BOARD OF WATER AND SOIL RESOURCES

2021 October Snapshots

Wetland project benefits Buffalo River



A wetland banking project in Becker County restored 80 acres of wetlands and more than 63 acres of upland habitat. The wet meadow shown above is one of three wetlands restored during construction, which began in October 2020 and concluded in November. **Photo Credits: BWSR**

Becker County restoration adjacent to WMA designed to enhance habitat, curb nutrient-loading

A 175-acre restoration project in Becker County will reduce the amount of nutrients entering the Buffalo River, create habitat and generate 87.5 wetland banking credits.

Located about 16 miles north of Detroit Lakes within the White Earth Reservation, the wetland banking site includes 80 acres of restored wetlands and more than 63 acres of upland habitat. The project also involved enrolling most of the site — 173 acres — into a permanent conservation easement. Construction began in October 2020 and finished in late November. Minnesota wetlands that are filled or drained must be replaced under state and federal wetland laws, including the Wetland Conservation Act.

The Minnesota Board of Water and Soil Resources (BWSR) paid for the \$1.12 million project construction in Becker County through the Local Government Road Wetland Replacement Program (LGRWRP). The LGRWRP is one of several BWSRadministered programs that restore wetlands to generate wetland banking credits. Local road authorities can use credits deposited into the state wetland bank to obtain state and federal wetland permits for qualifying road improvement projects.

In 2020, the state Legislature appropriated \$23 million for the program, expanding opportunities for wetland restorations throughout Minnesota.

"The Local Government Road Wetland Replacement Program is an important tool because it allows infrastructure projects to move forward while still ensuring wetlands are restored, offsetting the loss of these valuable natural resources," said Dennis Rodacker, BWSR wetland mitigation



A contractor installs a ditch plug, which blocks the ditch, allowing water to fill the once-drained wetland. The wetland restoration project in Becker County required several ditch plugs.

supervisor, who oversees the program.

BWSR Conservation Engineering Technician Jim Luniewski designed the Becker County restoration, which is adjacent to the Ogema Springs Wildlife Management Area (WMA). Luniewski said this site is unique because it involves wetlands located on gentle slopes — unlike the more common depressional wetlands known as "prairie potholes." The site was previously farmed. Natural wetlands were filled in or

altered, but wet conditions often prevented planting.

"Taking the land out of crop production and putting it into a restored shallow wetland is going to reduce nutrient loads downstream to the Buffalo River," Luniewski said. "The more we can reduce nutrients entering these tributaries, the better."

Three wetlands were restored by blocking and filling several ditches using shallow ditch plugs. The fill material came from areas onsite where upland sediment had accumulated along wetland edges. The goal, Luniewski said, was to remove shallow deposits of sediment to expose the original wetland basin. A local contractor did the work.

The Minnesota Department of Natural Resources (DNR) authorized a small amount of construction work related to the restoration on the adjacent Ogema Springs WMA. Habitat benefits created by the restoration project align with the DNR's management goal for the WMA to enhance waterfowl habitat for species such as yellow-headed blackbirds, rails, mallards and bluewinged teal.

"You're going to have both water quality and habitat benefits," Luniewski said. "The more land we can set aside and restore, while keeping the prime farmland farmable, that's a good goal for every conservationist to strive for whether you're a farmer or an outdoor enthusiast."