



WETLAND CONSERVATION ACT

Agricultural Wetland Banking Site Selection and Establishment

BWSR Administrative Guidance, February 7, 2012

Overview

- Rule/Statute: MN Rule 8420, MN Stat. 103G.222 and 103G.2242
- Applicability: This guidance summarizes factors involved with establishing wetland bank sites for replacement of approved impacts to agricultural wetlands.
- Intended Use: To provide guidance to agricultural landowners, wetland banking applicants, and agency staff for establishing and using wetland bank sites to meet wetland mitigation requirements of the Minnesota Wetland Conservation Act (WCA) and the USDA federal farm program.

Wetland banking provides an efficient mechanism for landowners to replace degraded farmed wetlands.

Agricultural Wetland Banking in Minnesota

The Board of Water and Soil Resources (BWSR) is responsible for administration of the Minnesota Wetland Bank. The Wetland Bank provides a market-based alternative where landowners can legally replace unavoidable wetland impacts by purchasing wetland credits previously established by other landowners. The purchase price of wetland credits is negotiated between the buyer and seller.

The current Minnesota wetland banking system was established in 1994. Most bank sites have been developed to address impacts from development and transportation projects. As a result, the majority of wetland bank sites have been located near the locations where these impacts have occurred.

Agricultural interests have recently shown a desire to establish bank sites in agricultural areas in order to increase the availability of replacement for agricultural wetland impacts.

BWSR and the USDA Natural Resources Conservation Service (NRCS) have procedures to accommodate agriculture-only bank sites for use under both WCA **and the federal farm program (aka "Swampbuster")**. The specific requirements for bank site establishment and use are currently established in the State Wetland Conservation Act (WCA) rules.

The general goal of wetland mitigation is to permanently replace wetland functions and benefits

that are lost when existing wetlands are impacted. Current State laws provide flexibility for impacts to wetlands located in cultivated fields when replaced through the restoration of wetlands that were previously drained or altered. The premise behind this flexibility is that fully restored, natural wetland systems provide greater benefits than existing degraded wetlands in agricultural landscapes. In order to ensure these benefits for the long term, many variables must be considered regarding the quality and sustainability of potential replacement wetlands.

A landowner should weigh the long term investment of establishing a bank site against factors affecting the return on that investment such as potential credit yield, project feasibility, long-term maintenance, and overall costs.



This degraded, farmed wetland could be a candidate for restoration and deposit into the wetland bank.

