-4901.

Trout Unlimited is North America's leading coldwater fisheries conservation organization, with more than 140,000 members dedicated to conserving, protecting, and restoring North America's coldwater fisheries and their watersheds.