

WETLAND CONSERVATION ACT Protection of Wetlands Previously Restored via Conservation Easements

Assessing Eligibility for the Agricultural Wetland Bank

BWSR Administrative Guidance, April 19, 2012

Overview

- Rule Reference: Primarily MN Rule 8420.0526, Subp. 6, with relevance to 8420.0522, 8420.0528, and other sections.
- Applicability: To provide guidance to Technical Evaluation Panels (TEPs) and Local Government Units (LGUs) for evaluating wetlands previously restored via conservation easements for Agricultural Wetland Bank eligibility.
- Intended Use: This guidance does not carry the weight of rule and is not binding on any party, however, it does provide additional specificity and should be used as a supplement to the Wetland Conservation Act (WCA) **Rule. The BWSR "Agricultural Bank Site Evaluation Tool" should also** be used as a technical companion to this guidance.

The Agricultural Wetland Bank is only used to replace impacts to wetlands located in a cultivated field per MN Rule 8420.0520, Subp 8.

Background

Agricultural Wetland Bank. The Agricultural Wetland Bank exists to provide replacement for impacts to wetlands in cultivated fields under the federal farm program and the MN Wetland Conservation Act (WCA). These wetlands are typically designated as **"Farmed Wetlands" (FW) on Natural Resource** Conservation Service (NRCS) wetland determination maps. Impacts to these wetlands, when replaced through restoration and not converted to a nonagricultural use for ten years, are not required to adhere to the typical WCA priority order of sequencing. In other words, as long as adequate replacement is provided, farmed wetlands may be impacted for agricultural purposes without considering alternatives that avoid and minimize wetland impacts.

Replacement of Wetland Functions. As required by WCA, wetland replacement (i.e. "mitigation") must replace the public value of wetlands lost as a result of an impact. This public value is based upon the important functions of wetlands lost due to the impact. In general, impacts to farmed wetlands result in the loss of at least some of the following primary wetland functions: wildlife habitat (typically early season prior to crop growth), water quality protection, and floodwater attenuation. The Ag Bank focuses primarily on these functions. While other functions exist to varying degrees in different farmed wetlands, these functions are generally degraded from cultivation and often from partial drainage.

Actions Eligible for Credit. WCA rules identify several actions that are eligible to generate wetland replacement credit. Of these actions, protection of wetlands previously restored via conservation easements (e.g. CRP) is a prominent opportunity for generating wetland replacement credit in agricultural areas of the state. The establishment of the Ag Bank, coupled with the expected expiration of Conservation Reserve Program contracts affecting thousands of acres of land in Minnesota, provide increased opportunities to use this action for replacing impacts to farmed wetlands. However, not all wetlands in expired conservation program contracts are eligible for wetland replacement. This guidance describes a process for assessing these potential sites for eligibility in the Ag Bank.



This farmed wetland in a soybean field is typical of the type of wetland impacted for agricultural purposes.



This restored wetland provides waterfowl habitat among other functions.

Evaluating Wetland Functions

Wetlands have certain characteristics (within, around, and affecting them) that are related to their potential to perform certain functions. Answering specific science-based questions regarding wetlands and their surrounding area provides a basis for general estimates of the level of wetland functioning. The Minnesota Routine Assessment Method (MnRAM) is a State-approved methodology for assessing wetland functions that provides a source of relevant questions. The MnRAM-based "Agricultural Bank Site Evaluation Tool" (see BWSR website) is used to assess functions of restored wetlands related to WCA Rule requirements.

The wetland functions evaluated for determining site eligibility for the Ag Bank and their relationship to minimum eligibility wetland replacement requirements is based on generalizations about the corresponding wetland impacts (farmed wetlands) and the nature and extent of wetland functions requiring replacement.

Eligibility Minimum standards for allocating full credit to wetlands restored under conservation programs.

