WETLAND CONSERVATION ACT

Wetland Preservation for Replacement Credit

BWSR Administrative Guidance, July 1, 2010

Overview

Rule Reference: **MN Rule 8420.0526, Subpart 9.**

Applicability: **To provide guidance to Technical Evaluation Panels (TEPs) and Local Government Units (LGUs) for use in evaluating potential wetland preservation projects for the allocation of replacement credit under the Wetland Conservation Act (WCA).**

Intended Use: **This guidance does not carry the weight of rule and is not binding on any party, however it does provide additional specificity for applying the Preservation action eligible for credit and should be used as a supplement to the WCA rule.**

Eligibility for wetland preservation credit is determined by the TEP. Early consultation with the TEP is essential.

Purpose and Use of Preservation

Purpose. Wetland preservation helps achieve the purpose of WCA by maintaining wetland quality and biological diversity through permanently protecting the functions of relatively pristine northeastern Minnesota wetlands, including forested swamps, bogs, and fens.

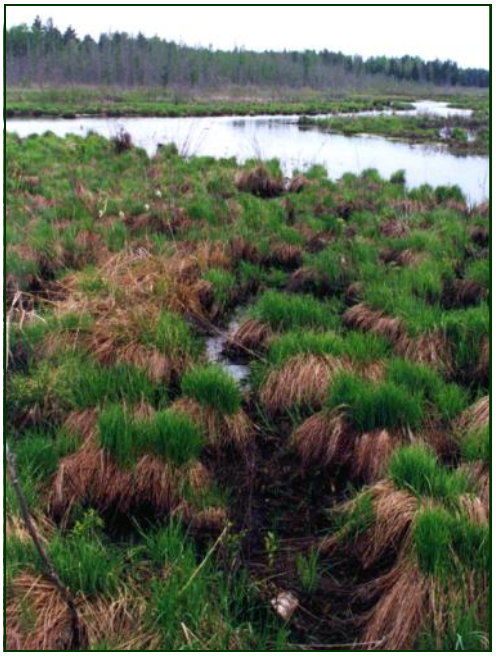
Maintaining Important Functions. Preservation is particularly important for rare or valuable wetland types and functions that are difficult to replace; where created or restored wetlands can replace the acres of wetland lost to an impact but not the lost function, thus resulting in a loss of public value. Creation or restoration of difficult-to-replace wetlands can be more costly with less certainty of success. Consequently, impacts to such wetlands are often replaced with different types, resulting in the long term loss of the functions provided by those wetlands.

Watershed Perspective. Both the WCA rule and the federal rule on Compensatory Mitigation for Losses of Aquatic Resources (April 2008) encourage the consideration of wetland replacement from a watershed perspective, which can help clarify when wetland preservation is appropriate for replacement. Preservation might not appear to offset the loss of wetland acreage in the short-term. However, when the long-term goal is to secure a mix of wetland types and locations that will most benefit the watershed, protection of certain wetlands central to that goal in exchange for replacement credit may be desirable.

Proximity to Impact. WCA rules require that wetland replacement should occur as close to the impacted wetland as reasonably possible (MN Rule 8420.0522, Subpart 7). The preservation of wetlands for wetland replacement provides an additional option to achieve this goal in the greater than 80 percent pre-settlement wetland areas of Minnesota where many exceptional wetlands exist and traditional wetland restoration opportunities are scarce.

Limitations on Use. Preservation credit can only be allocated for wetlands that are located in a greater than 80 percent area (see page 2) and owned by the state or a local unit of government (see page 5 for more information). Approved wetland preservation projects can be allocated credit at a rate up to 12.5 percent of the area preserved.

A pristine forested, coniferous, riparian wetland may be a prime candidate for wetland preservation.



A sensitive riparian wetland in northeast MN.

Application and Review Procedures

The TEP is responsible for determining if a wetland is important enough to warrant the allocation of credit for preservation and under a demonstrable threat of degradation or impact. This is particularly important since the applicant can often be the LGU for preservation projects.

