



The Minnesota Wetland Bank for Agriculture

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The Wetland Conservation Act

- “WCA” first passed in 1991.
- Originally included both regulatory and conservation provisions.
- Legislature recognized “no net loss” goal.
- Numerous statutory and rule amendments since original law.

WCA on Ag Land

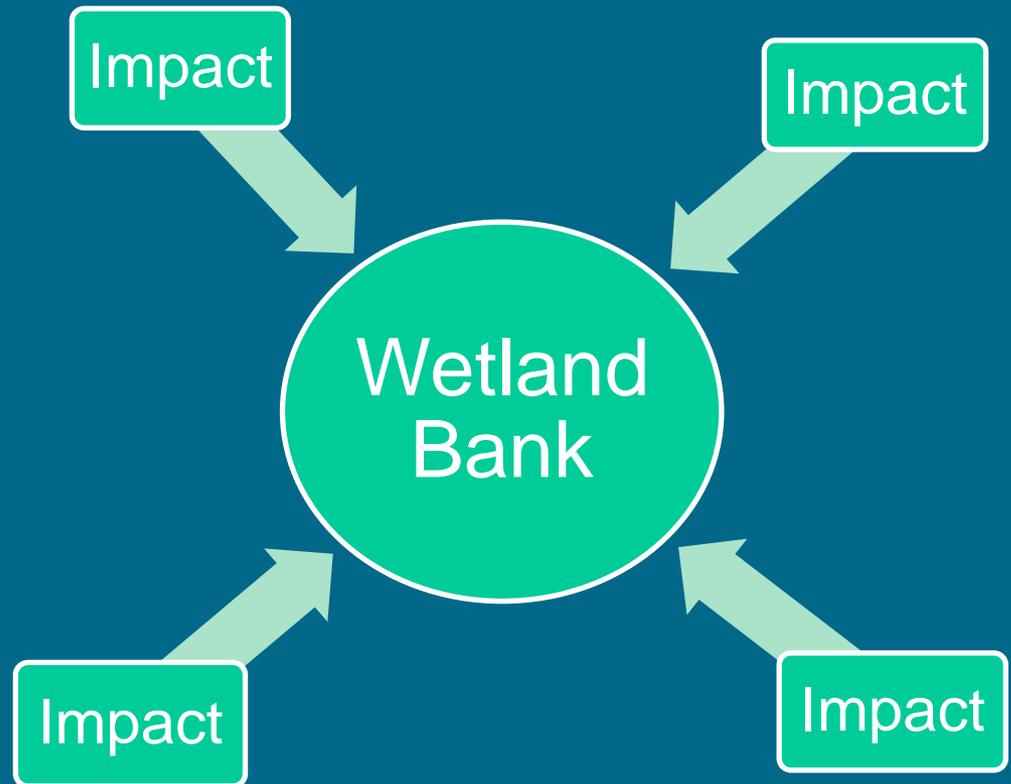
- Currently applies to all wetlands in MN, including those on agricultural land.
- However, several exemptions apply:
 - ❑ Drainage Maintenance
 - ❑ Cropping History (“6 of 10” and “8 of 10”)
 - ❑ Approved Conservation Practices
 - ❑ Others
- Many similarities to Swampbuster.

Mitigation (“Replacement”)

- WCA allows impacts to non-exempt wetlands with replacement.
- WCA provides flexibility for agricultural wetlands when replaced with a restored wetland.
- **Wetland banking is preferred over “project-specific” replacement.**

What is Wetland Banking?

- Banking provides a market-based structure that allows for replacement of multiple wetland impacts with pre-established wetlands.



What is Wetland Banking?



History of the Wetland Bank

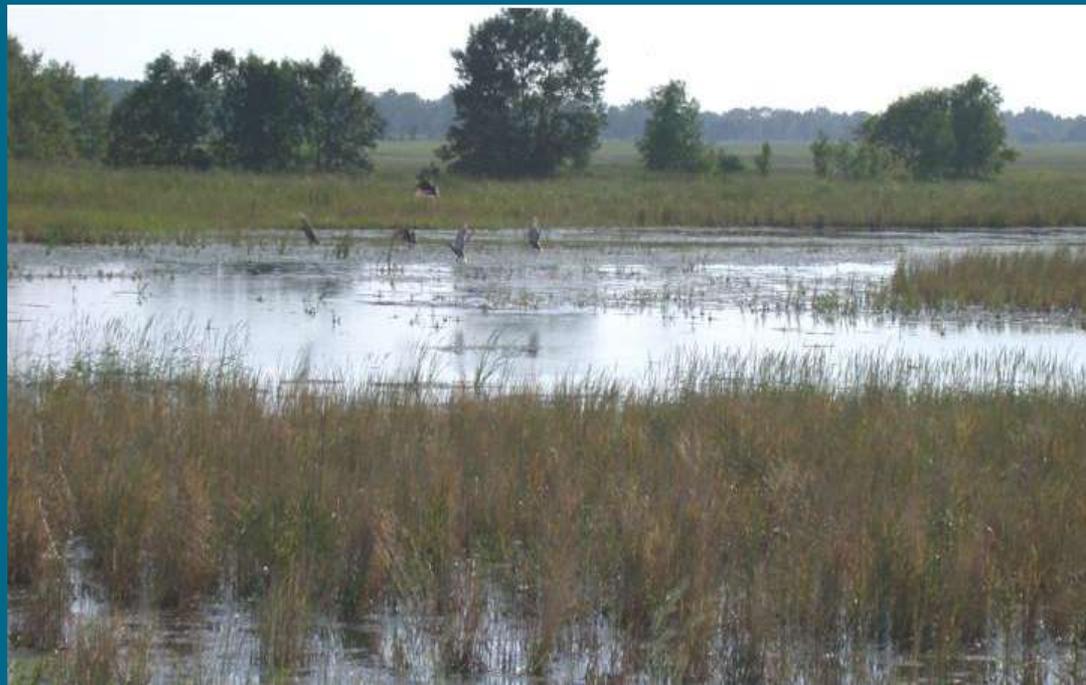
- State wetland banking system authorized in 1993 by MN Stat. 103G.2242.
- BWSR is responsible for the operation and management of the bank.
 - Compliance with WCA
 - Conservation easements
 - Recording transactions
 - Long-term inspections
 - Maintaining records