- Restored Wetland. The site must contain a wetland that was restored (hydrology and/or vegetation) through the program or naturally over the life of the contract. Pre-contract conditions can be assessed by reviewing aerial photos, cropping history, drainage system records, the conservation program contract or easement, and other reasonably available information.
- Restoration of Natural Hydrology. To the extent practicable, all restored wetlands must emulate the natural hydrology of the wetland prior to alteration. This should be based on a reasonable prediction of the natural hydrology while taking into account land use changes that could potentially prevent full restoration to pre-alteration conditions. For sites where the natural hydrology regime has not been restored, additional restoration activities could be required.
- Native, Noninvasive Vegetation. WCA replacement standards require the establishment of native, noninvasive vegetation. The Ag Bank Evaluation Tool can be used to assess the adequacy of existing vegetation. The restored wetland plant community should have a medium or higher rating for vegetative diversity/integrity. For wetlands with multiple plant communities, the weighted average community quality based on the percentage of each community ranking should yield a rating of medium or higher.
- Expired Contract or Easement. The conservation program contract or easement must expire or be terminated prior to deposit of any credits in the bank. The contract or easement must also give the landowner the right to drain or fill the wetland upon termination. The landowner must provide a copy of the contract or easement for review by the LGU and TEP.

- Functional Benefits. The site should generally provide an increase in wetland function over the farmed wetlands being replaced through the Ag Bank, particularly the wildlife habitat, water quality protection, and floodwater attenuation functions. The Ag Bank Evaluation Tool should be used to assess these functions. At least two of these three functions should be ranked medium or higher, or at least one of the functions should be ranked high or exceptional. Other functions may be evaluated and considered by the TEP for meeting this requirement provided sufficient rationale is given.
- Structural Integrity. Any water control structures, dams, wetland outlets, dikes, or other impoundment or construction features must be stable and meet minimum WCA program engineering standards. The TEP should inspect any existing structural features, document their current condition, and assess the need for improvements or additional features. Survey/design information should be reviewed when available, and BWSR engineering staff should be consulted for additional technical expertise.
- Sustainability. Restored wetlands must persist and provide important wetland functions over time without human intervention. Sustainability concepts include the stability and integrity of construction features, the potential for erosion in or near the wetland, likely maintenance needs, compatibility with adjacent land uses, and other factors that could negatively affect the wetland's ability to function over time. The TEP should consider sustainability when performing site inspections.
- Upland Buffer. To the extent practicable or feasible, a vegetated upland buffer is required around all replacement wetlands. See MN Rule 8420.0522, Subp. 6 for details.

Allocating Replacement Wetland Credit

Typical Credit Allocation. Previously restored wetlands that meet minimum eligibility requirements at the time of application can receive replacement wetland credit for 75% of the restored wetland area. The standard credit allocation of 75% under MN Rule 8420.0526, Subp. 6, will likely be the most common. Minimum eligibility requirements need to be confirmed to receive this amount of credit.

Alternative Crediting Procedures. Replacement wetland credit may be allocated according to other actions eligible for credit described in WCA Rule as applied prior to initiation of the contract or easement. Using these other actions can sometimes provide opportunities for additional credit allocation when the applicant can provide sufficient evidence of eligibility and credit yield. That evidence will include documentation of pre-restoration conditions in addition to the specific actions taken to restore the wetland. The most likely actions with potential applicability, with the specific MN Rule 8420.0526 subpart identified, are:

- Restoration of completely drained wetland areas (Subp. 3) can receive up to 100% credit.
- Restoration of partially drained wetland areas (Subp. 4) can receive up to 100% credit with sufficient cropping history prior to initiation of the contract or easement.
- Vegetative restoration of farmed wetlands (Subp. 5) can receive up to 90% credit in bank service areas 2, 3, and 4 with sufficient cropping history during the 20-year period prior to initiation of the contract or easement.

Options to Address Vegetative Deficiencies. Many wetlands previously restored under conservation programs will fail to meet WCA standards for vegetation, but in some cases may otherwise perform valuable functions. In such instances, the applicant may choose to perform vegetative establishment work to achieve the standard and obtain full credit. The amount and cost of work necessary, projected credit yield, and likelihood of long-term success should be considered in making this decision. TEP findings should identify options available to the applicant to gain eligibility and/or increase credit yield through such vegetative improvements.

