

ONE WATERSHED, ONE PLAN



‘We’re able to take a proactive approach’

With priorities set and funds available, the Red Lake River Watershed tackles water quality, quantity improvements



THIEF RIVER FALLS — Pennington County is doing conservation work differently in the Red Lake River Watershed. Instead of waiting for problems to arise, staff is targeting sites with the potential to make the greatest improvements in water quality and topsoil retention.

The approach will benefit the Red Lake River, which is impaired for turbidity and sediment. It will benefit Pennington County



farmers, who can turn over maintenance responsibility for gully-stopping side-water inlets to the county ditch authority.

The targeted, science-based approach

unfolding in Pennington, Red Lake and West Polk counties is one result of One Watershed, One Plan efforts that unified seven local government units within the watershed.

Top: The Red Lake River flows from Lower Red Lake to the Red River. The Red Lake River Watershed is among five One Watershed, One Plan pilot projects.

Photo Credit: Red Lake River Watershed District

Left: While not in a prioritized subwatershed, this Pennington County site illustrates where a side-water inlet could curb field erosion and keep sediment out of the ditch and the river.

Photo Credit: Pennington SWCD

“Prior to this, SWCDs would work with the landowners that were interested in installing side-water inlets. They’d come in, and we’d identify if there was a need,” said Peter Nelson, Pennington Soil & Water Conservation District water plan coordinator.

One Watershed, One Plan defined and prioritized needs, based on Watershed Restoration and Protection Strategies — the Minnesota Pollution Control Agency’s process for identifying and addressing threats to water quality. It stresses measurable results.

“Instead of a reactive approach where landowners are coming in throughout the watershed, we’re able to take a proactive approach,” Nelson said.

That means fixing edge-of-field gullies that unleash the most sediment into the ditch system, and, ultimately the river. The Red Lake River flows from Lower Red Lake to the Red River.



While not in a prioritized subwatershed, this Pennington County site is an example of a side-water inlet. **Photo Credit:** Pennington SWCD

“We hope at the end of the day that we can see measurable gains (in sediment reduction) throughout these areas that have been identified,” said Myron Jesme, Red Lake Watershed District administrator. “The big picture is to really continue to work on water quantity issues as well as water quality.”

The Red Lake River Watershed is one of five

subwatersheds within the 5,900-square-mile RLWD.

Red Lake River Watershed priorities for the next three years include constructing 248 side-water inlets and stabilizing 1,100 feet of legal ditch outlets. Combined, those 248 structures would keep an estimated 2,480 tons of sediment — the equivalent of 190 dump truck loads — out of the river annually.

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This is an opportunity for us to work with our neighbors and partner with local government units to improve a resource that is important to us.

— Peter Nelson, Pennington SWCD

The Minnesota Board of Water and Soil Resources awarded the Red Lake River Watershed \$667,550 in Clean Water Funds to implement the plan developed by Pennington, Red Lake and West Polk soil and water conservation districts; Pennington, Red Lake and Polk counties; and the Red Lake River Watershed District.

Pennington SWCD and the



The Red Lake River Watershed’s science-based, targeted and prioritized plan for the next three years includes constructing 248 side-water inlets. Combined, those projects will keep an estimated 2,480 tons of sediment out of the Red Lake River. **Photo Credit:** Red Lake River Watershed District

county ditch authority could draw from implementation funds to install sediment-reduction projects.

Details will be worked out with Pennington County farmers. Unlike the RLWD — which has authority to make and assess ditch improvements for the 20-plus ditch systems it maintains — the SWCD must obtain landowners' consent to work on property within the county system. The county asks landowners' permission to cross private land to access ditch right of way.

The initial idea is this: The county ditch authority would contact landowners — ideally, when a ditch is about to be cleaned out — and explain the benefits of side-water inlets. Pennington SWCD staff would survey and design projects; the county ditch authority would install and maintain them.

"It really takes a lot of that workload or burden off the landowner," Nelson said. "It's still 100 percent voluntary."

The current process is this: Landowners petition to have sections of the county ditch system cleaned out. When structures are installed as part of a Clean Water Fund project, landowners hire a contractor, and are responsible for ongoing maintenance.

"Rather than just a landowner doing projects and taking care of a small area, we can get broader coverage of the ditch and more of an impact for erosion protection," said Mike Flaagan, Pennington County engineer and ditch authority administrator.

The side-inlets would become part of the legal ditch system. The structures could be installed within the required buffers, alleviating landowners' right-of-way



A flotilla makes its way down the Red Lake River. Photo Credit: Red Lake River Watershed District

concerns. (Installation could start this year.)

"There's no cost to the landowners and in the long run, those systems are going to reduce erosion and reduce their cost for maintenance of that ditch," Flaagan said.

Landowners' taxes pay for county ditch maintenance. Flaagan estimated spraying cost \$150 per mile, and clean-outs — necessary every 15 to 20 years — cost \$6,000 per mile.

"If we can prevent some of that erosion and sediment going into the ditch system and eventually causing drainage issues, that's all for the best for those benefitted landowners," Flaagan said.

The Red Lake River Watershed was among five One Watershed, One Plan pilot projects funded in 2014.

"They've been working more cooperatively, working on a watershed-wide basis. They were already strong to begin with," Matt Fischer, BWSR board conservationist, said of the Red Lake River partners.

For example, the three SWCDs reworked criteria used to inventory waters that could benefit from buffers, making

it consistent throughout the watershed.

Red Lake River Watershed District shared water monitoring data with the SWCDs, and often provided matching funds for conservation projects.

When Pennington SWCD's Clean Water Funded ditch inventory came in under budget, the grant was reallocated so West Polk SWCD could complete a 300-mile ditch inventory within the Red Lake River drainage area. Because West Polk SWCD was short-staffed, it secured RLWD staff assistance before accepting the allocation.

"It improves that collaboration and communication with the other LGUs. Before, we would just focus on our county. It really brings awareness to everyone in this planning area on what the partners are doing and if opportunities to collaborate on projects (exist)," Nelson said. "One Watershed, One Plan allows projects to be funded without applying for as many Clean Water Fund Grants."

West Polk SWCD Administrator Nicole Bernd said funding the plan has

resulted in interest from landowners, who previously might have waited years for funding to come through.

"All of a sudden we have money to do projects. For years, we were always scraping and scrounging and asking for more," Bernd said. "There were times people would come in for assistance and we would have to say, 'We're out of money.'"

Instead of describing how a project works, now SWCD staff can show landowners examples of work in progress.

"The challenge now is going to be which project is ready first, which project's got the engineering plans done," Bernd said.

The watershed plans to seek federal and state funding to achieve the rest of its three-year goals: a \$6.9 million flood damage reduction project on a Black River impoundment, a septic system inventory, and an 80-acre fenced enclosure.

"To look at it as a watershed approach makes a lot more sense," Nelson said. "When you bring all these partners and players to the table that are involved in conservation, it allows more opportunities to prioritize and target areas where we can have the greatest impact."



The Minnesota Board of Water and Soil Resources' mission is to improve and protect Minnesota's water and soil resources by working in partnership with local organizations and private landowners. www.bwsr.state.mn.us.