



# Hay Creek Watershed Sediment Reduction Project

## Featured Project

A partnership of local, state and federal organizations has used various funding sources to target nonpoint pollution reduction efforts to the Hay Creek Watershed, a 24-square-mile area in Becker County that features several high-quality lakes. One funding source was a state Clean Water Legacy grant that was received in 2008 by the Buffalo-Red River Watershed District. The \$185,000 grant was received through a competitive process administered by the Minnesota Board of Water and Soil Resources (BWSR). The grant leveraged local and federal dollars, and it built on previous efforts to identify locations where conservation projects could provide the greatest benefits for water quality and wildlife habitat.



Once complete, gullies such as these will be closed and farmable.

Stinking Lake is a shallow lake in the watershed that provides high-quality waterfowl habitat and flood water storage. Protecting the lake has been a major concern of the watershed district and other organizations, including the Becker Soil and Water Conservation District (SWCD), U.S. Fish and Wildlife Service, and Ducks Unlimited. The watershed district used computer modeling to quantify sediment yield from various sources and to identify potential solutions to turbidity and sedimentation in Stinking Lake. The modeling effort was partly funded through an EPA Clean Water Act (Section 19) grant, administered by the Minnesota Pollution Control Agency.

The watershed district in partnership with the Becker SWCD and the USDA Natural Resources Conservation Service (NRCS) field office staff developed a plan to install 20 water and sediment control basins and 60 acres of buffer strips of native vegetation to be established along either side of Hay Creek. They contacted landowners and operators and explained the benefits of installing water and sediment control basins and buffers. They also explained the financial assistance available through the State Conservation Cost-Share Program, federal Environmental Quality Incentive Program (EQIP) and Conservation Reserve Program (CRP), and incentives offered by the watershed district.



The response exceeded what was originally expected. In 2009, 25 water and sediment control basins and 99 acres of native buffer plantings were installed in the Hay Creek watershed. Those projects led to more interest from landowners, so an additional 24 water and sediment control basins and 78 acres of buffers are scheduled to be installed in 2010.

**Location:** A 16,000-acre watershed along U.S. Highway 10 in Becker County, from the border of Clay County to the west edge of Lake Park.

---

# BWSR Featured Project

---

**Partners:** Buffalo Red River Watershed District, USDA Natural Resources Conservation Service (NRCS), Becker SWCD, West Central Minnesota Joint Powers Engineering Office (WCMJPB) and landowners / operators in the Hay Creek Watershed.

**Project Timeline:** July 2005 - June 2009

**Project Costs / Funding Sources:** As of February 2010, project costs for sediment basins, filter strips, and wetland restorations were \$467,340. Funding sources included \$232,327 in federal dollars through the Environmental Quality Incentive Program (EQIP) and Conservation Reserve Program (CRP). The remaining \$235,013 came from local and state funds, including the \$185,000 Clean Water Legacy grant, \$50,000 from the Buffalo-Red River Watershed District, State Conservation Cost-Share Program dollars through the Becker SWCD, and project costs paid by landowners/operators.



**Gully being closed after tile and sediment basin installation as part of the Hay Creek Watershed Project.**

**Keys to Success:** Selling the conservation practices to landowners in the watershed by NRCS staff and Becker SWCD staff. Engineering survey, design, and layout by the WCMJPB Engineering staff. Landowner cooperation to install practices. Construction supervision and certification by the Becker SWCD staff. All of the conservation organizations and landowners that have worked together has resulted in a successful start to the on-land treatment of the sedimentation issue in the Hay Creek Watershed.

**BWSR roles:** BWSR administered the Clean Water Legacy competitive grant program. BWSR received Clean Water Legacy funds in 2006, 2007 and 2008 to implement conservation practices that reduce nonpoint pollution as part of the state's overall effort to address its impaired waters and protect high-quality resources. Grants were awarded through a competitive process that emphasized selecting priority projects identified in local water plans or contained in approved TMDL implementation plans.

**Measurable Outcomes:** The following practices were installed in 2009: 11.25 miles of filter strips in 32 fields, 20.9 acres of wetland restoration, and 25 water and sediment control basins. Practices that have been designed and will be installed in 2010 are 7.9 miles of filter strips in 20 fields, 3.5 acres of wetland restoration and 24 water and sediment basins.

Total pollution and soil loss reduction for the 2009 projects:

- Annual reduction of phosphorous from surface water 9,923 pounds/year.
- Annual reduction of sediment delivery to surface water 8,391 tons/year.
- Annual soils savings on cropland 7,858 tons/year.

**For more information:** Brad Grant, Becker SWCD 218-846-7360