Flexibility in Replacement Standards. MN Rule 8420.0528 provides standards and guidelines for wetland creation and restoration projects. The overarching requirement for all replacement or banking plan applications is the adequate replacement of the public value of wetlands lost. The primary purpose of many specific standards is to ensure the replacement of that public value is sustainable over time. The evaluation of wetlands previously restored under a conservation program differs from traditional wetland restoration projects because the wetland was *previously* restored, as opposed to a *proposal* to restore a wetland. As such, the evaluation is based on whether the actions taken were in-fact adequate vs. a prediction of what will be adequate. In addition, some standards, such as erosion control during construction, no longer apply to previously restored wetlands that have no further construction needs.

The LGU, with the concurrence of the TEP, can allow flexibility in replacement wetland construction standards when appropriate. In regards to previously restored wetlands, the vegetation standard is the most likely area for which flexibility can be considered. Flexibility should only be considered when:

- 1. the wetland, in its current condition, is providing important functions to the watershed despite the flexibility;
- the flexibility will not compromise long-term sustainability (flexibility in any standard that could jeopardize long-term sustainability is *never* appropriate);
- 3. in general, the important functions of the wetland provide an increase in public value compared to those typically lost in impacts to farmed wetlands; and
- 4. an adequate rationale and justification is provided for the flexibility and documented in the TEP findings.

For example, the Ag Bank Evaluation Tool rates the water quality protection function as exceptional while vegetative diversity is rated low. Based on a site inspection and local knowledge of the watershed, the TEP confirms that the wetland is providing important functional benefits to the watershed and is of high public value despite a relatively higher proportion of non-native species.

In such instances, it can be appropriate for the TEP to recommend a reduced credit yield that recognizes the important functional benefits provided by the site, while accounting for the deficiencies in vegetation.

Upland Buffer. Establishment or preservation of a vegetated upland buffer adjacent to wetlands restored under conservation programs can receive replacement wetland credit in accordance with MN Rule 8420.0526, Subp. 2.

Conservation Reserve Program Eligibility

Specific CRP practices that can result in eligible wetland restorations include CP23, CP23A, and CP27/28. Permanent easements, such as those of the Conservation Reserve Enhancement Program (CREP), are not eligible.

Performance Standards, Monitoring, and Credit Deposit

Performance Standards. Performance standards and an associated credit release schedule are typically included in banking plans to provide the goals and benchmarks by which to evaluate the success of specific wetland establishment activities. However, in the case of expiring conservation program sites, the restoration activities have already been completed. The focus is therefore on whether the site currently meets functional standards rather than measuring the future success of proposes restoration activities.

Restoration activities will often not be necessary for wetlands previously restored under expired conservation program contracts. In those instances, the bank plan will not include performance standards. Instead, the Ag Bank Evaluation Tool will serve as the standard for evaluation.

When structural improvements or minor restoration activities are necessary, performance standards should be targeted to measuring the success of the actual work performed. The corresponding credit release schedule should recognize the success of the previous restoration compared to the amount of additional work necessary. In other words, the initial deposit of credit in the bank should be roughly proportionate to the amount of the site that currently meets eligibility standards, with future deposits corresponding to the amount of the site where additional work is necessary.

Documentation of Existing Conditions. Monitoring and long term inspections by BWSR will be based on the approved bank plan and the permanent conservation easement for wetland banking. The easement contains various conditions and restrictions on land-use. It also references the approved bank plan. Since all or most restoration activities will have been completed prior to bank plan approval, it is vital that the plan specifically document the existing conditions of the site, including vegetation, hydrology, and the location and as-built specifications of any structures. Those existing conditions are the benchmark by which future conditions of the site will be compared.

Monitoring. The purpose of replacement wetland monitoring is to measure replacement wetland success relative to the goals of the approved replacement or banking plan and to identify any needed corrective actions during the monitoring period.

Since all or most restoration activities have been previously completed, a determination that a site is eligible (after program expiration) is also a determination that the goals of the banking plan have been met. As such, the focus of monitoring should be on any required structural work or minor restoration activities and describing any changes to the remainder of the site from the existing conditions documented in the approved bank plan. Monitoring reports for expired conservation program sites will typically be less detailed than those of a current restoration project. Applicants should work with the TEP to determine the focus and intent of monitoring for each specific site.

When, after the third season of monitoring, the site conditions have not degraded significantly from the conditions documented in the approved bank plan, the LGU and TEP can end the monitoring period.

