

Minnesota Wetland Conservation Act

Wetland Banking and the Replacement Wetland Siting Criteria

This document describes the “replacement” wetland siting requirements under the Minnesota Wetland Conservation Act (WCA). It includes information related to the Federal Mitigation Rule’s requirements for the compensation of losses resulting from impacts to aquatic resources, referred to as “compensatory mitigation,” or “mitigation,” terms generally synonymous with “replacement” as used under WCA. Whereas WCA regulates only wetlands, Section 404 of the federal Clean Water Act (CWA) and its regulatory program (404 Program) more broadly regulate “aquatic resources.

Replacement Wetland Siting Criteria

The replacement wetland siting criteria in WCA statutes (Minn. Stat. 103G.222, Subd. 3) require an applicant seeking to replace unavoidable wetland impacts to search for opportunities to restore or create replacement wetlands within a certain geographic area in relation to the location of the wetland impact. Before expanding the search to a larger geographic area, the applicant must satisfy specific criteria established in statute.

Origin and Rationale of Replacement Wetland Siting Criteria

The location of the replacement wetland relative to the wetland impact was an important consideration in the development of early wetland regulatory requirements in the 1980’s and 1990’s, including WCA in 1991, with an emphasis on requiring replacement at the same site as the wetland impact (i.e., same parcel of land). For example, a 1990 Memorandum of Agreement between US Environmental Protection Agency (EPA) and the Department of the Army explains how mitigation determinations should be made, including a preference for on-site, in-kind mitigation. However, even then the agencies acknowledged that off-site wetland banking was different, stating that “mitigation banking may be an acceptable form of compensatory mitigation under specific criteria designed to ensure an environmentally successful bank.”

The original 1991 WCA requirement was that “Replacement shall be within the same watershed or county as the impacted wetlands...” The statutes were later amended to establish sequential, proximity-based criteria similar in format to what is in statute today, intended to guide applicants in their search for opportunities to restore or create replacement wetlands. These criteria closely paralleled those that were being used in the implementation of the Federal Clean Water Act at the time. Both the State and Federal siting requirements were originally based on the assumption that replacing wetlands as close as possible to the impact site is best, an assumption that did not account for function, sustainability, or watershed needs.

The Evolution of WCA Siting Criteria for Banking Credits

State statutory requirements for the siting of replacement wetlands have changed numerous times since WCA was first enacted. They were developed when few wetland banks existed and the primary mechanism for wetland replacement was “project-specific,” wherein each landowner/applicant was responsible for restoring or creating wetlands to replace those they proposed to impact. As the wetland banking rules were developed and the use of banks increased, state statutes were amended several times to address the siting of wetland replacement through wetland bank credit withdrawals.

The following table outlines the siting requirements for the use of wetland banking credits since WCA was adopted:

WCA Siting Requirements for Use of Wetland Bank Credits Over Time	
Period	Siting Requirement
1991- 1996	Had to be within the same watershed or county as the impact (same as project-specific).
1996-2000	Followed the WCA rules for banking which stated that " <i>wetland impacts should be replaced in a location that either most closely resembles lost functions and public values at the impact site or a location that maximizes important wetland functions and public values</i> " (1998 WCA rule).
2000-2007	Followed the same siting criteria as project-specific replacement.
2007-2011	Had to be within the Bank Service Area (BSA-wide siting for the use of bank credits).
2011-2015	Followed the same siting criteria as project-specific replacement.
2015-current	Must be within the Bank Service Area (BSA-wide siting for the use of bank credits), with additional direction added for BWSR to identify HPAs to transition to a watershed approach.

Note that, for the majority of time since WCA was enacted, replacement via wetland banking did not follow the proximity-based siting criteria used for project-specific replacement wetlands.

Bank Service Areas (BSAs) were added in 2007 for consistency with implementation of the 404 Program by the U.S. Army Corps of Engineers (USACE). The statutes were amended again in 2011, creating a four-year conflict with 404 until BSA-wide siting for bank credits was restored in 2015, largely to align with the 2008 "*Compensatory Mitigation for Losses of Aquatic Resources – Final Rule*" (the Federal Mitigation Rule). The multiple, sometimes "back-and-forth" changes to siting for replacement via wetland banking reflected an extended learning curve that was not resolved until the 2015 alignment with federal requirements. See below for further detail on the Federal Mitigation Rule and a watershed approach to wetland replacement/mitigation.

The Minnesota Office of the Revisor of Statutes website contains the current version of Minn. Stat. 103G.222, Subd. 3, and links to previous versions of the statute and corresponding legislation: [Sec. 103G.222 MN Statutes](#)

The Effect of Replacement Wetland Location on the Replacement of Public Value

The primary requirement of WCA is the "replacement of wetland values" (Minn. Stat. 103G.2242, Subd. 1). The previous assumption that the replacement of wetlands closer to the impact would be more likely to replace the functions that were lost has been proven incorrect. After a decade of wetland regulation and replacement (mitigation) under the CWA, the National Research Council of the National Academy of Sciences completed a seminal report, "Compensating for Wetland Losses Under the Clean Water Act" (2001). The report concluded that the automatic preference for siting replacement wetlands as close as possible to the impact, and "on-site" in particular, is often inadequate to replace lost functions and has frequently produced unsustainable replacement wetlands. Closer does not mean better. Instead, the report recommended siting based on an evaluation of wetland functions at a regional watershed and landscape scale, advocating for a "watershed approach" to wetland mitigation.

