Restoring the Wild Rice River

The Wild Rice River, which is impaired for turbidity, originates at Mud Lake in Clearwater County and flows west through Mahnomen and Norman counties. The Lower Wild Rice Corridor Habitat Restoration Program aims to restore the sinuosity of a 23-mile-long stretch, which will more than double its length. Photo Credit: Minnesota Pollution Control Agency

The Wild Rice Watershed District is leading a large-scale easement acquisition and channel restoration that aims to mitigate flooding issues and benefit water quality and habitat. Partners include BWSR and the Norman County SWCD.

The Wild Rice Watershed District (WRWD) is in the early stages of pursuing the most expansive project in its 73-year history.

Decades after a Wild Rice River channel was straightened and dredged as part of a U.S. Army Corps of Engineers project, the Lower Wild Rice Corridor Habitat Restoration Program aims to return a 23-mile-long stretch to its natural corridor. The proposed work will more than double that stretch of river, bringing it to 50-plus miles.

“Restoring the sinuosity of the river will allow us to better restore and protect the natural wildlife and fish habitat along the channel, and reduce further degradation to the environment,” said WRWD Administrator Tara Jensen.

The turbidity-impaired Wild Rice River originates at Mud Lake in Clearwater County and flows west through Mahnomen and Norman counties.

The project is in its first phase, which involves acquiring Reinvest in Minnesota (RIM) Reserve conservation easements administered by the Minnesota Board of Water and Soil Resources (BWSR) that will allow the WRWD to install and maintain practices associated with later phases of the project. Partners aim to enroll land within a half mile of the corridor into permanent conservation easements during this phase. As of this spring, 329 acres have been enrolled and planted with native vegetation. Enrollment is voluntary.

The WRWD is partnering with the Norman County Soil & Water Conservation District (SWCD) to identify and work with interested landowners. About 30 landowners have expressed interest to...
date. Two applications have been recorded; seven parcels are nearing completion. Landowners who enroll in the easements are required to plant and maintain native vegetation on that land.

“The fact that these easements include non-cropland is a good incentive,” said Mark Christianson, Norman County SWCD technician. “A lot of the river corridor lands aren’t square or flat. Some aspects of the land may be better for hunting than cropping.”

Many of the targeted parcels are also too wet to farm consistently. Enrolling less productive land in conservation easements can offer landowners multiple benefits.

“A lot of the land we’re looking at acquiring is land prone to flooding along the channel,” Jensen said. “This program keeps the land in private ownership, so it’s staying on the county tax rolls, and landowners are able to retain hunting rights.”

The redesigned channel will also help protect homes and farmland from flood damage.

The second phase will involve decommissioning riverside levees and replacing them with levees that are set back farther from the river. Detailed design work for the channel restoration will also be completed during this phase.

The third phase will focus on restoring the channel to its original state, reconnecting segments of the river that were cut off from each other when the channel was straightened in the 1950s. Wetland restorations for habitat benefits are also planned. The fourth and final phase will center on maintaining and operating the completed restoration.

The conservation easements will provide additional fish and wildlife habitat for sturgeon, river catfish and other species. Native vegetation combined with a stabilized, restored river channel will help reduce bank erosion and improve water quality.

“The main intention of the project is to store water, improve water quality and reduce flooding downstream,” Christianson said.

The project is funded by the Outdoor Heritage Fund (OHF), which is administered by the Lessard-Sams Outdoor Heritage Council (LSOHC). In fiscal year 2016, the LSOHC allocated $2.27 million to WRWD for the project, with the district providing $325,000 in matching funds. The LSOHC allocated an additional $2.975 million toward the project in fiscal year 2020, but with an adjusted distribution model that provides $2.75 million to BWSR for RIM easement enrollment and $225,000 to the WRWD for project management and other services. The local match for the 2020 grant is approximately $446,250. In fiscal year 2021, LSOHC awarded $1.88 million for the project, with $1.74 million of the allocation provided to BWSR for easement acquisition and $148,000 provided to the watershed district. The local match for this request was approximately $283,200. The WRWD plans to continue to apply for OHF funding in the future.

The large-scale project doesn’t have a hard deadline for completion — Jensen said the overall timeline will ultimately depend on how quickly land can be acquired to enable the WRWD to embark on subsequent phases.

“We need to get a start on it now if we want to help future generations deal with the flooding issues going on here,” Jensen said. “If we get a handle on it now, we can prevent the channel from continuing to degrade.”

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