LE SUEUR COUNTY



Le Sueur County farmer Shawn Onken stood in the 40-acre soybean field where contractors were repairing one water and sediment control basin and constructing another. With a Clean Water Fund arant from the Minnesota Board of Water and Soil Resources. Le Sueur Soil & Water Conservation District staff targeted projects to reduce runoff within the Lake Volney watershed. **Photo Credits:** Ann Wessel. RW/SR

Targeting Lake Volney



YouTube Video

https://youtu. be/kldBUcoEJY From topsoil-saving field work to rain gardens, the runoff-reducing projects farmers, lakeshore property owners installed working with Le Sueur SWCD and a Clean Water Fund grant benefit water quality

LE CENTER — Shawn Onken's 10-year-old son wants to be a farmer like his dad.

The conservation practices installed today through a Clean Water Fund grant will help to ensure the Le Sueur County farmland is still productive when he's ready to take over.

Onken is among 14 landowners who have treated a combined 450 acres through \$415,240 in targeted restoration projects meant to curb erosion and clear up Lake Volney. A rarity in southern Minnesota, spring-fed Lake Volney is deep — 65 feet at its deepest — and relatively clear for the region.

Le Sueur Soil & Water Conservation District Manager Mike Schultz said in the past, kids from throughout the county were bussed here for swimming lessons. In 2002, the Minnesota Pollution Control



A wetland enhancement originally slated as one of the targeted grant projects was enrolled in the Minnesota Conservation Reserve Enhancement Program instead. A trend toward higher rainfall totals flooded what once was farmland. Lake Volney is across the road.

Agency listed Lake Volney as impaired for aquatic recreation because of excess nutrients.



Le Sueur Soil & Water Conservation District Manager Mike Schultz, left, stood at the edge of a 200-acre field where erosion control structures were installed with help from a Clean Water Fund arant meant to reduce runoff. A gravel road separates the field from lakeshore homes. **Below:** The 2.017-acre Lake Volney watershed contributes to the Cannon River watershed, which feeds the Mississippi River.

A \$325,240 Clean Water Fund grant from the Minnesota Board of Water and Soil Resources targeted priority projects to reduce runoff — and the phosphorous and other nutrients it carried — within the 2,017-acre watershed. The Lake Volney watershed is perched high within the Cannon River watershed, which feeds the Mississippi River. Phosphorus feeds the algae that turns lakes green.

Work accomplished through the grant would reduce phosphorus by an estimated 1,296 pounds a year, save an estimated 2,510 tons of soil a year — the equivalent of 193 dump truck loads — and cut total suspended solids by an estimated 907 tons a year.

The grant helped Onken replace ineffective structures and add new ones.

"It's huge — and maybe more to my kids as the generations go on. If we continue down this path and my topsoil keeps moving down through the watershed, we're just



more or less abusing our land and there's less and less topsoil for the next generation," Onken said.

Shawn and Randee Onken run about 1,000 acres, and operate a small commercial grain-hauling business. Onken moved to Le Center as a kid, and worked for a farmer who later became his father-in-law.

The family's work with the Le Sueur SWCD dated back to 1998. Some of those projects had exceeded their intended lifespan by 10-plus years.

Shawn Onken met with Schultz in November on the 40-acre soybean field where one water and sediment control basin was being repaired and another was being constructed. It's one of two sites where additional grant work became possible after a landowner opted to enroll in the Minnesota Conservation Reserve Enhancement Program (MN CREP) instead.

Most of Onken's grant-related improvements — nearly \$47,900 worth of work on two fields — finished in 2017 on a 200-acre field separated from lakeshore homes by a gravel township road.

Onken described the 2013 torrent that followed a spring too wet for fieldwork. He planted a summer cover 66

The best way to treat water quality and nutrient issues is you start in the upper watershed.

– Mike Schultz,
Le Sueur Soil & Water
Conservation District

crop to meet USDA Farm Service Agency insurance requirements.

"It was about the Fourth of July. It was hot. We seeded the oats, rolled it — and that night we got 6.5 inches of rain on powder-dry dirt that was just perfect for erosion. Sheets of topsoil went into the ditches towards the lake. It was a rare occurrence, but it shows you what can happen. The perfect storm happened," Onken said.

