

Isanti SWCD expands focus to lakes



At a Stanford Township park on Blue Lake, contractors used coconut-fiber logs at the water's edge, back-fill at the base of the hill, and a 2-foot-tall stone retaining wall that doubles as a seating area. Nearly 250 plants — including native grasses, sedges and shrubs — grow in a hilltop rain garden and on the hillside. The gully is gone. Permeable stairs keep swimmers, picnickers and boaters off the hill.

Photo Credits: Ann Wessel, BWSR



Blue Lake water quality effort is one example of the SWCD taking on more than agricultural projects as townships, lake improvement district support Clean Water Fund-backed plans to curb phosphorus at this popular fishing, boating spot



One of the Top 3 recreational lakes in Isanti County, Blue Lake is fighting to preserve its water quality.

A popular fishing, boating and swimming spot under increasing development pressure from northern Twin Cities suburbs, Blue Lake was starting to produce more algae blooms. Monitoring in 2016 showed the lake failed to meet state water quality standards because of slightly elevated phosphorous and chlorophyll-a levels.

Blue Lake isn't on the Minnesota Pollution Control Agency's (MPCA) impaired waters list yet. Lakeshore property owners and Isanti Soil & Water



Conservation District (SWCD) staff aren't waiting for that to happen before pursuing water quality improvements.

"It has relatively good water quality. That's one of the reasons that we're putting a lot of focus on protecting the lake right now," said Isanti SWCD Manager Tiffany Determan.

Top: Isanti SWCD Manager Tiffany Determan walked up the permeable stairs. **Above:** Isanti SWCD conservation technician Todd Kulaf sat on the retaining wall.

With a \$251,000 Clean Water Fund grant from the Minnesota Board of Water and Soil Resources (BWSR), Isanti SWCD staff in 2018 started work on conservation projects that target runoff and phosphorus. The \$314,500 effort includes matching funds from the Blue Lake Improvement District (LID), two townships, and private landowners.

The grant runs through 2020.

Isanti SWCD staff resumed work this spring with private landowners at high-priority sites. Three wetland restoration options are under consideration, too. Surrounding wetlands connect to the 251-acre, spring-fed lake.

Last season's Blue Lake projects included a \$50,000 shoreline restoration at a Stanford Township park adjacent to a Minnesota Department of Natural Resources (DNR) boat access. Stanford and Spencer Brook townships also completed stormwater reduction projects.

Stanford Township Board members were discussing a shoreline stabilization when the Clean Water Fund grant became available.

The township park project stabilized 110 feet of shoreline and hillside, which will curb how much pollutant-carrying sediment enters the lake. The lake attracts Twin Cities anglers who pursue bass, walleye, northerns and panfish.

"Blue Lake has a little bit of everything," said Wayne Anderson, a Stanford Township board member, small-business owner and part-time farmer.

Anderson, who raises beef cattle on the 100-year-old



Marvin Paulson reflected on the changes he hopes to see on his Blue Lake property 10 years from now: "We'll have wonderful plantings that will have grown. It'll take less time to mow the yard. ... And the quality of the water should improve."

Project Details

GRANT MATCHES: Cash and in-kind grant matches include \$33,000 from the Blue Lake Improvement District, \$14,215 from Stanford Township, \$8,180 from Spencer Brook Township, and \$8,230 from private landowners.

LAKE STATS: Blue Lake is two connected lakes. Little Blue on the north is a shallow lake, 10 feet at its deepest. Big Blue is classified as a deep lake, 30 feet at its deepest.

MONITORING: Ten times a season, SWCD staff and LID volunteers collect data

including phosphorus, chlorophyll-a and Secchi disk readings.

RESULTS: In 2016 phosphorus failed to meet the state water-quality standard by 2 micrograms per liter. Chlorophyll-a failed to meet the standard by 4 micrograms per liter. The 2018 readings met water-quality standards — partly because of factors that reduced runoff. Water quality fluctuates from year to year. Blue Lake's readings have remained borderline, but trending toward poor water quality over the past few years.

family farm where he grew up, is among a dwindling number of livestock producers in the township. Land use in the 7,200-acre watershed mirrors that of the county — 25 percent ag, 25 percent forested, 50 percent residential or ripe for development.

"It's becoming more populated. There still are farms, but they're becoming smaller and smaller as development moves in," Anderson said.

Meanwhile, the township park is becoming more popular.

"Opening day of fishing, there'll be cars and trucks parked all the way out to the main highway almost a half-mile out," Anderson said. "On major weekends and holidays it's over-full."

Directly across the lake, Marvin Paulson was working on his shoreline restoration last August. He was the first landowner to sign up when

the grant became available.

"The timing was just right. We wanted to improve our lot, we wanted to improve the quality of the water, and this gives us an opportunity to do that," Paulson said.

Paulson and his wife, Mary, moved here in 2003. He'd spent time at his parents' cabin on an adjacent lot since the 1960s. He eventually purchased that land and built a house.

Paulson had rented a skid loader to dig a filtration trench. A buffer will help to slow runoff.

"There will be less to mow and it'll help the water get purified before it gets to the lake," Paulson said, adding that he had noticed more algae in recent years. "It just seems to be better to make the water clean before it gets into the lake."

Since the SWCD widened its focus in 2013, Determan said lakeshore and residential landowners' response has been overwhelming. While grants aren't available for every project, Determan said staff can offer technical assistance or suggestions.

The Blue LID also formed in 2013. Its taxing authority provided resources to continue decades of invasive species monitoring and control. The LID contributed a \$33,000 match toward the Isanti SWCD project. Its members help with lake monitoring, education and outreach.

"Clearly, people working together is the crucial part of this, feeling that they're accomplishing the goals of improving their water quality and the quality in general of the lake," said Bill Yueill, chairman of the 140-member Blue LID.