

Kittson SWCD grows soil health program via incentives, outreach



Clean Water Funds support Watershed-Based Implementation Funding, an alternative to the project-based competitive process used to fund water quality improvement projects.

In Minnesota’s northwestern-most county, financial incentives available through watershed-based funding and a five-year, industry-backed demonstration have more producers experimenting with cover crops and other soil health practices.

Over the past five years, Kittson Soil and Water Conservation District (SWCD) staff members have expanded the district’s soil health program, explored creative ways to work with landowners and experimented with outreach.

“Kittson is proving that you don’t have to have cover crops on every field every year, but where you can work it into your operation and see some benefits it’s worth doing and getting creative with that,” said Minnesota Board of Water and Soil Resources (BWSR) Board Conservationist Matt Fischer.

In 2021, the Kittson SWCD partnered with General Mills, the University of Minnesota, American Crystal Sugar, Barry Callebaut (a manufacturer of

high-quality chocolate and cocoa products) and local producers to conduct a soil health demonstration project within the county. The five-year, \$148,250 project aims to determine if strip-till and no-till practices work in the Red River Valley with crop rotations including sugarbeets, which are a significant part of the local economy.

Three producers are participating in the project. Each producer enrolled two 40-acre fields. One will serve as a control plot, using conventional tillage. The other will incorporate no-till when the field is planted in grain crops, and strip-till when it’s planted in sugarbeets. Producers are paid based on their crop rotation, with payments of \$350 per acre in years when the fields are in sugarbeets, and \$100 per acre when the fields are planted with grain crops. The project also pays for custom strip-tillage.

The SWCD will collect soil health, wind erosion and economic data throughout the length of the project. Soil samples collected in 2021 from the control and

The Kittson SWCD is encouraging producers to try soil health practices such as strip-till — seen here in a Hampden Township wheat field where sugarbeets will be planted this spring — and other reduced-tillage practices that can help to curb wind erosion. Wind erosion is an issue in the Red River Valley.

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Left: Joel Deere, one of the three producers involved in the Kittson SWCD soil health demonstration project, stood in the strip-tilled wheat field where, in spring 2023, he will plant the first sugarbeet crop in connection with the demonstration project. **Middle:** Central Minnesota farmer Brian Ryberg talked about his experiences using strip-till in December 2022 during the Kittson SWCD-hosted Strip-till and Sugarbeets Cafe Chat. **Right:** Strip-till and Sugarbeets Cafe Chat attendees gathered in small groups after Ryberg's presentation at Hallock City Hall to discuss soil health practices. The SWCD has hosted events that provide landowners with opportunities to hear how other people are incorporating soil health practices into their operation.

test plots will be compared with samples collected in 2026. The results are meant to help Kittson County farmers make decisions about how strip-till and no-till practices might fit into their operation.

The Kittson SWCD Board used \$40,000 of the demonstration funds from General Mills and Barry Callebaut to offer a strip-tillage with sugarbeets incentive program. Producers are eligible for a one-time payment of \$125 per acre for up to 40 acres. Funds are open to producers who try the practice for the first time, and are available through spring 2026 when the soil health demonstration ends. Producers commit to one year and if they like the results are encouraged to sign up for the SWCD's [Non-Structural Land Management Incentive Program](#) to continue the practice.

Kittson SWCD Outreach Specialist Heather Donoho said a SWCD-hosted Strip-till and Sugarbeets Cafe Chat in December 2022 — featuring central Minnesota farmer Brian Ryberg, who has practiced strip-tillage for eight years with a corn, soybean and sugarbeet rotation — generated

interest in the SWCD's soil health programs.

Carey Mortenson, a farmer and Kittson SWCD Board member who attended the chat, said hearing from farmers who have implemented soil health practices helps other producers make decisions about what to try on their fields.

"There's a lot of interest in strip-till," Mortenson said. "I think what helped was that you've got a farmer ... that's been doing it. So, when you get someone talking about how they do it, that really sparks people's interest."

The Kittson SWCD and its partners have made implementing soil health practices a priority in the Two Rivers Plus Comprehensive Watershed Management Plan.

Practices such as reduced tillage and cover crops help mitigate wind erosion, which is a major concern in the Red River Valley.

"When you have sugarbeets there is zero residue left. It's just a black field left in the fall. So, a lot of the times, if it's not a snowy winter, or if it's an early, dry spring, (the wind) can get that dirt blowing," Mortenson said.