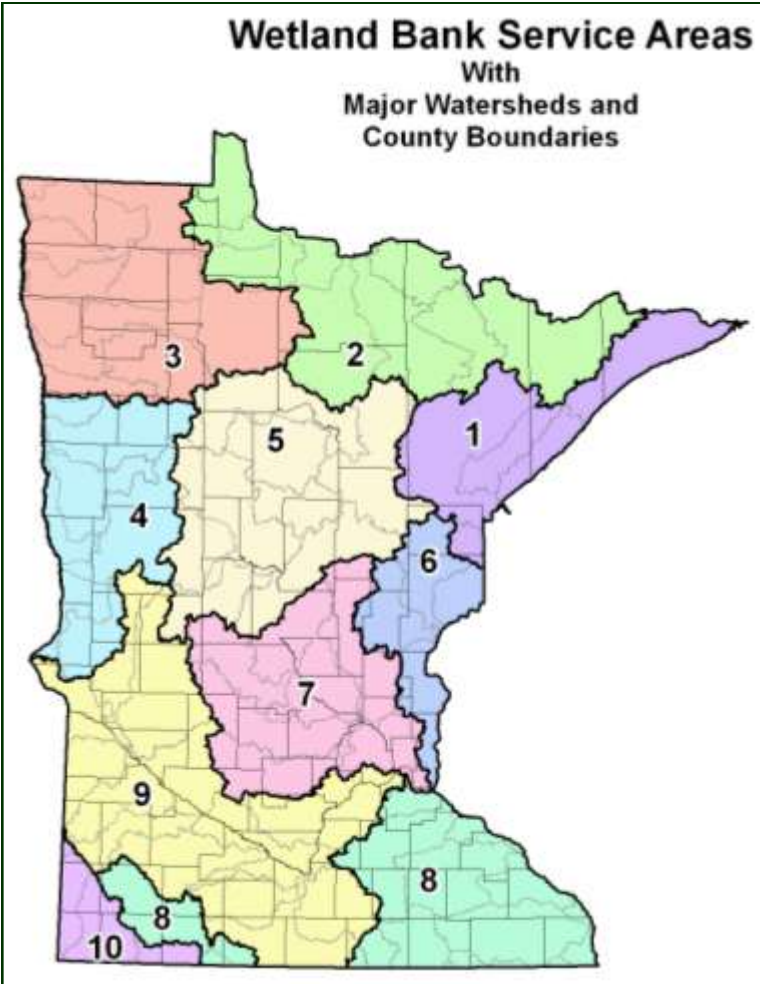
Locating Bank Sites

For the purpose of wetland banking, Minnesota is **divided into “service areas.”** A **Bank Service Area (BSA)** is a unique, watershed-based geographic area in which a bank can reasonably be expected to provide replacement for impacted wetlands.

Generally, wetland replacement that is closest to the impact site is preferred. Wetland impacts replaced outside of a BSA require an increased replacement ratio.

Agricultural bank sites can be established in any agricultural setting. However, the greatest need for agricultural bank sites will likely be in the western and southern regions of the state where the majority of agricultural wetland impacts occur. Establishing bank sites throughout those BSAs will improve both the marketability of the resulting wetland credits and the availability of wetland replacement for agriculture.

See the BWSR website for a Bank Service Area Locator and map:
www.bwsr.state.mn.us



Agricultural Wetland Banking Roles

WCA Local Government Unit

The Wetland Banking Program is implemented primarily by local government units (LGUs). The LGU is typically the County or Soil and Water Conservation District (SWCD), and is responsible for reviewing and approving wetland banking applications and credit allocation requests.

Technical Evaluation Panel

The Technical Evaluation Panel (TEP) consists of an employee from the LGU, the local SWCD (if different), and BWSR. The TEP has specific responsibilities in reviewing potential wetland bank sites, overseeing their establishment, and providing findings and recommendations to the LGU.

Minnesota Board of Water and Soil Resources

BWSR provides technical and administrative assistance to the local review process. Its role is to ensure applications are consistent with WCA and meet minimum standards for function and long-term sustainability. BWSR is also responsible for bank credit accounting, collection of banking transaction fees, and overall program oversight.

A permanent conservation easement must be granted to and accepted by BWSR before wetlands can be deposited

in the wetland bank. This requires that landowners are able to provide clear title to the property free of encumbrances that could conflict with the terms of the easement.

USDA Federal Farm Program

The wetland conservation provisions of the federal farm bill (“Swampbuster”) **have requirements for wetland replacement** that are similar to WCA. For agricultural wetland bank sites, an NRCS employee will provide assistance to the TEP regarding federal farm program requirements. Landowners may utilize the wetland bank to satisfy the mitigation requirements of Swampbuster.

Clean Water Act Coordination

Non-isolated wetlands in Minnesota are also regulated under the federal Clean Water Act, administered by the U.S. Army Corps of Engineers. Banking applicants who also wish to have their bank credits available to replace wetland impacts regulated by the Clean Water Act may choose to seek certification by the Corps of Engineers in addition to gaining approval under WCA. Note: The Corps may also have certain regulatory program procedures and timeframes that differ from WCA and Swampbuster.

Sites Eligible for Agricultural Wetland Banking

To be eligible, a site must contain a previously drained, filled, or degraded wetland located in an agricultural setting. Wetlands previously restored in short term conservation programs, such as the federal Conservation Reserve Program (CRP), may also be eligible. In addition, the following eligibility criteria apply:

- **Prior Approval.** A wetland banking plan must be approved by the WCA Local Government Unit prior to undertaking restoration actions. Actions completed or initiated without prior LGU approval are not eligible for deposit in the wetland bank.
- **Restored Wetlands.** State laws allow flexibility for impacts to wetlands in cultivated fields only when replaced through restoration. As such, only restored wetlands are eligible for agriculture-only banking.
- **Type Conversion.** Modification or conversion of nondegraded wetlands from one wetland type to another by damming, diking, impounding, or excavating is not eligible.
- **Violations.** Restoration of wetlands that were illegally drained or filled is not eligible.
- **WCA Exemptions.** Wetlands previously impacted under a WCA exemption may not be restored for replacement credit for ten years after the impact.
- **Funding Restrictions.** Wetlands may not be restored with financial assistance from public conservation programs (some exceptions for expired contracts) or for unrelated regulatory purposes.

