

# Technical Service Areas' engineering expertise saves SWCDs time, money



YOUR Clean Water  
Fund AT WORK

Each of Minnesota's eight TSAs receives \$242,500 per year through TSA Enhanced Shared Services, which is supported by Clean Water Funds.

A grassed waterway carries surface water away from an agricultural field. A water and sediment control basin slows water to reduce erosion and keep topsoil in fields. These are among the engineered conservation practices that help to improve water quality and boost soil health across Minnesota.

Less well known is the team of technical experts in structural conservation practices that provides engineering design, site evaluation and project support. Their work ensures that conservation practices meet engineering design standards, including those of the USDA's Natural Resources Conservation Service (NRCS), while functioning efficiently and affordably.

That behind-the-scenes role is where [Technical Service Areas](#) (TSAs) come in. TSAs are regional partnerships created by groups of soil and water

conservation districts (SWCDs) through joint powers agreements. Minnesota's eight TSAs align with Minnesota Association of Soil and Water Conservation Districts (MASWCD) service areas. TSAs provide shared technical capacity to SWCDs, helping conservation projects move from concept to construction.

"There's a lot of design that goes into all these practices," said Ryan Jones, an engineer for South Central TSA, also known as TSA 6. "There's a lot of behind-the-scenes work that we do to make sure that practices that are built with public money and built with landowner money are appropriately designed, so that they will work for the long haul."

That work includes detailed technical evaluations.

"We look at everything from the

*South Central TSA senior civil engineering technician Greg Schemmel assessed and surveyed a grade stabilization site along McLeod County Ditch 11.*  
**Photo Credits:**  
South Central Technical Service Area



**Left:** Civil engineering technician Brian Jacobs surveyed a large gully along Butterfield Creek in Watonwan County. A rock chute was later installed at the site to allow water to flow in and out of the creek during high water events. **Middle:** South Central TSA senior civil engineering technician Greg Schemmel surveyed the site of an embankment failure in Sibley County using a total station, a surveying instrument that measures distances, angles and coordinates. **Right:** South Central TSA engineer Ryan Jones assessed erosion in a ravine channel downstream from a potential project site in Sibley County.

watersheds to the soil types that are out there, to the slopes — or the grades — that are out there. That all has to be addressed,” said Greg Schemmel, a TSA 6 senior civil engineering technician whose duties include surveying, drafting, designing projects and inspecting construction.

TSAs provide technical and engineering assistance that individual SWCDs may not have the capacity or resources to provide.

“The main objective is for TSAs to provide a higher level of technical service,” said Jerad Bach, Blue Earth County SWCD manager and TSA 6 host manager. “If each district has a few projects that need engineering assistance, individually, that might not be enough to sustain an engineer position at the district level. But the TSA could address those concerns.”

TSA engineering services can stretch conservation dollars.

“TSAs have the engineering expertise to design conservation practices for the SWCDs without the private engineering firm’s fees,” Schemmel said.

Conservation efforts,

particularly on or adjacent to agricultural land, largely use NRCS practice standards. These standards often require [Job Approval Authority](#), which can take years for individual SWCD staff to obtain. By working with TSA engineers who have the credentials, districts get projects designed and on the ground faster.

Many types of Minnesota Board of Water and Soil Resources (BWSR) grants support project implementation, but those projects depend on technical design and engineering capacity that TSAs frequently provide. Without that support, fewer conservation projects, whether funded through NRCS or BWSR, would advance from application to on-the-ground results.

“We have the experience in these specialized areas of engineering that they don’t have. It can be difficult to train if a district doesn’t have the capacity where people are doing a lot of design work,” Jones said. “We do the engineering side of things; they’re doing the project management and coordination with the landowner.”

TSA 6 serves 11 counties

— Blue Earth, Brown, Faribault, Le Sueur, Martin, McLeod, Nicollet, Renville, Sibley, Waseca and Watonwan. Operating as a joint powers organization, the TSA allows member districts to share technical resources while maintaining local control and strong relationships with landowners.

“Each TSA area can add and customize what they need for their area,” Bach said.

The Blue Earth County SWCD provides grant administration, board support and a central location for TSA 6 staff. Other TSAs across the state use different staffing models, including contracted staff or employees housed in multiple district offices.

TSA 6 member districts contribute annual dues, which help support TSA operations. Not all TSAs have dues.

TSAs are supported by a combination of state funding, local contributions and, in some cases, contracted project work. All TSAs receive funding through two BWSR grant programs that support shared technical services statewide.

The Nonpoint Engineering Assistance (NPEA) program is funded through state general funds and provides \$127,500 per year to each TSA. This program, which has existed in various forms since the mid-1990s, supports engineering assistance for member SWCDs. Since July 1, 2025, the NPEA grant has not required a local match. NPEA also includes an additional \$20,000 equipment fund, which rotates to two districts each year.

The Clean Water Fund-supported TSA Enhanced Shared Services Program also provides \$242,500 per year to each TSA. As with the NPEA, the local match requirement for this grant was removed July 1, 2025.

Additionally, some TSAs allocate staff time to specific grants, such as Watershed-Based Implementation Funding (WBIF), while others allocate staff time to contracted projects for partner organizations.

BWSR staff members write and produce Snapshots, a monthly newsletter highlighting the work of the agency and its partners.