



# Rice County erosion project aims for flood prevention

January 2015 Snapshots

Flooding has been a problem within Rice County's Spring Creek watershed for the past several years. Heavy rains and resulting high waters have eroded gullies and washed away roads in Bridgewater Township, flooding houses all the way into Northfield, a few miles down the road. Using \$35,000 in flood relief appropriations from the Board of Water and Soil Resources, the Rice Soil and Water Conservation District (SWCD), in partnership with the Bridgewater Township, began work to address the issue.



Work centered on a local farm that was already using best practices like strip-till farming to try and control erosion and runoff. These efforts weren't quite enough when heavy rains fell. Over many years, weather and high waters took a toll, forming gullies along the property. The SWCD estimates that 200 tons of soil were being lost annually from these gullies, as water ran off the farmland downstream.



To address the erosion and prevent future washouts to county roads, the SWCD installed a grade stabilization structure called a berm that will slow water down and allow water to drain slowly rather than all at once. The gullies along the edge of the field will be controlled, slowing their creep into crop acreage. Engineering for the project was provided by the Southeast Technical Support Joint Powers Board.

"This project is very rewarding, as it is a great example of how SWCDs can have an impact on flooding, water quality, and soil erosion," said Steven Pahs, Rice SWCD District Manager. "We expect to see a 50% reduction in peak runoff during a 10-year storm event for this 200 acre watershed.



The project was completed in November 2014, although seeding won't be finished until next spring. Thanks to the conservation measures, more soil will be kept on the land, hopefully reducing the flood risk to Bridgewater Township and the City of Northfield.

*Pictured, top: 125<sup>th</sup> Street in Bridgewater Township was washed out after a heavy rain event. Middle: Deep gullies have formed along the edge of the property. Bottom: South end of the newly constructed grade stabilizer.*