Sustainability

Replacement wetlands must be located and designed to be self-sustaining to the maximum extent practicable. **“Self-sustaining” refers to the ability of a wetland to provide the desired functions over time in a changing landscape without human intervention.** Choosing and establishing bank sites that are sustainable will improve wetland functions over time, and will minimize additional inputs of landowner time and labor for maintenance.

Land Ownership and Long Term Responsibilities

A banking applicant can either own the property or have a formal agreement with the fee title owner granting the rights necessary to establish the bank site and obtain the credits from it. Ultimately, the fee title owner must sign and record a BWSR conservation easement before credits can be granted. Banking applicants, if different than the current landowner, should obtain approval of a wetland bank plan application prior to finalizing any purchase of property rights for a particular site.

The conditions of the BWSR conservation easement apply to the land regardless of changes in property ownership. In general, the terms of the easement require that the restored wetland cannot be altered and the site must remain in a natural condition perpetually. Future activities that can degrade the wetland and its ability to function are prohibited. Activities that are consistent with the use of the site for wetland replacement, such as hunting, fishing, or hiking, are allowed. Unless transferred to a public entity, bank sites remain as private lands and are not open to the public for hunting or other uses.

Maintenance of constructed features such as ditch plugs, earthen embankments, and outlet structures is often a necessary component of a wetland restoration. Maintenance of vegetation in the restored wetlands and their associated upland buffers, such as the control of noxious weeds, is also necessary. Long-term maintenance will be the responsibility of the landowner.

Initial construction and long-term maintenance costs will help landowners decide whether the prospect of establishing a bank site is attractive. Because of these long-term maintenance requirements, wetland restorations that require extensive earthen embankments or diking are typically not well suited for banking. When necessary, these and other planned construction features must meet program design and construction standards. High quality, sustainable wetland restorations are required for the benefit of the State as well as the current and future owners of the property.



All structures, whether a ditch plug, earthen embankment, or this outlet weir, can require maintenance.

Actions Eligible for Banking Credit

CREDIT YIELD

Wetland “credit” is used to assign value to the various actions taken to restore a wetland. Those “credits” can then be used to offset impacted wetlands. In general, the more a wetland is degraded, the more credit can be generated by restoring it. Restoration of completely drained wetlands is typically worth more credit than restoration of partially drained wetlands; and restoration of frequently cropped wetlands are typically worth more credit than those cropped only occasionally.

The Wetland Conservation Act rules describe several actions that are eligible for wetland replacement credit. The particulars of each site determine the appropriate action(s). The amount of work involved, total costs, and likelihood of full success will vary between sites and the actions necessary to restore the wetland. The amount of credit allocated varies as well. The maximum amount of credit is 100 percent, or one acre of credit for one acre of wetland. The applicable action(s) and the corresponding credit amount will be identified and approved as part of the application process. Below are the actions eligible for credit most relevant to agricultural banking.

Restoration of completely drained or filled wetlands.

- Up to 100% credit allocated for restoration of both natural hydrology and native vegetation.

Restoration of partially drained or filled wetlands.

- Partially drained wetland areas with cropping history in at least 10 of the last 20 years can be eligible for credit equal to the percentage of years the wetland was cropped, up to 100%.
- Partially drained wetlands without cropping history are eligible for up to 50% credit.
- Credit is allocated for restoration of both natural hydrology and native vegetation.

Vegetative restoration of farmed wetlands.

- Eligibility and credit is determined by the percentage of years in the last 20 that the wetland was planted with annually seeded crops (at least 10 to be eligible).
- Restoration of native vegetation can be allocated up to 90% credit in Bank Service Areas 2, 3, or 4, and up to 50% credit in all other areas.

Protection of wetlands previously restored via conservation contracts or easements.

- Credit is typically allocated for up to 75% of the wetland area restored under the contract or easement.
- The contract or easement must give the landowner the right to drain the wetland after expiration and must be terminated prior to the allocation of credit.

Upland buffer areas.

- The establishment or preservation of a vegetated upland buffer is required around all bank sites.
- Typically 25% credit for native vegetation or 10% credit for non-native vegetation.
- The area of the buffer for which credit is allocated cannot exceed the replacement wetland area.

See MN Rule 8420.0526 for more details and a complete list of the actions eligible for credit.

