

CONSERVATION *Showcase*

Winemaker Helps Reduce Contaminates in Lake Erie

Erie County, PA

November 2012

Randy Graham, a fourth generation grape farmer and, most recently, winery owner and winemaker is using USDA's Great Lakes Restoration Initiatives (GLRI) funds to reduce contaminants and sedimentation from reaching the waters of Lake Erie in Northwestern Pennsylvania.

Randy is owner and operator of South Shore Farms and Courtyard Wineries, which encompasses 125 acres of juice and wine grapes. The winery is located in the Concord grape belt of Erie County, Pennsylvania, along the shore of Lake Erie. Through the Environmental Quality Incentives Program (EQIP) administered by the Natural Resources Conservation Service (NRCS), Randy has applied conservation practices such as Integrated Pest Management, Nutrient Management and No-till Cover Crops.

These conservation practices are helping to improve environmental quality and operational efficiency for Randy. By reducing the numbers of sprays and chemicals he uses, he is better able to manage the amounts and placement of nutrients and prevent nutrient overload and runoff. Additionally, practicing no-till and growing cover crops improve soil health. Randy's goal to minimize tillage reduces compaction which restricts water infiltration and increases runoff. Minimizing soil disturbance via no-till increases the soil's ability to hold water which in turn reduces erosion and flooding. In addition, Randy's use of diverse cover crops throughout the year helps reduce nitrogen leaching into subsurface water. This nitrogen reduction is essential in protecting fish that migrate up stream of the nearby Twelve Mile Creek—a high-quality, cold-water fishery.

Prior to these practices, runoff from the vineyard and unimproved road were causing erosion and delivering excess chemicals, nutrients, and sedimentation directly into the creek.

NRCS is able to provide producers like Randy Graham technical and financial assistance to implement a variety of conservation practices on their operation. For more information on our programs and services, please visit your local USDA Service Center, or www.pa.nrcs.usda.gov.



An access road was installed along Twelve Mile Creek to prevent runoff from reaching the water.



The vineyard at South Shore Farms and Courtyard Wineries.