The review process for potential preservation projects relies heavily on pre-application scoping. Early TEP involvement is vital. The use of preservation requires unique information and documentation that is not typical for most commonly used actions eligible for credit. Applicants should solicit feedback from the TEP and consider any recommendations before preparing a complete application. The TEP can provide early input on the value of the wetland, the probability of future impact or degradation, the applicability of preservation, and other aspects of the proposed project. The TEP is encouraged to consult outside expertise for additional review and comment when appropriate.

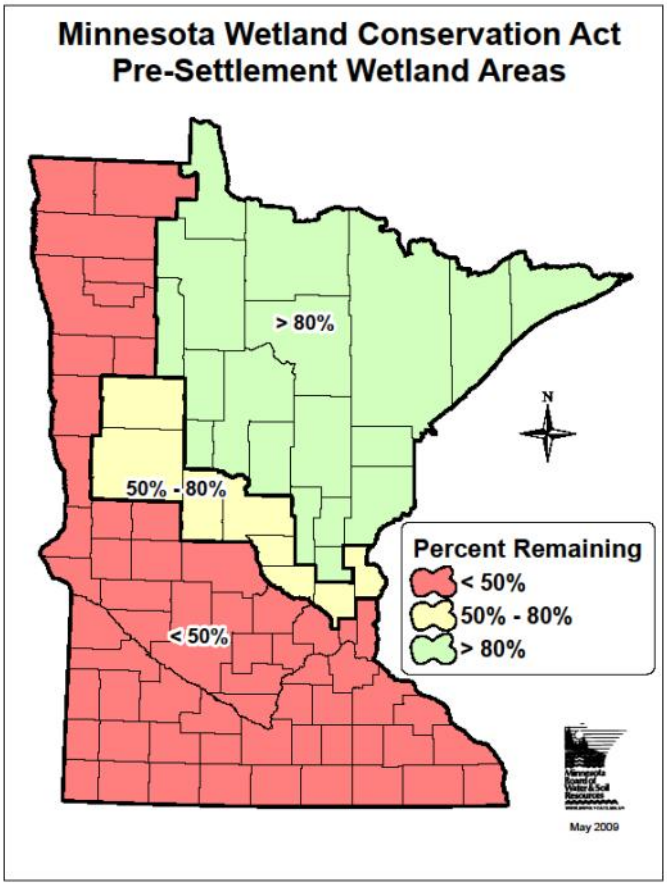
The applicant must submit sufficient information to document the existence of an eligible wetland and for the TEP to determine if the proposed project warrants the allocation of replacement credit. The use of preservation for credit is approved as part of a replacement or banking plan application in accordance with the standard WCA decision-making process.

When is Preservation Appropriate for Replacement?

Preservation may be appropriate for replacement credit when <u>all</u> of the following conditions are met:

1) The wetland is in >80% pre-settlement wetland area.
2) Other actions eligible for credit have been considered and preservation will provide greater benefits to the watershed than other available wetland replacement opportunities.
3) The TEP has determined that the wetland:
   A. contains or directly benefits an exceptional natural resource;
   B. is of a type or function that is rare, difficult to replace or of high value to the watershed;
   C. contains a rare or declining plant community; or
   D. is of a type not likely to regenerate, such as northern white cedar (see page 3 for details).
4) The TEP has concluded that there is a high probability the wetland will be degraded or impacted.
5) The wetland is not in need of significant restoration or management, and a conservation easement will adequately protect the wetland and its functions from the threat of degradation.
6) The property is either currently owned by a state or local unit of government, or will be prior to the recording of the conservation easement.

The use of wetland preservation for replacement credit is limited to Minnesota counties with greater than 80 percent of their pre-settlement wetlands remaining (shown in green below).



Considerations for Identifying Eligible Wetlands

The following considerations can assist in identifying wetlands eligible for preservation credit:

A) A wetland that contains or benefits an exceptional natural resource.