Wetlands Restored Under Conservation Programs

Wetlands restored under temporary conservation programs, such as the Conservation Reserve Program (CRP), can be allocated banking credit after the contract has expired. With significant acreages of CRP scheduled to expire, banking provides an option to protect certain high quality sites. For eligible sites in good condition, establishment costs can also be lower. A few points:

- ◆ The site must contain a wetland that was restored under CRP, or naturally re-established over the life of the contract.
- ◆ Sites that contain embankments or other structures will require review to ensure they meet current construction standards. Inadequate structures, or a lack of structures where needed, will increase costs.
- ◆ The greater the coverage and diversity of *native* vegetation, the greater the likelihood of approval without additional vegetation establishment work being required.

While wetlands that were previously restored in short-term conservation programs typically have less credit value (up to 75%) than the restoration of a currently drained wetland (up to 100%), the concept of enrolling these sites into the wetland bank with little to no additional restoration work required will be attractive to many landowners.

Considerations for Site Selection

Wetland mitigation is successful when it provides important functions and benefits over time. Site selection is the most important factor in determining mitigation success. The functions and benefits provided by restored wetlands are related to the type and quality of vegetation, hydrologic characteristics, and soils within the wetland.

In addition, numerous external factors also contribute to the wetland's ability to function and provide important benefits. These factors include adjacent land use, proximity to other habitats and natural resource features, consistency with regional and local watershed needs or characteristics, the protection of adjacent upland resources and riparian areas, and others relating to long term sustainability.

These factors and others are important when considering potential bank sites. A few concepts:

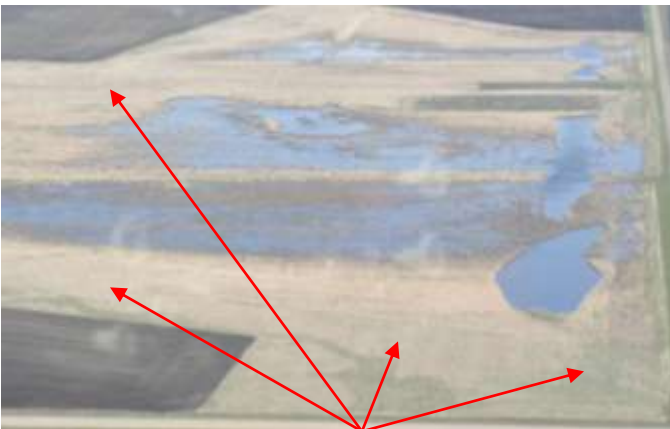
- **Connectivity.** An adjacent Wildlife Management Area or stream will typically enhance the function of a restored wetland over that of an isolated site bordered entirely by cropland.
- **Adjacent Habitat.** The restoration of a prairie pothole in the vicinity of other potholes or waterfowl habitat will often result in greater usage by waterfowl over a site that is substantially isolated.
- **Bigger is Better.** Large wetland complexes generally provide greater benefits than smaller wetlands.
- **Upland Buffer.** A wetland surrounded by an adequate upland buffer will provide better habitat and be more sustainable.



Potential wetland restoration projects that directly contribute to the water quality of an important resource and/or provide adjacent habitat can be good candidates for banking.



Restoration of wetlands in river floodplains provide multiple benefits of water quality, flood storage, and habitat.



An adequate buffer protects this wetland from degradation and increases wetland function by providing adjacent habitat.



Restoration of this large wetland complex provided multiple wetland types and habitats. Its size also contributes to its sustainability.

Technical and Financial Feasibility

As discussed earlier, there are a number of factors that influence the success of a wetland banking project. A successful bank site both provides environmental benefits and offers the landowner a return on their multi-year investment. In some cases the restoration of a wetland may be physically possible, but not necessarily practical or prudent. Prior to moving forward with a banking project, it is important for a potential bank sponsors to consider:

1. the practicality and likelihood of achieving successful restoration,
2. the potential amount of banking credits available and the costs associated with establishing them, and
3. future maintenance needs and long term sustainability.

These factors will vary from site to site, but all are part of a **potential banking applicant's decision-making** process.

Sites that are more likely to achieve full restoration of natural hydrology and vegetation, and that will not require excessive long term maintenance, are more likely to gain credit approval. Such sites also typically have a higher credit yield and will be less costly in the long term.

Sites that require substantial construction features and landscape alteration, or intensive vegetation management due to adjacent invasive species, will both cost more and be less likely to gain approval due to reduced chances of success and potential issues with long-term sustainability.