Deposit of Credit in the Ag Bank. To be deposited into the wetland bank, credits must be certified by the LGU based on the findings and recommendations of the TEP. According to WCA, the TEP must ensure that sufficient time has passed for the wetland to become established, especially vegetation and hydrology, before recommending certification of credits.

For wetlands previously restored under conservation programs, the restoration activities were often completed 10 to 30 years before contract expiration and the wetland is now fully established. In those instances when no additional restoration activities are required, all available credits can be deposited in the bank when each of the following has occurred:

- 1. The bank plan has gained LGU approval,
- 2. The conservation program contract or easement has terminated or expired, and
- 3. The permanent conservation easement for banking has been recorded and accepted by BWSR.

In those instances when additional restoration activities are necessary, the approved performance standards and credit release schedule will help guide decisions on credit deposit.



This sedge meadow provides wildlife habitat and performs an important water quality protection function.

Technical Evaluation Panel Site Review Process

Pre-Application Scoping is a particularly important step in the review process. This step will provide information on eligibility and help the potential applicant make more informed decisions prior to investing substantial amounts of time and money in the site. The steps below summarize this Scoping review process. The evaluation can cease at any point the site is determined to be ineligible.

- 1. Assemble Scoping Materials. The LGU and/or TEP assemble available relevant technical information and assist the applicant in completing the Scoping form.
- 2. Review Contract or Easement. Confirm that the conservation program contract or easement has expired (or will expire prior to credit deposit) and gives the landowner the right to drain the wetland.
- 3. Identify Wetlands. Identify wetlands and their boundaries on aerial photos and/or other mapping resources (offsite methodology).
- 4. Confirm Wetlands were Restored. Compare pre-project and current conditions for evidence that identified wetlands were restored (hydrology and/or vegetation) through implementation of the conservation program. Pre-existing wetlands that were not restored are typically not eligible for credit. Relevant sources of information can include historic aerial photos, the conservation program contract, landowner records, and observations from the on-site evaluation.
- 5. On-Site Functional Assessment. Complete this on-site assessment using the Ag Bank Evaluation Tool. If the site provides other important functions that are not adequately captured in the evaluation tool, document the justification and add the applicable section of the full MnRAM procedures to the evaluation. Field check the off-site map from step 3 and modify wetland boundaries as appropriate. Document general conditions of vegetation and hydrology.
- 6. Identify Landscape Features. Identify and document existing ditches, waterways, embankments, plugs/structures, or other notable features.
- 7. Inspect Structures. Inspect and evaluate all identified construction features of restored wetlands, such as ditch plugs, embankments, and control structures. Record details and seek advice from program engineers or qualified technical professionals as needed.
- 8. Determine Eligibility. Analyze results of above assessments and determine eligibility status for deposit in the Agricultural Wetland Bank. Eligibility status will generally be one of the following:
 - Eligible as-is.
 - Eligible with minor upgrades to existing structures.
 - Currently ineligible for full credit but eligibility or higher credit yeild could be obtained with additional restorative actions.
 - Ineligible.
- 9. Estimate Credit Yield for Eligible Areas. Estimate the credit yield for each eligible wetland based on the boundaries as determined above. Also estimate potential credit available for upland buffer.
- 10. Assemble TEP Findings. Document eligibility and the crediting determination in the TEP findings. The findings should also address the results of each of the above steps and include recommendations and options for necessary site improvements.

Wetland Delineation

The purpose of the identification and mapping of wetlands described in the scoping steps is to determine eligibility and estimate potential credit yield. Off-site methods are sufficient for this purpose, with detailed on-site methods and transects typically unnecessary. If an applicant decides to proceed with a banking application, a determination can be made at that time concerning whether the existing delineation is adequate or if a more detailed on-site delineation is necessary.

So a site is eligible, what next?

- When currently eligible sites are identified, the applicant may proceed to the complete banking plan application.
- When additional construction or restoration work is necessary, applicants should prepare a Concept Plan for review by the TEP and BWSR technical services staff.

BWSR Guidance, April 19, 2012

The primary authors of this guidance are:

- Ken Powell, Senior Wetland Specialist
- Les Lemm, WCA Coordinator

This document is available on the BWSR website and may be revised periodically. Check the website for the most current version. www.bwsr.state.mn.us/wetlands

Contact your Local Government Unit or BWSR Wetland Specialist for additional information.