The report is available online: [Read "Compensating for Wetland Losses Under the Clean Water Act" at NAP.edu](#)

Federal agencies soon adopted this approach. The 2008 Federal Mitigation Rule, published jointly by the USACE and EPA, established that the compensatory mitigation (replacement wetland) "*should be located where it is most likely to successfully replace lost functions and services, taking into account such watershed scale features as aquatic habitat diversity, habitat connectivity, relationships to hydrology sources, trends in land use, ecological*

benefits, and compatibility with adjacent land uses.” The Federal rule further requires that replacement wetlands be located in areas where it is appropriate and practicable to conduct successful activities that replace wetland functions at this watershed scale.

The goal of a watershed approach is to maintain and improve the quality and quantity of aquatic resources in a watershed through strategic selection of mitigation sites, based on watershed needs and landscape-scale factors. A purely proximity-based siting framework is contradictory to the watershed approach.

The Federal Mitigation Rule is available online, including at the EPA website: [Compensatory Mitigation for Losses of Aquatic Resources under CWA Section 404 \(Final Rule\) | US EPA](#)

Federal Mitigation Rule Requirements for Replacement Wetland Siting

The Federal Mitigation Rule requires a watershed approach for all forms of compensatory mitigation whenever possible. Rather than focusing primarily on the location of the replacement wetland relative to the impact, the rule prioritizes replacement based on the mechanism used to generate it.

The first priority is the use of bank credits, followed by in-lieu fee credits, then permittee-responsible mitigation using a watershed approach, followed by permittee-responsible mitigation through on-site and in-kind replacement, and finally, permittee-responsible mitigation through off-site and/or in-kind replacement. Bank credits and in-lieu fee credits are prioritized with no qualifiers as to their location relative to the wetland impact other than that the replacement wetland be located within the same watershed, defined broadly as an area of land that drains to a common waterway. The rule does not specify the size of the watershed for use of a wetland bank, but it requires the consideration of any locally-developed standards and criteria, as well as the economic viability of the bank.

The USACE used these criteria to establish BSAs for Minnesota, which are the geographic areas within which credits from a given wetland bank can be used to replace a wetland impact. BSAs are established in the USACE St. Paul District’s *“Policy For Wetland Compensatory Mitigation In Minnesota”* and in the WCA rules, and are consistent with the replacement wetland siting criteria for the use of wetland bank credits in current state statutes.

The Federal Mitigation Rule recognizes that, in some instances, it may be appropriate to replace certain wetland functions in more localized areas. In such cases, the Federal Rule requires the permitting authority (i.e. the USACE District Engineer) to consider any locally developed standards and criteria that may be applicable.

WCA and the Watershed Approach to Wetland Replacement

The 2007 WCA rule update adopted USACE Bank Service Areas. The 2009 WCA Rule update incorporated key watershed approach concepts from the 2008 Federal Mitigation Rule, including establishment of the ecological suitability and sustainability subpart (8420.0522, Subp. 5); a general preference for banking credits through in-kind requirements and replacement ratios; and a general preference for restoration over creation implemented through credit allocation.

In 2015, WCA was amended to facilitate use of a watershed approach for wetland replacement, consistent with the watershed approach and the Federal Mitigation Rule.

- Minn. Stat. 103G.222, Subd. 3 was amended to address BSAs and siting for replacement via wetland banking.
- Minn. Stat. 103B.3355, paragraphs (e) and (f) directed BWSR to identify and designate high priority areas for wetland replacement consistent with the watershed approach.

- Minn. Stat. 103G.222, Subd. 3(g) required implementation of high priority areas through the WCA rule as a benefits-based prioritization of wetland replacement opportunities.

Since that time, both the Minnesota Legislature and the EPA have funded BWSR to complete comprehensive watershed planning statewide, prioritizing wetland replacement opportunities that will best address watershed needs. These efforts were completed consistently with the Federal Mitigation Rule to implement the watershed approach and to improve the outcomes of wetland replacement. The plans incorporated local input and the priorities, including One-Watershed, One-Plan, where available.

These watershed plans, termed “Compensation Planning Frameworks” (CPFs) under federal regulations, can be viewed here: [In-Lieu Fee Mitigation Program | MN Board of Water, Soil Resources](#)

Applicants and local governments can currently use these plans to pursue a watershed approach for wetland replacement. BWSR will also work with stakeholders to incentivize the use of these watershed priorities in the next WCA rulemaking.