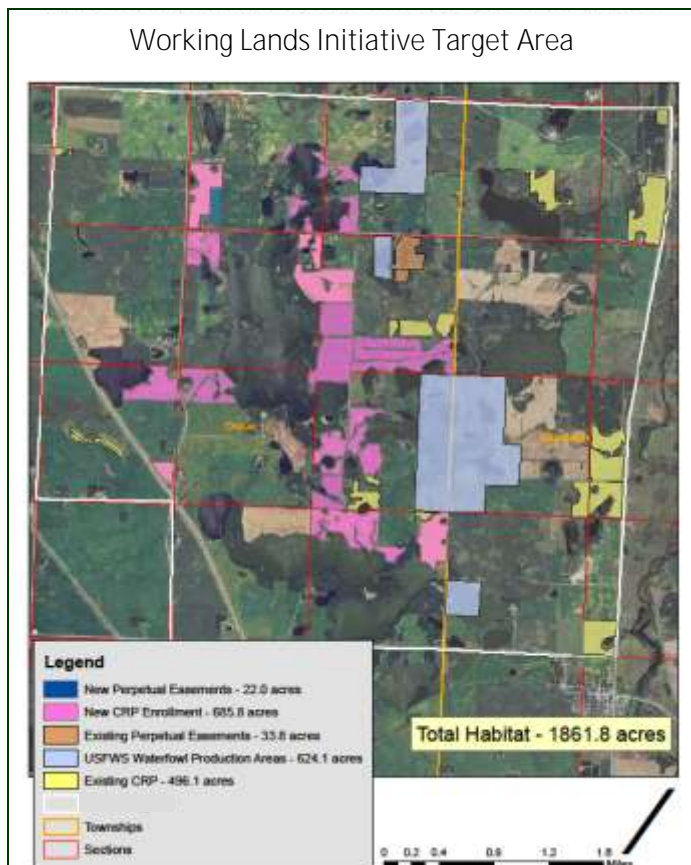
Obtaining early input from review agencies will help potential banking applicants assess the technical and financial feasibility of a site before making the decision to **move forward**. See the **"Site Review and Application Procedures"** section for details.

Opportunities for Coordination and Partnerships

Local, state, and federal agencies and conservation groups often collaborate to inventory and prioritize opportunities for conservation projects, including wetland restorations. Those organizations can help identify potential sites for wetland banking that will maximize environmental benefits and meet the goals of the various agencies. The map below is an example of such an inventory.

As discussed on page 3, most bank sites are in private ownership and not open to public access; they are bought and sold like any other property. Bank sites can also be sold or transferred to public agencies or conservation organizations.

The conservation easement allows for activities such as vegetation management, wildlife management, or other activities specified in the approved bank plan that do not **degrade the wetland's ability to function over time**. This provides opportunities for ownership and/or long-term management by conservation organizations, State agencies, or other landowners with compatible goals. Such partnerships can achieve shared goals while reducing costs for both organizations: a *win-win opportunity*.



Example of a Wetland Banking Partnership between Agriculture and Conservation Organizations

1. Both groups collaborate on the selection of potential bank sites.
2. **The conservation organization's long term goals for the site are included in the bank plan.**
3. The agriculture organization is responsible for gaining necessary approvals, restoring the site, and establishing credits.
4. The conservation organization takes over site ownership and/or management according to their long term goals.

Early coordination is essential!

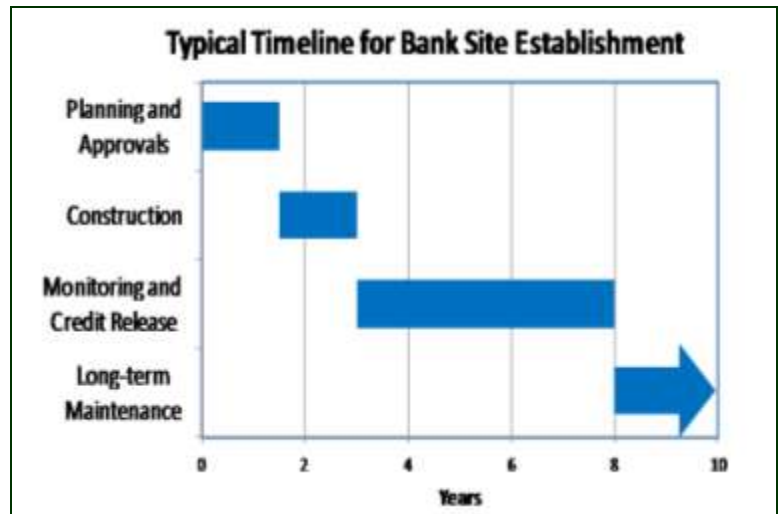
Process for Establishing a Wetland Bank Site

The process for establishing a wetland bank site includes four distinct phases:

1. **Planning and Approvals.** This phase includes the identification and review of sites, developing a restoration plan and application materials, and obtaining necessary approvals.
2. **Construction.** This phase consists of completing the construction activities necessary to physically restore the wetland, including any necessary grading and seeding, and recording of the conservation easement. Length of this phase will vary based on the construction activities needed, weather, and timing issues.
3. **Monitoring and Credit Release.** Monitoring is typically performed for 3 to 5 years after construction to document the success of restoration activities. Some credit is typically allocated upon completion of construction, with the balance being available as monitoring confirms restoration success.
4. **Long Term Maintenance.** This includes the periodic maintenance of structures, control of noxious weeds, and addressing problems as necessary to ensure the banked wetland remains in perpetuity.

The timeline described here is “typical,” but the actual times for each project will vary. For example:

- A wetland restored under CRP (now expired), that is both eligible and in good condition with little or no construction required, can have reduced construction and credit release timeframes.
- A wetland restoration project involving multiple landowners, public drainage systems and/or upstream drainage rights, or other complicating factors can require more time for planning and approvals.



Site Review and Application Procedures

BWSR, NRCS, local governments, and banking applicants all share a similar goal: obtaining high quality, sustainable wetland banking sites while avoiding conflicts, delays, and unnecessary investments of time and money. The early review of potential sites will help ensure a smooth approval process by providing up-front information to applicants. It also allows for more informed decisions about whether to proceed further in the process prior to making substantial investments in the site. In order to facilitate this early review, the application process consists of three steps:

Step 1. Pre-Application Scoping. Scoping consists of the review of available site information by the TEP, and will often include an on-site visit. Findings and recommendations will be provided to the applicant, which provide information on eligibility, potential credit yield, necessary work, and concerns or potential problems. The LGU or SWCD can assist the landowner in completing the Scoping form and assembling the necessary information. At this stage, the Corps of Engineers can also provide feedback on the potential for wetland mitigation under the Federal Clean Water Act.

Step 2. Concept Plan. The Concept plan is essentially a draft of the restoration plan for the site, incorporating findings from the Scoping phase. It provides an overview of the actions proposed to restore wetland hydrology and vegetation, **along with specific information about the project's size, easement boundaries, and potential credit yield.** The concept plan is reviewed by the TEP and BWSR technical staff, resulting in written findings and recommendations. This allows for simple plan modifications prior to substantial expenditures on engineering. Depending on the complexity of the site, development of the concept plan may require assistance from natural resource professionals.

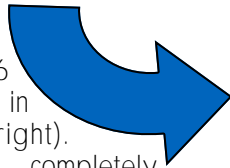
Step 3. Wetland Bank Plan Application. The Wetland Bank Plan Application addresses all previous comments and recommendations, and provides additional details regarding construction design specifications, credit allocation, and monitoring. It is a final, comprehensive plan that results in formal approval or denial by the LGU. Developing the full bank plan application typically requires assistance from technical and other natural resource professionals.

Contact your WCA LGU or local SWCD for information and assistance.

Wetland Banking: A Win-Win for Agriculture and Minnesota's Natural Resources



A successful agricultural wetland restoration in 2006 prior to restoration (top) and in 2011 after restoration (right). Successful restoration of a completely drained wetland such as this can provide mitigation for agricultural drainage and important environmental benefits.



Information Sources and Contacts

- For a directory of NRCS field offices and employees: <http://www.mn.nrcs.usda.gov/contact/directory/index.html>
- For a directory of professional wetland consultants: www.mnwetlandprofessionals.org
- See the BWSR website for information relating to wetland banking: www.bwsr.state.mn.us
 - ✓ Directories of WCA LGUs, SWCDs, and BWSR Wetland Specialists.
 - ✓ WCA rules (MN Rule 8420), including the specific requirements for wetland impacts, mitigation, and banking.
 - ✓ Wetland banking forms and guidance.
 - ✓ A listing of existing wetland banks, available credits, and sales data.
 - ✓ Native vegetation seed mixes and identification guides.
 - ✓ Wetland delineation and functional assessment procedures and guidance.
 - ✓ A list of certified wetland delineators.
- For the U.S. Army Corps of Engineers: www.mvp.usace.army.mil
- For more information on the compliance provisions of the federal farm bill: <http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/alphabetical/camr>



BWSR Guidance, February 7, 2012

The primary author of this guidance is 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 WCA Local Government Unit or BWSR Wetland Specialist for additional information.