



# Upper South Branch BMP Strategic Implementation



## Clean Water Funds: 2011

Clean Water Grant	\$135,363
Leveraged Funds*	\$33,841
Total Project Budget	\$169,204

\* Leveraged Funds include required 25% local match

### Targeted Water:

South Branch of the Buffalo River upstream (south) of the Clay

### Project Sponsor:

Buffalo-Red River Watershed District

### Partners:

Wilkin SWCD, West Otter Tail SWCD

### Grant Period:

January 2011 - December 2012

### Project Contact:

Bruce E. Albright, Administrator  
(218) 354-7710  
brrwd@bvillemn.net  
www.brrwd.org

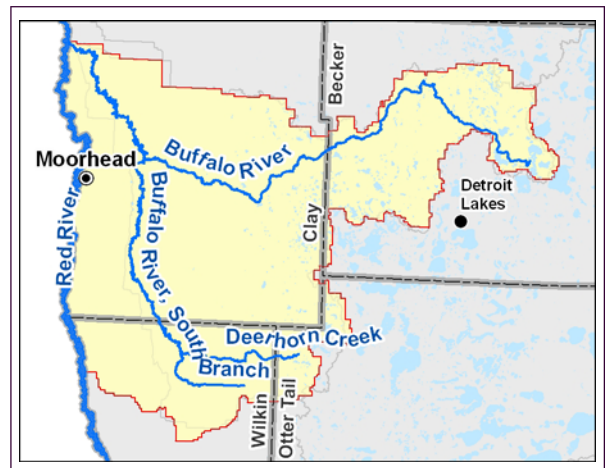


## Project Narrative

Portions of the South Branch of the Buffalo River are currently overloaded with sediment. Two primary waterways in the watershed, Deerhorn Creek and the South Branch, are listed as impaired for turbidity. Due to sediment deposition in the channel, the waterways have lost much of their capacity. Historical attempts by landowners and others to restore the capacity of the channel by removing sediment have had limited success due to additional excess sediment being washed into the channel.

The project addresses a 155 square mile watershed. LiDAR terrain analysis will be used over the entire watershed area to identify existing and potential areas of high sediment contributions (i.e. gullies). The analysis will target the best locations for measures to reduce sediment loads and runoff. This analysis will help identify and rank high priority areas for installation of soil conservation practices such as sediment control basins and side inlet structures. Both of these methods will reduce the peak discharge rate of the watershed by storing runoff in the watershed. Also, by temporarily storing the water within the contributing watershed, these practices will reduce the sediment and nutrient loads traveling downstream.

The Buffalo-Red River Watershed District has partnered with the Wilkin and West Otter Tail SWCDs to complete this project. This initial phase will result in a best management practices (BMP) implementation plan along with some construction of side inlets, sediment basins, and other BMPs. Future phases will be primarily geared towards funding BMP installation and landowner coordination.

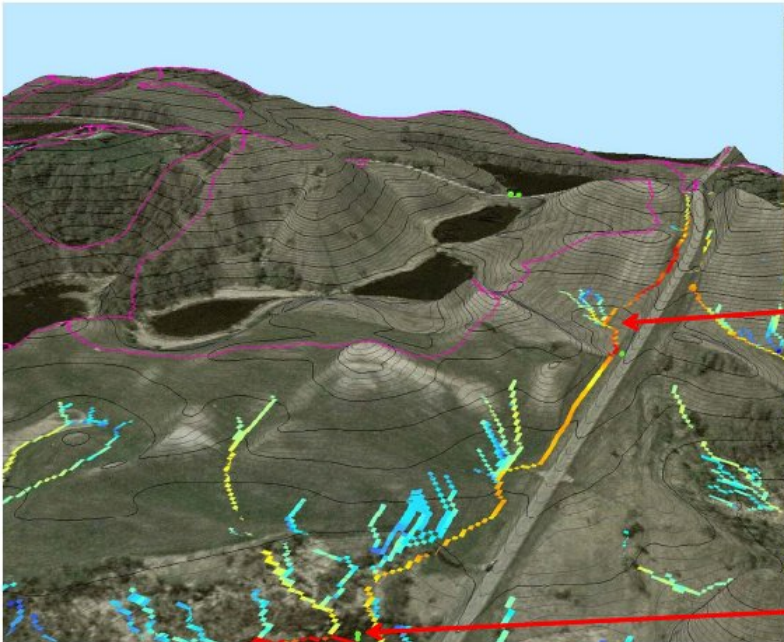


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Field erosion

Calibration to real world situations.



Identifying erosion and deposition sites with LiDAR analysis