The 2011–2015 Siting Criteria for Wetland Banking vs. Watershed Approach

The 2011-2015 siting criteria were inconsistent with the watershed approach to wetland replacement because they were purely proximity-based, contrary to both current wetland science and the Federal Mitigation Rule. The goal of the watershed approach is to maintain and improve the quality and quantity of aquatic resources in a watershed through strategic selection of mitigation sites, considering watershed needs and landscape scale factors. A purely proximity-based siting criteria is contradictory to the watershed approach and would, in fact, prevent it. The 2008 Federal Mitigation Rule that prioritizes the watershed approach was developed largely in response to a comprehensive study showing that existing mitigation practices, which included proximity-based siting, were ineffective at replacing the public value of wetland functions that were lost to wetland impacts.

Local Priorities in Replacement Wetland Siting

Similar to the Federal Mitigation Rule, which directs the USACE District Engineer to consider locally developed standards and criteria, WCA allows local governments to develop local priorities for replacement wetlands. There are several mechanisms by which local watershed needs and priorities have been and can be considered:

- 1) The CPFs developed under Minn. Stat. 103B.3355 (e) described above incorporated local input and the priorities of local plans, including One-Watershed One-Plan, where available.
- 2) Minn. Stat. 103B.3355 (f) allows local governments to utilize existing water and wetland planning processes to identify priority areas for replacement wetlands and provide them to BWSR for potential incorporation into state high priority areas.
- 3) Local governments can be more restrictive via ordinance or rule. To be consistent with the watershed approach and the recommendations of the National Academy of Sciences, such restrictions should follow from an analytically based watershed assessment (under the second mechanism above and in consideration of the CPFs) to assure that the localized replacement wetlands further the broader watershed goals.
- 4) In making decisions on replacement plans, WCA local government units must ensure that the public value of the impacted wetland, based on its functions, is adequately replaced. For functions that are unique or extremely important to a local watershed, replacement of lost public value may be difficult or nearly impossible in another watershed.

WCA rule (MN Rules 8420.0522, Subp. 7F) and statute (Minn. Stat. 103G.222, Subd. 3(f)) directs regulatory agencies, local governments, and other entities involved in restoration to collaborate in identifying potential replacement opportunities in their jurisdictions. BWSR sought input on local priorities during the development of

each CPF, and Minn. Stat. 103B.3355(f) provides further opportunities for state and local collaboration on wetland replacement priorities that are important to local watersheds.

Consequences of Reverting to the 2011–2015 Siting Criteria for Wetland Banking

Reverting to the previous, proximity-based siting criteria would:

- Conflict with both the Federal Mitigation Rule and the St. Paul District USACE “Policy For Wetland Compensatory Mitigation In Minnesota,” both of which implement the 404 program in Minnesota. The St. Paul District policy can be found here: [Final St. Paul District Policy for Wetland Compensatory Mitigation in MNs.pdf](#)
- Conflict with other State statutory provisions intended to implement watershed-based replacement wetland siting priorities, including Minn. Stat. 103B.3355, paragraph (e) and 103G.222, Subd. 3(g) discussed above.
- Severely limit opportunities and choices for the public to obtain required replacement wetland credits for wetland impacts approved under WCA.
- Substantially reduce market area for most wetland banks, by effectively shrinking the BSA for individual banks, while increasing inconsistencies and uncertainties for wetland bankers, as newly established banks could effectively alter the market area for existing banks.
- Limit the ability of local governments and others to use wetland banks they have developed to replace wetland impacts for projects they sponsor, including local road projects, when other banks are closer to the wetland impact.

Impacts of Reversion to the 2011–2015 Siting Criteria on Public Access to Replacement Credits

The 2011-2015 siting criteria would impose a significant limitation on landowners, local governments, developers, farmers, and all potential applicants who propose projects with unavoidable wetland impacts requiring replacement under WCA. In many instances, those criteria required applicants to obtain credits from the wetland bank closest to the impact regardless of watershed considerations, forcing them to pay whatever the closest bank charges with no option to choose another bank, directly harming the landowner purchasing credits.

For wetland bankers, the effect would be uneven: some banks would benefit from effectively gaining monopolies, while others would see their market areas reduced. The intended “market-based” structure of the wetland banking system (MN Rules Chapter 8420.0700 and the Federal Mitigation Rule) would no longer function in a meaningful way, and effective competition and pricing of credits would be compromised.

By contrast, the current siting criteria expand the potential market for bank credit sales beyond smaller minor and major watersheds. Wetland bank owners can compete across a larger watershed-based BSA rather than being excluded when another bank is closer. This market structure has been instrumental in developing the most robust wetland banking program in the country, both in terms of the number of banks and acres. It is this robust wetland banking program that makes WCA successful.

Importance of Consistency Between WCA and the Federal Mitigation Rule

Maintaining consistency between state and federal wetland replacement requirements benefits Minnesotans whose projects require replacement under both programs. While WCA and the 404 Program have somewhat

different regulatory jurisdictions, mechanisms, and exemptions, wetland replacement requirements under both have been closely aligned since the 2008 Federal Mitigation Rule and the 2009 WCA rule amendments.

The 2008 Federal Mitigation Rule established a more sound approach to mitigation that improves the ability of regulatory programs to replace the public value lost to wetland impacts. The 2015 WCA statutory changes, which updated the outdated siting criteria and required identification of high priority areas for replacement, brought WCA into closer alignment with the Federal Mitigation Rule and the achievement of improved replacement outcomes.