

Irrigation workshop introduces NRCS, SWCD staff to latest tech



Details

TTCP: The [Technical Training and Certification Program](#) is funded by a contribution agreement between BWSR (Clean Water Funds) and NRCS (Farm Bill dollars).

Project area: Involves SWCDs from Becker, Benton, Cass, Dakota, Douglas, East Otter Tail, Grant, Hubbard, Kandiyohi, Meeker, Morrison, Pope, Sherburne, Stearns, Stevens, Swift, Todd, Wadena, Washington and West Otter Tail counties

STAPLES — An irrigation workshop at Central Lakes College (CLC) this summer introduced Natural Resources Conservation Service (NRCS) and soil and water conservation district staff to an array of new technology, components of different irrigation systems — and some of the management decisions producers consider before making changes.

The two-day training prepared NRCS and SWCD technicians to plan, design and install practices supported by a \$3.5 million Regional Conservation Partnership Program (RCPP) grant focused on conservation work on irrigated lands within 20 central Minnesota counties. NRCS awarded the [five-year grant](#) to the Minnesota Department of Agriculture (MDA) in 2021.

Partners include 20 SWCDs, the Mille Lacs Band of Ojibwe, Central Lakes College, the University of Minnesota,



Natural Resources Conservation Service website: www.nrcs.usda.gov

[AgCenter](#), plus industry representatives.

The RCPP goal: decrease water use, and improve groundwater and surface water by reducing sediment, nutrients and chemical contaminants.

The RCPP grant also supported the July 17-18 training, coordinated through the Minnesota Board of Water and Soil Resources' Technical Training and Certification Program (TTCP).

“The purpose of this workshop is really to help provide some advanced information about irrigation, irrigation technology and irrigation water management to help those staff to provide good technical assistance to irrigators,” said Jeppe Kjaersgaard, an MDA research scientist on



Left: Cory Detloff, Central Lakes College's Ag & Energy Center and Farm Business Management director, behind the table at left; and Keith Olander, executive director of AgCenter and Agricultural Partnerships with Minnesota State and CLC; led a discussion July 18 during the Irrigation RCPP Technical Training Workshop for NRCS and SWCD staff at Central Lakes College in Staples.

Center: Kelan Buchta of Grand Irrigation in Clear Lake discussed elements of irrigation.

Right: Jeff Lorentz of the Minnesota Department of Agriculture discussed chemigation.

Photo Credits: Ann Wessel, BWSR



Top: A chemigation presentation led by Minnesota Department of Agriculture staff held the attention of irrigation workshop attendees, from left, Melanie Dickman, Ryan Haspel and Rick Gronseth of NRCS; Clean Water Corps member Lilly Bowman; Logan Berg of NRCS; Megan Tritz of the Benton County SWCD; and Thomas Zimmermann and Lawrence Mettler of NRCS. **Bottom:** Nathan Weise of East Otter Tail SWCD led a presentation about uniformity testing.

hand for the July 18 field tour at the college's Ag & Energy Center.

About 40 technicians attended. Willmar-based NRCS civil engineer technician Rick Gronseth was among them.

"(I'm) just using this training to have a better working knowledge of the type of systems that are in place out there, and how the industry is constantly changing and innovatively moving forward — and how we as an agency can help farmers with irrigation systems that are old and failing, and putting a good plan together with them to make sure that it's going to work for them and it's good for the environment as well," Gronseth said.

At five stations in and around the center's corn and soybean fields, industry representatives, CLC faculty and MDA staff members led discussions and demonstrations focused on wells, irrigation panels and controls, sprinklers and end guns, pivot hardware, and chemigation (applying pesticides via irrigation).

Later, East Otter Tail SWCD



staff demonstrated a method for testing the uniformity of water application by a pivot irrigation system. University of Minnesota staff members and company representatives discussed soil moisture sensors. A panel of farmers talked about the type of assistance they want from technical staff.

"We're just hoping that they understand some of the challenges that farmers face when they're looking at irrigation, and some of those decisions that they have to make on a regular annual basis (related to) irrigation. Some of those costs. Some of that technology they're making decisions upon, and then some of those day-to-day decisions on whether to irrigate or not to irrigate," said

Cory Detloff, director of CLC's Ag & Energy Center and its Farm Business Management Program.

Kjaersgaard said the 75% cost-share, which is available to producers through the RCPP, addressed the initial expense and the risk of trying something new.

"We have some irrigators that are on the front end and adopting new technology readily, and we have others that are just waiting and seeing how the different types of technologies pan out," Kjaersgaard said. "We are able to accommodate all irrigators depending how risk-averse they are. If there's an irrigator that wants to dip their toe into new technology — for example, installing soil

VIDEO: "Irrigation Workshop" features the July 18 field tour at Central Lakes College in Staples.

moisture sensors to help with irrigation scheduling — we can help provide cost-share for those soil moisture sensors. At the other end of the range, we might have some irrigators that have been utilizing some of this technology for years, and are looking more to go the final step into very advanced technology or very advanced irrigation water management. Our program can help with providing cost-share for that also."

Those newer technologies can manage nutrients and water better. Kjaersgaard explained how natural resources benefit:

"They (irrigators) can more accurately apply just the right amount of water or just the right amount of nutrients. That means there's a lower risk for over-applying water or under-applying water," Kjaersgaard said. "Because of that, we will be pumping less water from the ground. Also, there's less risk of applying too much water, which can lead to leaching of nutrients, especially nitrate nitrogen."