

# 2021 Annual Report

## Soil & Water Conservation

Conservation work kept the Dakota County Soil and Water Conservation District (Dakota County SWCD) busy in 2021. Staff worked with landowners and other partners around the county on projects ranging from large scale ravine stabilization projects to 100 sq ft raingardens on private property; shoreline stabilization projects, sediment control basins, and cover crops as well.

Achieving clean water and healthy soils takes a community of organizations, groups, and individuals sharing similar goals and promoting positive outcomes. Thank you for partnering with us on land and water conservation projects. We look forward to continued partnerships in 2022!

## 2021 Highlights

In 2021, the Dakota County Soil & Water Conservation District...

- Assisted landowners with land and water issues at over **220** sites around the county
- Provided technical assistance and cost share funds to install **106** rural & urban conservation projects resulting in the removal of **2,346** lbs. of phosphorous, **1,417** tons of total suspended solids (sediment) and **13,224** lbs. of nitrogen from reaching our lakes, streams or groundwater resources annually
- Educated over **631** people on landscaping practices that benefit water quality and pollinators through the Landscaping for Clean Water program
- Monitored water quality in **26** water bodies across **4** watersheds

## Connect with us through Conservation

Need some information about the many different programs we offer? Scan the QR code and head over to our **website** to learn more and get your questions answered!

Connect with us on one of our social media platforms - **Facebook, Instagram, or Twitter!**

Or, shoot us an **email at [swcd@co.dakota.mn.us](mailto:swcd@co.dakota.mn.us)** with your questions and we can discuss potential partnerships and available grant opportunities!



## Conservation Projects

In 2021, Dakota County SWCD worked with residents, cities, schools, churches, and businesses to improve stormwater management, water quality, and pollinator habitat. We also worked with rural landowners and operators on projects to promote soil health, reduce erosion, and protect local water quality.

SWCD staff provided technical assistance on projects that included evaluation of best practices for a specific site, topographic surveys, preliminary designs, final designs, and construction oversight.

Along with providing assistance throughout the planning and installation process, over **\$350,000** of funding was provided through SWCD cost share programs for projects that included:

- Stabilizing **985** linear feet of lakeshore
- Planting **23.8** acres of native prairie on five different projects
- Installing **41** raingardens, native gardens, and shoreline restorations
- Constructing **12** water and sediment control basins
- Constructing **7,622** linear ft of grassed waterways
- Planting **2,828** acres of cover crops
- Constructing **4** grade stabilization structures



## Landscaping for Clean Water

We continued our partnership with watershed organizations and cities to help residents install raingardens, native plantings, and shoreline restoration projects through the Landscaping for Clean Water program.

371 individuals participated in a virtual Introduction Class, where participants learned about local water quality concerns and how residents can help improve water quality on their own property. 164 individuals took part in the Design Course, including one-on-one virtual consultations with SWCD staff to walk through the design process, select plants, and answer project questions. SWCD staff provided on-site project layout and installation guidance for participants installing a project on their property, resulting in 41 completed projects. In addition, 96 people participated in maintenance workshops that provided season-specific information on how to maintain and promote the health, performance, and beauty of their project.

### LANDSCAPING FOR CLEAN WATER



Dakota County Soil and  
Water Conservation District





**2021 Outstanding Conservationist  
City of Burnsville**



The Dakota County SWCD was proud to announce the City of Burnsville as their **2021 Outstanding Conservationist** due to their commitment to conservation.

The City of Burnsville has a long track record of working with us and other organizations to install water quality improvement projects, restore shorelines of community lakes, and establish native prairies for pollinator habitat.

Examples of their conservation work include the installation of bioretention basins (raingardens) at several locations on City property or in conjunction with street reconstruction projects, stabilizing the north shoreline of Crystal Lake, and restoring native prairie with pollinator habitat at Lake Park and North River Hills Park. They also continue to be a strong supporter and partner of our Landscaping for Clean Water Program, hosting classes and sponsoring a grant program to aid residents in implementing conservation practices on their property that enhance the beauty of our natural landscape and improve local water quality!

Congratulations to the City of Burnsville for being conservation leaders and supporting clean water practices!