- **Exceptional Resources.** The WCA rule provides a list of exceptional resources. They include habitat for state-listed endangered or threatened species, rare native plant communities, special fish and wildlife resources, sensitive surface waters, and others determined to be exceptional by the TEP. See MN Rule 8420.0526, Subp. 8 for details.
- **Public Value.** An exceptional resource is somewhat rare and of special value to the public because of the functions it provides. What is considered exceptional will vary across the state based on abundance, functional benefits provided, statewide or national significance, watershed needs, and local values.
- **Qualification as Exceptional.** A site that contains a feature listed in rule as exceptional (i.e. rare native plant community) does not automatically qualify as exceptional for preservation. The TEP must determine that the resource is exceptional within the context of the watershed, region, or state and consistent with local priorities. For example, a wildlife travel corridor primarily used by raccoons is clearly not exceptional.
- **Functional Assessments.** The Minnesota Routine Assessment Method for evaluating wetland functions (MnRAM) can be used to assist in determining if a site is exceptional and to support the applicability of allocating credit for wetland preservation. For example, if a site is a significant wildlife resource, MnRAM can be used as evidence to support its exceptional rating. MnRAM ratings of high or exceptional, however, do not necessarily mean the site qualifies as "exceptional" for preservation.
- **Approved Plans.** BWSR approved plans can identify local or regional goals for the preservation of particular wetland habitat types or functions that may be considered exceptional within the plan area.

B) A wetland of a type or function that is rare, difficult to replace or of high value to the watershed.

- **Wetland Loss Trends.** Wetland types or characteristics that have been significantly lost in the watershed, including current trends of habitat loss, fragmentation, or degradation, may be particularly valuable due to the widespread loss of specific functions.
- **Scientific and Natural Area Criteria.** Sites meeting the criteria to qualify as a Scientific and Natural Area (SNA), as determined by the DNR, can be rare and important to maintaining biological diversity.
- **Ability to Replace.** Wetlands that are difficult to replace and, when impacted, will result in a permanent loss of function (i.e. white cedar swamps and bogs) are good candidates for preservation.
- **Habitat Connectivity.** A wetland providing habitat for important species that is in close proximity to and directly benefiting public lands or natural areas (i.e. fens, riparian areas, Wildlife Management Areas, etc.) can be of significant value to the watershed.
- **Trout Streams.** Wetlands directly adjacent to or at the headwaters of a designated trout stream can provide a source of hydrology, shade, temperature moderation, and other functions necessary for trout survival. Such wetlands are extremely valuable to the trout stream and its watershed.

C) A wetland that contains a rare or declining plant community.

- **Rare Natural Communities.** A site containing a wetland native plant community that the DNR has determined qualifies as a "Rare Natural Community" (a conservation status rank of S1, S2, or S3 or an "Outstanding" or "High" biodiversity significance ranking and mapped or eligible to be mapped in the Natural Heritage Information System) can be considered for wetland preservation.
- **Statewide or Watershed Trends.** In northeastern MN, the most common example of a declining wetland plant community is white cedar. Other plant communities, however, may be in decline on a watershed basis that could be candidates for wetland preservation.

D) A wetland of a type not likely to regenerate, such as northern white cedar.

- **Harvest and Regeneration.** Logging can be very beneficial to the long-term sustainability of wooded wetlands. However, if techniques appropriate to the species being harvested are not employed, harvest may not result in the sustainable regeneration of the primary species or an important sub-species of a mixed forest stand. Forested wetlands containing such susceptible species can be considered for preservation.

Determination of a "Demonstrable Threat"

In addition to being an eligible wetland according to the criteria on the previous page, the TEP must determine that there is a high probability the wetland will be degraded or impacted if not preserved. This is commonly referred to as a "demonstrable threat." Applicants must provide sufficient documentation to demonstrate that a threat to the wetland's ability to function exists and can be removed though preservation. The following are considerations for determining a demonstrable threat:

Fragmentation by use of exemptions. Wetland areas that are likely to be impacted through WCA exemptions, where preservation will protect the wetlands. Examples include:

- Maintenance of legally installed drainage ditches or tile lines where maintenance rights will be vacated.
- Areas where use of the deminimis exemption will likely result in numerous minor impacts such as roads, buildings, or other infrastructure that will fragment and degrade the wetland over time.

Accessibility for development. TEPs should consider whether the wetland is readily accessible by public roads which may increase the potential for development or other impacts. A landlocked parcel would typically be less vulnerable to development than one with public roads directly adjacent to the parcel.

Unsustainable use of exceptional forested wetlands. Protecting white cedar swamps and other important forested wetlands from activities that will cause degradation, such as concentrated motor vehicle traffic or logging where provisions will not be included to ensure regeneration. Other difficult to replace forested wetlands, such as tamarack/spruce bogs or mosaics of various species, can also be considered.

