

BWSR Board tour highlights habitat work, water storage



By late August, plants flourished on a Renville County RIM easement where Native Resource Preservation conducted a late-spring prescribed burn to prepare for interseeding. The Renville County SWCD secured a \$95,000 HELP grant to fund enhancements, including tree removal and the planting of diverse dry and wet prairie seed mixes. Tour attendees visited the site, one of three sites improved through the project, to see the results. **Photo Credits:** Ashley Rezachek, BWSR



Clean Water Funds supported some conservation projects featured during the annual tour, including improvements to the County Ditch 59 drainage system and a wetland restoration in Redwood County.

Minnesota Board of Water and Soil Resources (BWSR) Board members, staff and partners visited water storage, habitat restoration and water-quality improvement projects in Redwood and Renville counties during the agency's annual board tour.

The late summer tour highlighted projects and initiatives designed to reduce downstream flows and limit sediment- and nutrient-loading. These projects were made possible through strong partnerships among local, state and federal partners plus private companies.

BWSR hosts the annual tour to showcase partners' efforts



Each August, BWSR Board members, BWSR staff and partners tour conservation sites with ties to the agency's work to see project outcomes and accomplishments. Each year features a different region of the state.

to address the various types of natural resource concerns that impact all Minnesotans.

"The BWSR tour provides a glimpse of the challenges

and complexities local partnerships face in implementing lasting conservation efforts to address resource concerns," said Luke Olson, BWSR board

conservationist and tour organizer. “The insight promotes informed flexibility and efficiency of programs to assist with these efforts.”

Joey O’Brien, president of the Lower Sioux Indian Community Council, welcomed the group and noted that this was the first time the annual BWSR Board Tour included a stop in a Tribal community.

Deb Dirlam, director of the Lower Sioux Indian Community’s Office of the Environment, opened the Aug. 27 tour with a presentation about the community’s ongoing stewardship efforts — including wild rice and wetland restorations, medicinal plant gardens, agricultural practices and a hemp program centered on sustainable building materials.

The first featured project on the bus tour was a grade stabilization structure renovation in Renville County completed in November 2018 and fully funded with approximately \$76,600 in state Disaster Recovery Assistance Program (DRAP) dollars.

The project stemmed from a 2014 Presidential Disaster Declaration following severe storms across southwestern Minnesota. In Renville County, an altered grade stabilization structure with a corroded metal pipe had failed, creating a deep ravine and increasing flooding risks for the city of Morton downstream.

The Renville County SWCD worked with a new landowner to reconstruct the site.



Three BWSR Clean Water Fund grants totaling \$1.85 million serve as the primary funding source for water quality and storage work within the County Ditch 59 drainage system. Funding includes a 2023 Multipurpose Drainage Management grant (\$116,897), a 2024 projects and practices competitive grant (\$773,133), and a 2025 Multipurpose Drainage Management grant (\$956,613). Construction work was underway during the Aug. 27 tour.



“The new owner was very interested in it, because they had small children, and so they were really concerned about this big, huge hole and this big ravine that was created,” said Holly Hatlewick, Renville County SWCD administrator.

The SWCD partnered with Technical Service Area (TSA) staff, private engineers and Area II Minnesota River Basin Projects. Area II

Minnesota River Basin Projects handled design and engineering. The new structure controls flow, reduces erosion and manages runoff. Plants stabilize the site and restore habitat.

“It turned out to be a fantastic project,” said Hatlewick. “We’re saving 152 tons of sediment, that sediment is being held back annually with that pond system, and now we just have this great

structure.”

The project also reduces phosphorus by an estimated 175 pounds annually.

The next Renville County stop featured a restoration project funded by BWSR’s Habitat Enhancement Landscape Program (HELP), which aimed to restore diverse native habitats to benefit pollinators, birds and other wildlife.

The Renville County SWCD secured a \$95,000 HELP grant to apply toward three Reinvest in Minnesota (RIM) easements and a Conservation Reserve Program (CRP) site.

The stop featured one landowner’s property where restoration work was underway. The site includes three adjacent sites: two RIM easements totaling 99.2 acres and a 60-acre CRP contract.

Restoration efforts over the past year included tree removal, prescribed burning, targeted herbicide application and reseeding with native prairie species. A mix of 41 wet prairie and 51 dry prairie species was planted across the easements. To protect wildlife habitat, the work is being done in phases.

A Native Resource Preservation crew completed the work with guidance from SWCD staff. In addition to the grant-funded work, the landowner completed additional improvements to the CRP enrollment, completing prescribed burns with approval from the USDA’s Farm Service

Agency (FSA).

The next stop highlighted a collaboration between the Renville County SWCD and the Renville County Drainage Authority to improve water quality and storage within the [County Ditch \(CD\) 59 drainage system](#). The project manages runoff from a 700-acre watershed.

CD 59 flows into Beaver Creek, a priority watershed in the Hawk Creek-Middle Minnesota comprehensive watershed management plan. Beaver Creek carries water to the Minnesota River from 21 county and judicial ditches affecting nearly 97,600 acres. Beaver Creek is impaired for dissolved oxygen, fish and macroinvertebrate populations, turbidity and fecal coliform.

The project involved constructing 13 water and sediment control basins, three water storage ponds and a restored wetland. These features are designed to reduce nutrient runoff, curb sediment-loading, alleviate flooding and enhance long-term watershed health.