## 2021 Partners

*This is a partial list of partners that Dakota County SWCD worked with in 2021:*

- Black Dog Watershed Management Organization
- Cities and Townships of Dakota County
- Cannon River Watershed Joint Powers Board
- Clean River Partners
- Conservation Corps of Minnesota & Iowa
- Dakota County
- Eagan-Inver Grove Heights Watershed Management Organization
- Lower Minnesota River Watershed District
- Lower Mississippi River Watershed Management Organization
- Metropolitan Council
- Metro Conservation Districts Joint Powers Board
- North Cannon River Watershed Management Organization
- State of MN: Board of Water & Soil Resources; Department of Agriculture; Department of Health; Department of Natural Resources; Pollution Control Agency
- USDA: Natural Resources Conservation Service
- Vermillion River Watershed Joint Powers Organization

## Project Partnerships

Major conservation projects can only happen as a result of partnerships! The Dakota County SWCD worked with partners on several projects this year, including:

- Cherokee Heights Channel Stabilization
- Almquist Sediment Retention Basins
- Conservation Corps River Restoration Projects (Bachman's Nursery property and Vermillion Park Conservation Area)
- Conservation Corps Trout Brook Streambank Stabilization
- Conservation Corps Raingarden Retrofits at Dakota County Facilities
- Holland Lake Channel Stabilization
- Jordan and Braun Wetland Banks
- Thompson Lake Restoration
- Spring Lake Park Erosion and Gully Stabilization
- CR 78-06 Wetland Restoration
- Jensen Lake Gully Erosion
- Ravenna Trail Ravine Stabilization



## Water Quality and Quantity Monitoring

Dakota County SWCD partnered with local agencies and watershed organizations to collect almost 300 surface water samples from 26 different lakes and rivers all around the county. The water quality dataset provides information to use when evaluating watershed health and determining ways to improve water quality.

We also worked with state and local agencies to monitor groundwater. These groundwater monitoring efforts include the Minnesota DNR's Cooperative Groundwater Monitoring Program (a network of observation wells used to monitor static groundwater levels of different aquifers around the state), the Lower Minnesota River Watershed District's fen monitoring program, and Dakota County Parks' nitrate monitoring in the Trout Brook Watershed.



## Groundwater Protection Efforts

Our activities on the landscape impact what is below it. This is especially true in Dakota County where some groundwater can pass through the soil profile relatively quickly and reach drinking water wells. Nitrogen is very soluble in water and moves with water through the soil profile, making nitrogen a prevalent issue in Dakota County's drinking water.

Dakota County SWCD has promoted the use of practices such as cover crops and perennial vegetation that can retain nitrogen where it is available for crops while reducing the amount of nitrogen that reaches drinking water. With technical assistance and cost share funding provided through Dakota County SWCD's cost share programs, 2,828 acres of cover crops were planted in 2021.

Dakota County SWCD also partnered with several organizations to develop the **Irrigation Management Assistant (IMA) Tool** to protect both the quality and the quantity of groundwater. The online tool can be used by agricultural producers to plan the most efficient times and amount of irrigation, leading to better use of groundwater and fewer nitrogen leaching events. The tool is planned to be ready for the 2022 growing season.

## Funding to Reach Water Quality Goals

Dakota County SWCD has worked with many partners to secure funding that provides education, technical assistance, and cost share opportunities to Dakota County residents. Some 2021 examples include:

- Secured a \$150,000 Clean Water Fund Drinking Water Protection Project Grant to provide landowner incentives for planting cover crops and perennial vegetation that reduce nitrate leaching in vulnerable areas
- Partnered with watershed organizations and Dakota County to provide project funding to landowners through Dakota County SWCD's cost share programs
- Partnered with over 30 organizations, including 20 SWCDs throughout Minnesota, to carry out a 5-year, \$3.5 million effort working with agricultural producers to implement irrigation conservation practices that protect groundwater quality and quantity
- Secured over \$470,000 of Watershed Based Implementation Funding (WBIF) for projects that include agricultural erosion control practices, groundwater nitrate reduction practices, subwatershed analyses to prioritize the most cost effective projects, wetland restorations, and urban stormwater practices to improve water quality



### Dakota County Board of Supervisors & Staff December 2021

#### Board

- District 1: Kevin Chamberlain, Vice Chair
- District 2: Laura Zanmiller, Chair
- District 3: Chelsea Skog, Secretary
- District 4: Bruce Johnson, Public Relations & Information Officer
- District 5: Jayne Hager Dee, Treasurer

#### Staff

- Brian Watson, District Manager
- Curt Coudron, Project Management Supervisor
- Joe Barten, Sr. Resource Conservationist
- Ashley Gallagher, Sr. Resource Conservationist
- Todd Matzke, Resource Conservationist
- Gabe Okins, Resource Conservationist
- John Stelzner, Resource Conservationist
- Lindsey Albright, Water Resource Specialist
- Dave Holmen, GIS Specialist
- Lana Rotty, Finance & Grants Coordinator
- Diane Schmidtke, Administrative Specialist