Fragmentation from subdivision or development. Subdivision of large tracts of land may result in wetland impacts or degradation from isolation, removal of habitat connections, or decreased water quality. Similarly, development of limited upland habitat within or adjacent to eligible wetlands can degrade the wetlands if destroyed. Preservation of associated upland habitat along with adjacent wetland will protect the wetland's ability to function over time.

Scientific and Natural Areas. SNAs where buyout of timber and/or mineral rights on DNR designated Watershed Protection Areas or preservation of other lands adjacent to SNAs that will enhance long-term protection and sustainability of wetlands within the SNA.

Excavation. The potential mining of peat, gravel, or other materials from an exceptional wetland can be considered a threat of degradation for purposes of wetland preservation.

Degradation from unregulated activities. The expansion of farming operations, removal or alteration of natural vegetation, overgrazing, and other unregulated activities can often threaten to degrade a wetland and reduce its ability to function.

An example of the clear-cut of a mixed stand of white cedar, balsam fir, black ash, and balsam poplar with no provisions for regeneration of the cedar or fir.

Meeting the eligibility requirements (listed on page 3) does not automatically result in the granting of replacement credit. Eligible wetlands must be under a demonstrable threat that can be removed by preservation of the wetland through a conservation easement. The project must also be consistent with all other requirements of WCA rule and any relevant local plans.

Ram's head lady slipper is a threatened plant in Minnesota. It can be found in the north-central and northeastern parts of the state.

Upland Buffer and Adjacent Habitat

Buffer. Wetland areas preserved for replacement credit should have a buffer adequate to protect the wetland and its function from current and future land use in perpetuity. LGUs can consider the specifications of MN Rule 8420.0522, Subp. 6 for minimum buffer width requirements, however, wider buffers may be necessary in some circumstances.

Upland Habitat Connections. Important wildlife travel corridors or upland habitat connections with other resources can be allocated credit and included in the conservation easement when they directly contribute to the function and sustainability of the wetland being preserved. The upland area must consist of native, non-invasive vegetation and be connected to the wetland being preserved.

Allocation of Credit. Preservation of buffer and upland habitat connections can be allocated up to 12.5 percent credit, consistent with the wetland being preserved. Restoration of buffer consisting of native, non-invasive vegetation adjacent to a preserved wetland can be allocated credit consistent with MN Rule 8420.0526, Subp. 2. Credit for buffer restoration can only be granted for areas degraded by legal human activity that occurred at least 10 years prior to the date of application.

Ownership Requirements

Wetlands must be owned by the state or a local unit of government to receive WCA replacement credit for their preservation. These options will meet that requirement:

- **Current Public Ownership.** Preservation of wetlands currently in public ownership may be somewhat rare due to the lack of a demonstrable threat, however, there can be circumstances where valuable publicly owned wetlands are under threat of degradation or loss and preservation can be justified.

- **Purchase.** The state or a local unit of government can consider the purchase of privately owned and eligible wetlands currently under a demonstrable threat for the purpose of removing the threat and preserving the wetland for credit. Governmental units should secure written TEP concurrence and, if possible, LGU approval prior to purchase.

- **Transfer of Property.** Privately owned and otherwise eligible wetlands under a demonstrable threat can be allocated replacement credit for preservation when the land ownership is transferred or sold to the state or a local unit of government after a replacement or banking plan is approved, but prior to the recording of the conservation easement. The replacement or banking plan application must include documentation that the applicable governmental entity will accept the property transfer and record the easement.

Many species of wildlife, such as this fisher, require large tracts of connected wetland and upland forest habitat.

Clean Water Act Coordination

The U.S. Army Corps of Engineers is responsible for approving wetland mitigation credit under the federal Clean Water Act. To increase the likelihood that preservation credits will be acceptable for both the state and federal programs, applicants are encouraged to consult with the Corps early in the process, before a full application is prepared and concurrent with TEP pre-application scoping. More information is available at: www.mvp.usace.army.mil

General Considerations

Other Land Use Controls. Wetlands must be vulnerable to degradation caused by allowable land use activities in or near them. Comprehensive plans, zoning, and other land use restrictions should be referenced in making this determination. For example, claiming that the wetland could be degraded by construction of a housing development would not be acceptable if the site is zoned as rural and there are no planned land use changes. In contrast, a wetland or wetlands in an area with significant upland that is zoned or planned for commercial development would be vulnerable to degradation. A wetland that is protected by virtue of its position in the landscape and/or protected by other regulations (some floodplain/floodway areas for example) would generally not be eligible for preservation credit.

