



Protecting Lake Minnewaska

June 2016 Snapshots



The majority of Pope County is located within the 1.3 million acre Chippewa River Watershed which includes Minnesota's 13th largest lake, Lake Minnewaska. This 8,050 acre lake is an economic driver in the region. The lake's water quality is important to the community.

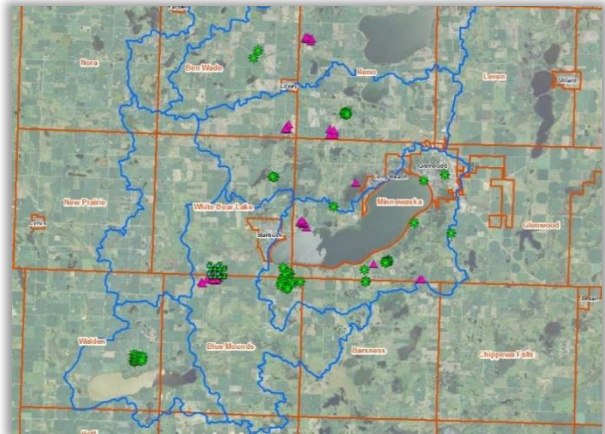
The Chippewa River Watershed has 22 years of monitoring data that was used to develop the Pope County 8 Lake TMDL study. Grounded in the study results, the Pope County Local Water Management Plan has set its sights on protecting Lake Minnewaska. The Plan contains goals to improve the water quality of four lakes which ultimately outlet into Lake Minnewaska, and concentrates efforts to address drainage directly into the lake.

The primary water quality issue for Lake Minnewaska and the other lakes in the watershed is storm water runoff from the city of Glenwood and rural gully and ravine erosion. The watershed is glacial moraine area with steep grades. Agriculture is the predominant land use in the area. When the topography and farming practices combine, nutrient delivery to these water bodies is inevitable.

Pope County Coalition of Lakes Association monitoring indicates that water quality trends for Lake Minnewaska are holding steady, but without conservation projects those trends may decline. Citizen stream monitoring data in 2014 confirms this, showing significant decreases in water clarity after storm events because of ravine and gully erosion within the subwatershed.

Pope Soil and Water Conservation District (SWCD) has targeted efforts in the region to where they're needed most. Sixty-two practices have been implemented in Malmedahl, Pelican, Strandness, Ann, and Minnewaska Lakes thanks to Clean Water Fund grants. Combined, those practices are estimated to reduce 1,505 pounds of phosphorous and 3,263 tons of sediment from entering the lakes annually.

The City of Glenwood did a water quality assessment and Best Management Practice prioritization in 2015 on approximately 1,796 acres that contribute runoff to Lake Minnewaska and impact its water quality. Using the assessment's results to implement additional practices could potentially result in an annual reduction of 1,297 pounds of phosphorus and 203 tons of sediment. That's good news for Lake Minnewaska's water quality.



Pictured top: A map of the subwatershed. The areas in pink are in-progress projects, those in green are completed.

Pictured bottom: Erosion like this increases sediment in the lake.