Mortenson, who raises wheat, canola, soybeans and sugarbeets, enrolled in the Kittson SWCD's Non-Structural Land Management Incentive Program in 2022. He was already trying cover crops on a few acres, and decided to enroll additional acres through the program. Mortenson said he planned to plant cover crops in his sugarbeet fields as soon as possible this spring.

When the Kittson SWCD started its cover crop program in 2016 it required a three-year contract. Because the SWCD had a hard time getting people to sign up for three years, it requested an exemption to allow one-year contracts beginning in 2019.

"We are at Mother Nature's mercy as far as how things can get established," said Jeremy Benson, Kittson SWCD technician. "As soon as we had that one-year option, the door just was off the hinges. We had people in all the time signing up."

The switch worked. In 2017 the district secured three contracts. In 2019, with the change in place, that number jumped to 24.

"Once you get someone trying it, people can see how it turns out and then

you get more trying it," Mortenson said.

When funding for the district's cover crop program — now referred to as the Non-Structural Land Management Incentive Program — switched to [Watershed-Based Implementation Funding](#) (WBIF) in summer 2022, the contracts were again restricted to three years. Benson said the length of the commitment made landowners hesitant.

In response, the SWCD obtained an exemption and offered a one-year contract option — along with an incentive for producers who signed multi-year contracts.

In addition to the base rate, producers now receive an additional \$10 per acre if they sign up for two years, or an additional \$20 per acre if they sign up for three.

Benson said landowners took up the offer of the three-year contract. Eighteen landowners signed three-year contracts in 2022. Benson credited the SWCD's flexibility and outreach with the program's success.

Asked what prompted him to enroll, Mortenson said: "To start with, it's just

seeing your dirt blowing in the spring. You own the land, rent the land, you're paying money for the land, and want to keep your farm going — so you don't like seeing that topsoil blow. So, you try to figure out ways to keep it from blowing, especially in sugarbeets when there is no residue left after harvest. Then just talking to Jeremy and then some of these cafe chats Heather's been doing the past couple of years, you start seeing more options and other people out in the area trying different things and it kind of sparks some ideas on what we can try."

Donoho said the SWCD's soil health program and outreach go hand-in-hand.

The COVID-19 pandemic inspired SWCD staffers to find new ways to reach their target audience and to share success stories.

"Video seemed like the best way to do that," Donoho said.

Donoho started by interviewing graziers who had been enrolled in the Kittson SWCD's cover crop program for a few years and were seeing success. She shared those stories on the SWCD's website and Facebook page, generating a larger online following. Those video stories have since expanded to include other conservation practices. Donoho highlights a local landowner each month.

"It's not always the easiest thing to do. Especially in



Above: Sugarbeets emerged in a Vincent Township field where rye was planted as a cover crop. **Below:** State Rep. John Burkel spoke at the Kittson SWCD's Livestock Producer's Supper at the Lancaster Community Center. The SWCD has hosted events that let landowners hear from others who are incorporating soil health practices into their operation.



the winter, I have to get a little bit more creative. But I try to do that along with advertising our programs. And our youth outreach helps drive people to our social media page," Donoho said.

The SWCD augments the Facebook photo albums

it produces with monthly photo contests that carry conservation, natural resources or agriculture-related themes. Although not directly related to the SWCD's work, by increasing views the contests can draw more eyes to program offerings.

When Donoho began her

outreach duties in 2019, the SWCD's Facebook page had fewer than 100 followers. Today the SWCD's Facebook page has more than 600 followers. Donoho noticed the biggest increase in followers once the district started posting videos and hosting photo contests.

"The more followers we have, the more reach and engagement it's possible for us to have," she said.

Kittson SWCD staff members continue to seek new ways to inform landowners about programs.

In December 2022, staff hosted the Livestock Producer's Supper. In addition to the meal, producers got the chance to network, and received free manure-testing kits. Other cafe chats have explored topics including carbon credits, wind erosion, pasture management, feedlots and grazing plans.

"Programs like our cover crops and soil health demo projects are combining with the outreach that we're doing to target our audience in different ways. We keep exposing people to the fact that people are trying it here, and (we're) trying to make it easier for them. We don't want them to take on all the risk, either, and a lot of people aren't willing to take it on ... or just appreciate having the help," Donoho said.