Vegetative Management. Preservation credit should only be granted for areas of native, non-invasive vegetation that do not require management intervention. Applications for preservation credit should include a long-term plan that identifies any potential allowable activities or intentions for future harvest of woody species. Any proposed harvest must be done for the purpose of promoting regeneration, maintaining needed diversity, and improving the sustainability of the stand consistent with the goals of preservation. To the extent possible, vegetation should be maintained by natural regeneration and competitive selection, as opposed to using herbicides, replacement plantings, and weeding to promote certain plant species over others. Avoid allocating credit for sites that will depend on perpetual management to be successful.

Watershed Scale. Site selection for wetland conservation and mitigation should be conducted on a watershed scale in order to maintain wetland diversity, connectivity, and appropriate proportions of upland and wetland systems needed to enhance the long-term sustainability of the wetland and riparian systems. Regional watershed evaluation should greatly enhance the protection of wetlands and/or the creation of wetland corridors that mimic natural distributions of wetlands in the landscape.

Riparian Wetlands. Riparian wetlands should receive special attention and protection because their value for stream water quality and overall stream health cannot be duplicated in any other landscape position.

Northern white cedar is in decline in Minnesota due to insufficient regeneration.

Wetlands and associated upland preserved for replacement credit must be protected via a permanent conservation easement granted to BWSR.

Conifer swamps provide thermal cover for whitetail deer and other wildlife during severe winters.

Ecological Suitability and Sustainability. TEPs should pay particular attention to the ecological suitability and sustainability requirements of MN Rule 8420.0522, Subp. 5 when evaluating proposals. The preservation project must be compatible with adjacent land use (current and projected) and result in a naturally sustainable wetland.

ENRV. Exceptional wetlands that require restoration or management intervention may be eligible for replacement credit under MN Rule 8420.0526, Subp. 8: Restoration and Protection of Exceptional Natural Resource Value (ENRV). See BWSR ENRV guidance and consult with the TEP for more details.

Technical Resources. See BWSR ENRV guidance for a list of information sources that may also be helpful in reviewing potential wetland preservation projects.

Application Requirements

The use of preservation for credit relies heavily on early TEP involvement and the submittal of supplementary information. In addition to the application requirements of MN Rule 8420.0330, the following information is of particular importance for the review of potential banking and replacement plan proposals utilizing preservation:

- √ Supporting evidence for qualification as an eligible wetland (i.e. an exceptional natural resource or other eligible wetland according to MN Rule 8420.0526, Subp. 9). See page 3 of this guidance for details.
- √ A wetland delineation that includes an identification and description of existing plant communities on the project site, adjacent habitats, and any other features important to the wetland proposed for preservation.
- √ A description of any imminent or likely activities that threaten to impact or degrade the wetland, including supporting documentation. This could include individual permit applications, land-use plans, examples of current development trends on similar nearby properties, or other pertinent information.
- √ Documentation that the property either 1) is currently owned by the state or a local unit of government or 2) will be owned by the state or local unit of government prior to the recording of a conservation easement. See page5 of this guidance for details.
- √ A long term vegetation management plan (see page 6 for details).
- √ Identification of the conservation easement area (easement recorded after plan approval). To the extent practicable, the conservation easement should cover both the preserved wetland area itself and any adjacent resources that contribute to the function of the preserved wetland.

Black bear benefit from the preservation and protection of large tracts of wetland and upland habitat from fragmentation.

See the BWSR website for examples of eligible wetlands and a list of approved preservation projects.

In addition to large mammals (whitetail deer, moose, black bear), mature white cedar stands also provide important habitat for fisher, pine marten, snowshoe hare, white throated sparrow, golden crowned kinglet, northern parula, winter wren, Swainson's thrush, Blackburnian warbler and numerous other species of wildlife.

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The primary authors of this guidance are:

- Dale Krystosek, 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.