

MN CREP fits Minnesota River bottom



MN CREP has made significant strides in Nicollet County, where a focus on the river bottom and retiring flood-prone cropland enrolled more than 800 acres



The Minnesota River bottom contains some of the most fertile — and flood-prone — cropland in Nicollet County, where landowners are seeing the advantages of the Minnesota Conservation Reserve Enhancement Program (MN CREP).

Since MN CREP began accepting applications in May 2017, Nicollet Soil & Water Conservation District (SWCD) staff has assisted 15 landowners in enrolling a total of 972 acres. Twelve of the 15 landowners enrolled 832 acres along the Minnesota River bottom.

The voluntary, federal-state funded program targets the highest priority areas across 54 counties in southern and western Minnesota. Landowners enroll simultaneously in a 14- to 15-

year federal Conservation Reserve Program (CRP) contract administered by the USDA's Farm Service Agency, and a perpetual Reinvest in Minnesota (RIM) conservation easement administered by the Minnesota Board of Water and Soil Resources (BWSR).

MN CREP is working toward making a big difference. Aiming to permanently protect land, the program restores hydrology, increases infiltration, provides flood mitigation and wildlife habitat, and reduces nitrate-loading in drinking water supplies.

A Minnesota River-Mankato Watershed Total Maximum Daily Load (TMDL) study identified high levels of E. coli, total suspended solids, nitrate and total phosphorus as impairments

This MN CREP easement borders the Minnesota River in Nicollet Township, Nicollet County. River bottom floodplain cropland was enrolled in 2013.

Photo Credit:
Nicollet SWCD



Left: This MN CREP easement bordering the Minnesota River in Courtland Township, Nicollet County, is river bottom floodplain cropland enrolled in 2020 and scheduled to be seeded in fall 2020. **Middle and Right:** A MN CREP easement borders the Minnesota River in Nicollet Township, Nicollet County. The river bottom floodplain cropland was enrolled in 2013. **Photo Credits:** Nicollet SWCD

in the Minnesota River-Mankato watershed. Those impairments affect aquatic life, including macroinvertebrate and fish communities; aquatic recreation including swimming; and drinking water.

Because the Minnesota is a Mississippi River tributary, protection and restoration of land within the Minnesota River watershed affects the Mississippi.

“There has been tremendous landowner interest in enrolling in the program,” said Eric Miller, Sibley/Nicollet SWCD Farm Bill technician.

The river bottom holds the key to conservation in Nicollet County. The interaction among its soil, hydrology and biotic communities serves many important physical, biological and ecological functions.

The river will always meander, but deep roots and vegetation help to hold soil and mitigate erosion. During floods, permanent vegetation slows down the flow. That allows sediment deposition outside the river channel, trapping more sediment in the floodplain. During regular flow, more sediment is held in the uplands, reducing the velocity of water flowing off

“ There has been tremendous landowner interest in enrolling in the program. ”

— Eric Miller, Sibley/Nicollet SWCD Farm Bill technician

the bluffs. The end result is reduced sediment transport, reduced nitrate loading, improved water quality, and improved habitat for fish and macroinvertebrate communities.

Although the river bottom produces some of the most fertile land in the county, heavier and more frequent rainfalls make that land more susceptible to flooding. For landowners, this results in crop loss and/or the inability to plant.

“Rather than fighting the unknown question of what the river will do, and can I get a crop in and what happens to my crop insurance prices if I get flooded out again,” Miller said, enrolling in the program tends to make more sense for landowners. “There’s really only a few fields left along the river bottom.”

Just over 1,370 acres of crop ground potentially eligible for MN CREP remains within the floodplain in Nicollet County. Just over 5,700 acres are already enrolled in federal and state easement programs within the county’s

17,972-acre, 500-year floodplain — the area that has a 1 in 500 chance of flooding in any given year. The county contains a total of 280,866 acres, and nearly 105 miles of the meandering Minnesota River.

Landowner and Nicollet SWCD Board Member John Kral owns about 230 acres of river bottom and bluff land in Nicollet County. Kral enrolled his last 9 acres located within the floodplain into the program in 2019.

“It was a good way to utilize marginal land and put acreage back into wildlife habitat,” Kral said, explaining why he enrolled those 9 acres in the program. Referring to the debris that comes with flooding, he said, “It got to the point where it made more sense than always fighting wood with the waves.”

Seeing the instability of the river has been difficult for Kral, an outdoorsman who enjoys fishing and hunting. In 10 years, Kral said he would like to see less flooding, a more stable river level, and more water storage in the highlands.

Kral said most people don’t understand how much work and customer service staff members put into MN CREP and into conservation. “It’s much more than just typing out a project. It’s surveying, measuring, staking,” he said.

Miller, who was hired nearly five years ago as a Nicollet SWCD watershed technician and moved into his current role two years ago, said he most enjoys the customer service-driven side of conservation — finding the right program for the right person and understanding that each person’s needs are different.

“I really enjoy working with landowners. I’ve established strong relationships with landowners. Working on the CREP program, I can’t say I know Nicollet County like the back of my hand, but it’s given me the opportunity to meet a ton of people and hear stories about the land and what it’s meant to their family.”

From the time MN CREP enrollment opened in May 2017 through March 2020, nearly 480 applications have been funded, voluntarily enrolling 25,000 environmentally sensitive acres. MN CREP will continue to accept applications until funds are exhausted or the sign-up acreage goals are met.