The bus stopped at the site of the constructed wetland restoration, where work was underway. Designs call for a permanent pool of 18 to 24 inches of water that will temporarily rise during storm events. Water will be stored for up to 100 hours before being gradually released downstream. Berms and in-field basins will help to slow water flow and capture sediment.

Together, the projects provide 460 acre-feet of



Above: Tour attendees explored a wetland complex in Redwood County, where nearly 200 acres of wetlands and habitat have been restored.

Photo Credit: Denise Lauerman, BWSR **Below:** The tour included a stop at a grade stabilization structure completed in 2011, which created an 8-acre ponding area for water storage. **Photo Credit:** Ashley Rezachek, BWSR



water storage, and keep an estimated 4,635 pounds of nitrogen, 538 pounds of phosphorus and 49 tons of sediment out of the waterways annually.

Three BWSR Clean Water Fund grants totaling \$1.85 million served as the primary funding source.

Additional support from NRCS allowed the installation of saturated buffers to further treat low-flow tile drainage.

Tour attendees visited a wetland complex in Redwood County, an area

historically challenged by poor drainage. Four Redwood County landowners cooperated to restore nearly 200 acres of wetland and associated habitat through the Minnesota Conservation Reserve Enhancement Program (MN CREP). This voluntary program combines federal and state resources to permanently protect environmentally sensitive lands while keeping them in private ownership.

“We had to have all of the landowners work together for this,” said Brian Pfarr,

Redwood SWCD resource specialist, who helped coordinate the project.

The project included building berms with stable outlets, removing and rerouting drainage tile and installing culverts along a Paxton Township road to help alleviate flooding. Because a designated public watercourse — a trout stream — added significant permitting complexity, the Minnesota Department of Natural Resources (DNR) assisted with project hydrology.

Participating landowners enrolled in both the FSA-administered CRP for 14 to 15 years and the BWSR-administered RIM program, which establishes perpetual conservation easements.

The project, which tapped \$446,730 in Outdoor Heritage Funds, approximately \$322,200 in Clean Water Funds from BWSR and \$7,500 in capital investment funds — bonding dollars associated with the easement — demonstrates collaboration among local, state and federal partners to improve water quality, wildlife habitat and long-term land stewardship.

“The project is an example of everyone coming to the table,” Pfarr said. “If one of these people had backed out, it would be a problem.”

The next stop on the tour showcased a 14-year-old grade stabilization structure in Sherman Township, which is holding strong after replacing a failing 33-year-old grade stabilization structure. Installed in 2011, the structure has withstood



Hempcrete blocks (center) are made by mixing hemp (left), a lime-based binder and water. **Photo Credits:** Ashley Rezachek, BWSR **Right:** Danny Desjarlais, hempcrete construction project manager, stands in front of a prefabricated hempcrete wall panel at the Lower Sioux Indian Community's hemp manufacturing facility. **Photo Credit:** Denise Lauerman, BWSR

time and the region's corrosive soils, which had caused the original corrugated metal pipe to deteriorate and collapse.

The updated design uses long-lasting concrete instead of metal, providing a more durable, permanent solution. A key feature of the project is an 8-acre ponding area, which helps manage stormwater runoff, control erosion and improve water quality.

"It was a godsend when I saw what had happened to it," said landowner John Hogan, reflecting on the completed project. A self-described conservation advocate, Hogan said that he's seen a range of wildlife return to the site, including ducks, swans and geese.

Project partners included the Redwood SWCD, Redwood-Cottonwood Rivers Control Area, NRCS, BWSR, DNR and Area II Minnesota River Basin Projects. Funding for included approximately \$12,800 in 2011 Upper Minnesota River Basin Initiative funding and a \$1,450 landowner contribution, and additional support from BWSR for project monitoring.

The tour concluded at the Lower Sioux Indian Community's 20,000-square-foot hemp manufacturing facility. The facility produces eco-friendly building materials such as prefabricated hemp panels, bulk hemp fibers and hempcrete blocks.

Hempcrete is made from a mix of hemp, lime-based binder and water. Used to insulate exterior housing walls, the material is pest-, water- and fire-resistant.

Hempcrete plays a key role in the community's "[Seed to Sovereignty](#)"

initiative, a housing program that blends traditional knowledge with modern sustainable building methods. Made from locally grown and processed industrial hemp, this durable, carbon-negative material supports efforts to address the housing crisis.

"We aren't inventing anything new here, this is ancient technology," said Danny Desjarlais, hempcrete construction project manager.

He emphasized that hempcrete is a nontoxic alternative to plastics

and hazardous materials commonly used in home construction.

The program also includes hands-on training, project consultation and community workshops aimed at empowering others to replicate the model. From retrofitting existing homes to constructing new ones, the initiative promotes healthy living environments, energy efficiency and a local economy centered on hemp.

Throughout the tour, participants engaged with local staff and landowners, gaining insight into the cooperation and innovation behind long-term solutions. Olson said hearing local challenges firsthand showed how state grant funding helps drive lasting change.

"It was very beneficial for me to gain an understanding of the complexity of projects, the cooperation and patience it takes to pursue these endeavors," Olson said. "The solutions proposed to address water and land resource needs are impressive."



Joey Goodthunder, a Lower Sioux Indian Community farmer who grows corn, soybeans, and hemp, stands near a hemp processing machine during a tour of the community's hemp manufacturing facility. He spoke about the community's agricultural work and conservation efforts.

Photo Credit: Denise Lauerman, BWSR

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