

Wetland mitigation on ag lands



Updated guidance streamlines process, improves quality of restorations

The first site in Minnesota to use new guidelines to calculate the value of wetland restorations on former cropland, a Roseau County parcel that drains to the Warroad River and Lake of the Woods, illustrates the benefits of the crediting system developed by the Minnesota Board of Water and Soil Resources (BWSR) and the St. Paul District of the U.S. Army Corps of Engineers (USACE).

Wetlands are protected by federal, state and sometimes local laws and regulations. In Minnesota, the primary state wetland protection law is the Wetland Conservation Act (WCA). The WCA was passed by the state Legislature in 1991 to protect wetlands and the benefits they provide. It is one of the most comprehensive wetland protection laws in the country, administered by BWSR and implemented by local governments.

In some cases, draining or filling wetlands is allowed when the lost functions and values of those wetlands are adequately replaced by restoring, enhancing or creating wetlands

elsewhere. This process is commonly referred to as wetland replacement or mitigation.

The most common mitigation mechanism in Minnesota is wetland banking, where wetland mitigation credits are withdrawn from the state Wetland Bank. These credits essentially represent acres of wetlands that have been previously approved for mitigation, subsequently restored, and then deposited in the bank for use in replacing future wetland impacts.

One of the methods used to generate mitigation credits is the restoration of partially drained, farmed wetlands.

Previously, credit for partially drained agricultural wetlands was allocated based primarily on the number of years the wetland was planted with annually seeded crops such as corn or soybeans. The more years it was planted, the more credit was allocated when restored. This assumed that the more the wetland area was planted, the more drained and degraded it was, and the more value it would have if restored.

*The first site to use the new method of calculating the value of wetland restorations on former cropland was a partially drained, farmed Roseau County site restored in 2020 through a partnership between BWSR and the landowner. Under the previous crediting system, the site may not have produced enough mitigation credits to offset the investment and risk in establishing a wetland mitigation bank. **Contributed Photos***

That approach could lead to overlooking lands with high restoration potential and high public value for mitigation in cases where landowners decided not to plant — as a business decision or for other reasons.

Additionally, applicants and their consultants were incentivized to devote significant time and resources to distinguishing drained from partially drained wetlands. That task is especially difficult when previous planting history is sparse.

Under this approach, productive cropland with effective drainage often provided the most credits while less productive cropland yielded fewer credits — even if it provided more public value related to wetland functions.

In response, BWSR and the USACE began collaborating on ways to streamline the crediting process in agricultural landscapes and provide more incentive to restore partially drained and marginally productive lands

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when such lands provide significant public value.

In May 2019, the agencies provided new joint guidance for crediting wetland restorations on cultivated fields in Minnesota.

The [“Alternative Method for Determining Wetland Credit Potential for Hydrologic Restorations on Cultivated Fields in Minnesota”](#) provides an improved method for determining functional gains, and corresponding credit amounts, resulting from the hydrologic restoration of drained and/or partially drained croplands.

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the degree of wetland degradation.

BWSR immediately began using the new guidance to develop wetland bank sites for the Local Government Roads Wetland Replacement Program (LGRWRP).

The first site to use this new method was a partially drained, farmed wetland that was restored in Roseau County in fall 2020 through a partnership between BWSR and the landowner. The site was regularly cultivated but was not always planted due to frequent flooding from the Warroad River. When it was planted, crop yields were minimal. Yet due to the frequent flooding, the site was a significant contributor of sediment and nutrients to the Warroad River and,

ultimately, Lake of the Woods.

Under the previous crediting system, the site may not have produced enough mitigation credits to offset the investment and inherent risk in establishing a wetland mitigation bank. But the new guidance increased the mitigation credits yield. This credit increase was more consistent with the function and value gained from restoration of the wetland on this site, and it sufficiently offset the investment and risk of establishing the wetland bank.

This new method for crediting wetland restorations on partially drained agricultural land expands mitigation banking opportunities, increases efficiency in the review and approval process, and focuses more attention on the functional benefits of wetland restoration. Better replacement wetlands ultimately improve the extent to which the legislative goals of WCA are being achieved.