

Restoring Summit Lake: A rare opportunity



An August drone photo shows a recently restored Summit Lake and wetland complex in Nobles County. Once a natural lake, the site was drained in the early 1900s and farmed for much of the 20th century. Project construction was completed in 2017. **Photo courtesy Nobles SWCD**



Nobles Soil & Water Conservation District (SWCD) staff and supervisors seized a rare conservation opportunity when it arose: An ambitious Summit Lake and wetland restoration that would provide upland water storage and wildlife habitat.

most recently by the Gruis family. The Gruises wanted to permanently protect the land, so they enrolled their property in the Reinvest in Minnesota (RIM) Reserve Program. RIM aims to protect and improve water quality, reduce soil erosion, and enhance fish and wildlife habitat on privately owned land.

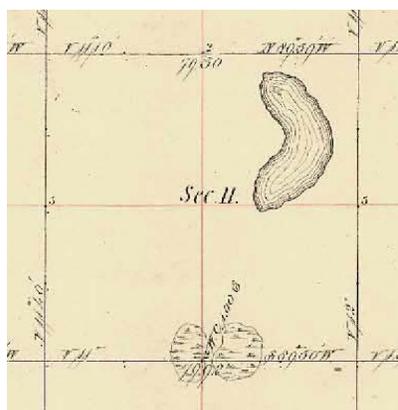
“If we didn’t have the RIM funding at the time, this would still be farmed,” Nobles SWCD District Manager John Shea said Aug. 22 during a site visit as part of BWSR’s annual board tour.

The site had been on the SWCD’s radar for years. Its position high in the Kanaranzi-Little Rock Watershed — just on the Missouri (west) side of the Des

The SWCD in 2015 contacted Minnesota Board of Water and Soil Resources (BWSR) staff to initiate a partnership.

Once a natural lake, the site 10 miles northwest of Worthington was drained in the early 1900s, and then farmed for most of the 20th century. The drainage structures installed in the early 20th century to make farming and pasturing possible remained largely intact.

The nearly 300-acre field was farmed



Left: An 1868 pre-settlement public land survey depicts the Summit Lake Township project area. **Right:** The Summit Lake area in this 2011 aerial photo was farmed before restoration. **Photos credits:** Minnesota Geospatial Information Office (left photo); USDA Farm Service Agency (right photo)

Moines River/Missouri River Basin divide — made it an ideal location for upstream water retention.

When a land transfer stipulated that the property be sold, the Nobles SWCD purchased the land in 2015 to maintain the easement. The sale also ensured that the restoration would move forward as envisioned. It's the first and only property the SWCD has purchased.

“When we were managing the construction portion of the project, we had a unique situation where we didn't have to be the ‘go-between’ and could make decisions about the direction of the project,” Shea said.

After the SWCD purchased the site, BWSR and SWCD staff planned structural changes that would maintain drainage to neighboring parcels on the shared county drainage system while providing storage and wetland enhancements for the restoration. Plans were finished in 2016; the restored lake and wetland were constructed in 2017. Construction cost \$53,344.

The Summit Lake Township project restored the nearly 100-acre lake basin plus a wetland complex to the south, providing water quality improvements, additional water storage space, and



Nobles SWCD District Manager John Shea (left) gives a presentation with BWSR Clean Water Specialist Mark Hiles at Summit Lake during BWSR's annual board tour Aug. 22.

Photo Credit: Mary Juhl, BWSR

enhanced wildlife habitat. Native grass plantings and a small tree plot completed site work.

“This year, a youngster harvested a banded duck at this site,” Shea said. “The place is definitely an attraction for waterfowl.”

A natural impoundment — formed by a lakeshore and a constructed berm — keep overflow toward the center of the site. The water flows south to form the wetland complex.

A control structure near the downstream edge of the property can manipulate water levels, allowing the site to fill to a depth near the original lake's natural state. The outlet is connected to Judicial Ditch 11B.

The SWCD established an operation maintenance agreement with Nobles County to operate the control structure, which allows water levels to be adjusted as needed. Annual maintenance is projected to cost \$3,000 to \$5,000.