"Three weeks later, we probably would have had very little erosion," Onken said.







Left: A treeline marks the highest point in the 2,017-acre Lake Volney watershed. **Middle:** A contractor worked Nov. 8 in Shawn Onken's 40-acre Le Sueur County field. **Right:** Conservation work throughout the Lake Volney watershed augments projects completed through a Clean Water Fund grant. Here, a previously installed basin (in the foreground) and related work prevent erosion from a culvert replacement.

After the storm, Schultz said a layer of topsoil 6 to 10 inches deep filled the basins and plugged culverts already clogged with debris from earlier rains. Water ran over the road. Dirt settled between lakeshore homes.

"We've put in the sediment basins in the right places. We've put in the stormwater ponds in the right places.



We've worked with the township to put in the right culverts

in the right places," Schultz said during a stop at the site, where slight rises in the field indicated erosion control structures and where a bank of grass grew between the field and road.

Lake Volney is among the smallest, deepest and cleanest lakes in the Cannon River watershed. About 45 houses and cabins, a small county park and the Minnesota Department of Natural Resources' 1.64-acre Volney Lake Aquatic Management Area ring the 277-acre lake.

Jay Witty, 54, is treasurer of the Lake Volney Association, an active group with about 35 members. About half of the lakeshore property owners, including Witty, live here yearround.

Grant partners

The Minnesota Board of Water and Soil resources awarded the \$325,240 Clean Water Fund grant to Le Sueur County. The Le Sueur Soil & Water Conservation District carried out the work. Landowners provided \$25,000 in matching funds. The rest came from

Three years ago, he and his wife bought her parents' house on Lake Volney. He'd kept his boat there since 2008 when the place was built.

Witty occasionally goes fishing — the lake supports panfish, northerns, bass and some walleye. His children grew up water-skiing and wake-surfing. He still swims in the lake.

"The state, the county, area farmers — they're all working together to try to stop the nutrient flow as much as possible into the lake, which ultimately is going to affect the entire watershed," Witty said.

"There's no way it can't be a positive — what they've done. Everything they've done has done something to try to improve that (water quality) and reduce that flow," Witty said. "I find it hard to believe over time we won't see some positive impacts."

\$42,500 in county gravel tax revenue, which paid for three shoreline protection projects; \$9,500 from the Volney Lake Association; \$8,000 in in-kind technical and administrative assistance; and a \$5,000 Bush Foundation Grant via the Cannon River Watershed Partnership.

The grant wraps up Dec. 31.

It's built water and sediment control basins, stormwater basins, drainage outlets, plus culvert and inlet stabilizations. Adjacent conservation practices within the watershed augment Clean Water Fund projects.

Those include the MN CREP enrollment, originally planned as a Clean Water Fund wetland enhancement with water-quality and fish spawning benefits involving the Minnesota Department of Natural Resources.

"The wetland they were going to enhance through the grant is wetter now than it ever had been," Schultz said.

With increasingly heavy rains, historically dry spots held water and made farming impossible. The lake level rose by about 1 foot, which is why SWCD staff believes water being pumped off

the field was returning via groundwater. The drainage system couldn't keep up. And it required major repairs.

"We got storage benefits. We're going to get nutrient absorption through all the plants, and a place for all the nutrients to settle out. We are going to have additional wildlife benefits. The landowner is getting some compensation for a piece of farmland that he no longer is able to farm," Schultz said.

That MN CREP sign-up increased from 7 to 30 the acres placed into conservation programs, and freed \$53,000 for grant work on Onken's 40 and another landowner's 80-acre field.

A series of five water and sediment control basins under construction on the 80-acre parcel lead to the watershed's only natural wetland.

"It helped us hit some major erosion in this field that was going right into the wetland that ultimately ends up in the lake," Schultz said.

The Minnesota Board of Water and Soil Resources' mission is to improve and protect Minnesota's water and soil resources by working in partnership with local organizations and private landowners. www.bwsr.state. mn.us.