

The waters of northeast Minnesota are one of the jewels in our state's crown. They are important natural resources, an economic driver, and a destination for tourists and sportspeople alike. Impaired watersheds are rare in this part of the state and the Knife River is one of them.

The Knife River plays an important role in the region for a number of reasons. It is home to Minnesota's naturalized wild steelhead trout population. Water quality in the river impacts Lake Superior.



The problem in the Knife River is turbidity – cloudy water – caused by soil erosion along the river's banks. Since 2010, the Lake County Soil and Water Conservation District (SWCD) and its partners have successfully designed and implemented several projects aimed at reducing the Knife River's turbidity, multi-benefit work that will make a difference both for water quality and wildlife habitat.

The SWCD identified five banks on the river that were priorities for stabilization, and in 2012 received a \$221,000 Clean Water Fund (CWF) grant to stabilize the largest one. Flooding in the region delayed the project and work was finally completed during this last field season.

"It was a doozy," Lake SWCD Manager Dan Schutte said. "The scope was huge."

The stabilized bank is 1,200 feet long and 80 feet high, which is quite a footprint. It was designed to follow the natural channel and has drawn interest from other districts as a demonstration site for this type of approach to river restoration.

The SWCD was able to leverage federal funding thanks to the CWF grant. The Great Lakes Commission awarded the district an additional \$293,000 grant to work on additional streambank and channel stabilization projects along the Knife, so they were able to maximize their impact.

The SWCD estimates that through the CWF project alone, they'll reduce sediment loading to the river by 21%, which amounts to 750 tons of sediment a year. District staff are encouraged by what they've seen so far. Vegetation is taking off, and the restored banks are performing well with the river flow.



*Pictured, top: Construction of the new bank.  
Pictured, bottom: Floodplain bench installed at the  
bank stabilization site on the Knife River.*

"You can already visibly see how it's keeping sediment out of the river," Schutte said. "We've set ourselves up for success."