



# Lac qui Parle Yellow Bank Watershed Terrain Analysis



## Clean Water Funds: 2013

Clean Water Grant	\$66,572
Leveraged Funds*	\$16,643
Total Project Budget	\$83,215

\* Leveraged Funds include required 25% local match

### Project Sponsor:

Lac qui Parle-Yellow Bank Watershed District

### Grant Period:

January 2013—December 2015

### Project Contact:

Mary Homan



- AcceleratCWF13-132ed Implementation

## Project Narrative

The Lac qui Parle-Yellow Bank Watershed District will contract with the Water Resource Center at the Minnesota State University in Mankato to complete a Geographic Information System (GIS) terrain analysis for the watershed. It will concentrate on the impaired reaches of the Lac qui Parle and Yellow Bank Rivers and tributaries. This inventory will utilize LiDAR elevation datasets to create many GIS datasets by spatially analyzing the elevation data. Multiple watershed maps will be developed and will show priority ranking of conservation practices and areas to target based on environmental sensitivity variables.



This analysis will provide valuable data for future planning and prioritizing of projects when partnering with Lac qui Parle, Yellow Medicine and Lincoln County Soil and Water Conservation Districts and Natural Resource Conservation Service offices. The precision conservation strategies involving LiDAR based DEM terrain analysis, will prove its worth in future planning with conservation efforts tailored to the specific landscapes and in the placement of practices within the critical source areas.

### Proposed Outcomes:

1. Create a LiDAR dataset that can be used to develop accurate hydrologic characteristics of the watershed.
2. Assess existing watershed conditions and identify critical source areas using Stream Power Index, the Compound Topographic Index, and Environmental Benefit Index
3. Share results with each county

### Actual Outcomes:

Project in Progress

