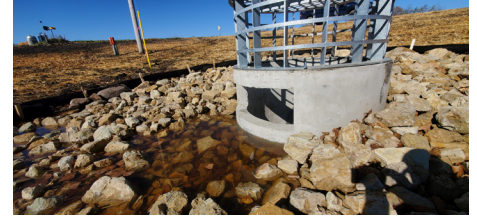


New option for drainage + water quality



First-of-its-kind arrangement in Le Sueur County incorporates wetland restoration and easement held by drainage authority



Le Sueur County SWCD received \$50,000 of BWSR's \$301,200 Clean Water Fund grant to the GBERBA.

MONTGOMERY — A first-of-its-kind fix for flooded farm fields and impaired waters has implications from Montgomery Township, where the Le Sueur County Soil & Water Conservation District (SWCD) multipurpose drainage management project finished this fall, all the way to the Gulf of Mexico, where excessive nutrients from the Mississippi River create a dead zone.

The 5.5-acre wetland restoration adjacent to a judicial ditch is the first multipurpose drainage management project involving a wetland restoration and an easement held by a drainage authority.

“This is the type of project that should be our highest priority,” said Dave Bucklin, technical coordinator with the Greater Blue Earth River Basin Alliance (GBERBA). “If you can store water, the damage not done downstream all the way down to the Gulf of Mexico is just amazing. We really have to try and keep our water on our land as much as possible.”

Increasingly heavy and frequent rains combined with more tiling in farm fields has, over the decades, put more pressure on 100-year-old ditch systems than they were designed to handle. Backed-up water floods crops

Contractor Barnett Brothers Inc. of Kilkenny constructed the \$75,000 wetland restoration adjacent to Judicial Ditch 63 this summer. Work on the project 4 miles south of Montgomery finished Oct. 7. The wetland restoration provides water retention. Because the option was less expensive, the contractor moved an existing driveway to make it part of the wetland embankment. Photo Credits: Le Sueur County SWCD



upstream. Downstream, cities flood and shorelines erode.

“As these ditches get more water, they all dump into a natural water body — either lake or stream,” Bucklin said. That causes lakes and streams to flood. “They unravel, those streams, which means the banks are all eroding and the streams are getting bigger and bigger. They’re flooding more often. So everybody says we’ve got to do something. Since a lot of the water that originates in our watershed is in ditches, that was a very obvious place for us to start.”

The \$75,000 project 4 miles south of Montgomery temporarily stores water from a 112-acre watershed and its three tributaries in the Kilkenny Hills. It taps a \$50,000 grant GBERBA awarded to the SWCD. The joint ditch authority provided the match, which includes the cost of the easement.

The GBERBA award is part of a \$301,200 Clean Water Fund multipurpose drainage management grant the Minnesota Board of Water and Soil Resources (BWSR) awarded to the 10-county alliance in 2017.

“Every stop along the way, the same amount of water to be stored gets more and more expensive because there’s more of it, and more damage. So if we stop it at the top in individual (wetlands) like this one in Le Sueur (County), that’s by far the best place to do it,” Bucklin said.

Multipurpose drainage management incorporates water quality improvements with ditch fixes.

“If you can keep that water there, you’re not sending it somewhere else,” said Kay Gross, GBERBA administrative

“ Prior to this, there was no mechanism to give the ditch system funding to potentially do storage, so this is a unique opportunity for us to start looking at ditches in a different way, of (not) just sending water downstream. ”

— Mike Schultz, Le Sueur County SWCD manager

coordinator. From the Le Sueur County site in the Blue Earth River Basin, water flows to the Minnesota and Mississippi rivers. “You’re just adding all the time. When you’re adding water, you’re adding sediment, you’re adding nutrients and flooding.”

Working out the details took two years and required the state attorney general to approve the easement language.

“We were the test run for everything here,” said Le Sueur County SWCD Manager Mike Schultz.

Landowner Francis Budin, 80, had approached the SWCD a few years earlier about options for 15 acres — the only part of his newly purchased 40 acres that was ineligible for the Conservation Reserve Program (CRP).

“I could never do anything with the wetlands, and I wanted to lower my tax base on that property,” Budin said. “It was nonproductive, and I couldn’t do anything with it. I thought it would be a nice give-back for nature.”

No conservation program matched his objective at the time. But Schultz recalled that conversation when the opportunity arose to create a water treatment and storage wetland restoration as part of multipurpose drainage



management on Judicial Ditch 63.

The easement was a good solution for Budin, who preferred to leave construction to others.

“It was great,” Budin said of working with the SWCD. “I got updated on what the progress was. It did take probably (three years) but they handled all the titling and documentation and the permitting.”

Schultz said the wetland worked as designed. So did the funding mechanism.

“Prior to this, there was no mechanism to give the ditch system funding to potentially do storage, so this is a unique opportunity for us to start looking at ditches in a different way, of (not) just sending water downstream,” Schultz said.

“To get the drainage that the land needs, we need to look for storage,” Schultz said. “Le Sueur County for the last, let’s just say 10 years, has been struggling with flooding with cities, erosion and damage. So this is a priority not only for the soil and water district. Our county board is fully supportive of doing this type of work.”

The Le Sueur County Board doubles as the drainage authority.

County Commissioner

Danny O’Keefe represents Montgomery Township. He said the wetland easement would take some pressure off the Judicial Ditch 63 system, which he described as being in tough shape.

“I think it turned out great,” O’Keefe said of the project.

“We have several areas that could benefit from a project like this, and we have willing landowners that have already come to us and told us that they would be willing to put up some property for storage like this,” O’Keefe said.

The wetland will slow and filter water released downstream.

“The opportunity to do water storage and provide water quality benefit is what makes this project so unique,” said Mark Hiles, Mankato-based BWSR clean water specialist. “Hopefully drainage authorities and SWCDs across the state can replicate this in their jurisdiction and leverage water quality funding and benefits while providing additional storage where it is needed.”

Gross applauded the many partners — which included the township, county highway department, SWCD and BWSR — and noted water-storage wetlands were never in drainage authorities’ job descriptions.

“Their job was to move the water,” Gross said.

“Now it’s trying to change the mind-set a little bit and kind of scale back and say, ‘We know we’ve got to move this much water, but can we hold any of that back so we don’t need a 36-inch tile at the end? Can we save money for the project even if we put some money up here in the upland? What do we have to do?’” Gross said.