WCA Roles in Wetland Banking

- Board of Water and Soil Resources (BWSR).
- WCA Local Government Unit (LGU).
- Technical Evaluation Panel (TEP).
- Landowners, consultants, engineers, etc.

Benefits of Wetland Banking

- Alternative to “project-specific” replacement – not every landowner has the opportunity or capability to establish a replacement wetland.
- Better target restorations
- Larger sites with multiple benefits



Benefits of Wetland Banking

- Impacted wetlands are replaced with pre-established mitigation wetlands.
- Credits can be used to satisfy multiple program requirements.
- Approving agencies agree on eligibility, crediting, etc, ahead of time.
- Landowners can take advantage of regulatory flexibility allowed by law.

How the Bank Works

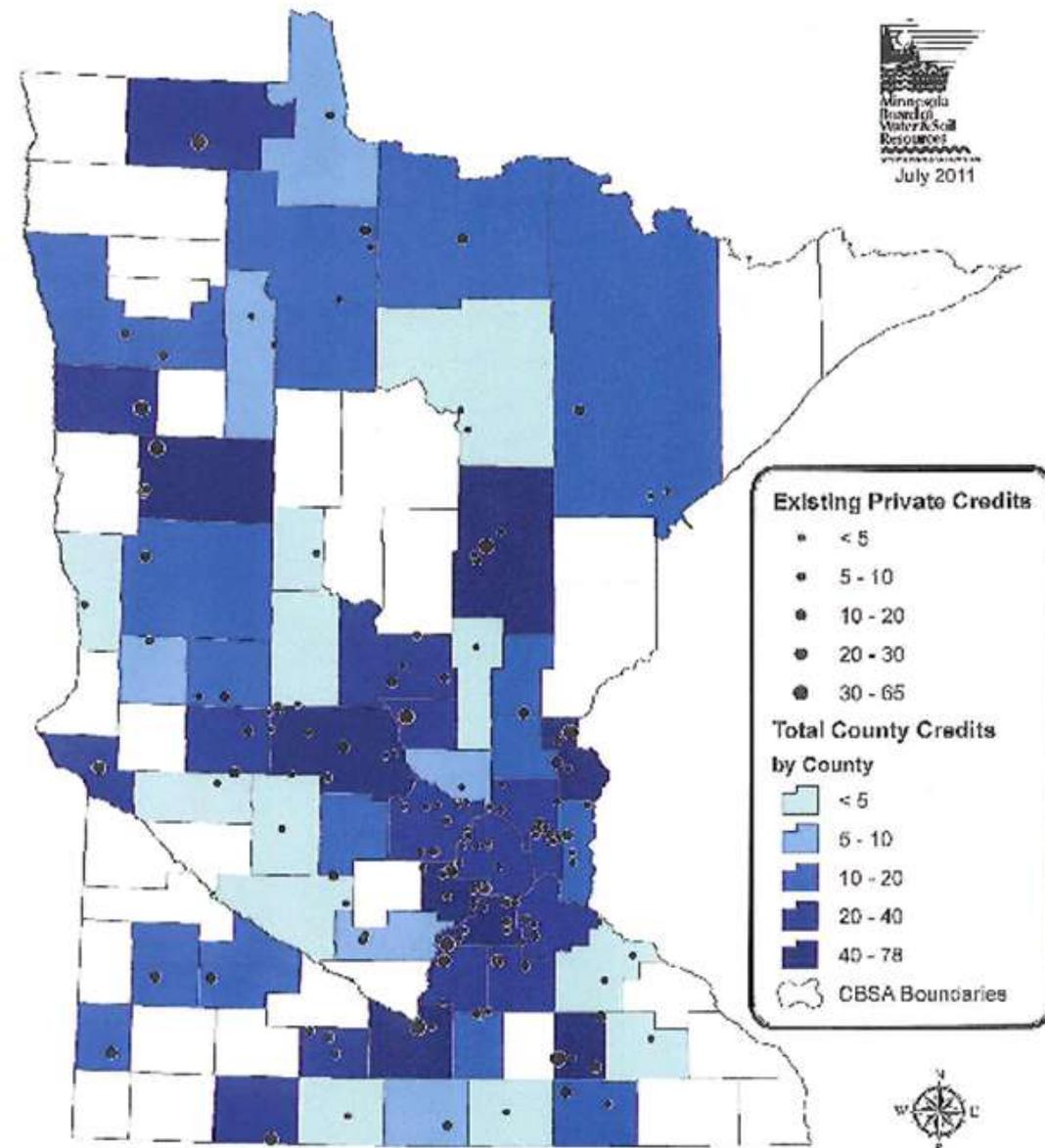
- Similar to traditional financial banks with “credits” replacing “dollars.”
- Transactions include deposits, withdrawals, and transfers.
- Deposits are made in “credits” which are allocated based on the actions taken to restore the wetland.

How the Bank Works

- Withdrawals are made from bank accounts with available credits to replace wetlands impacted by individual projects.
- “Replacement plans” identify specific banks to meet replacement needs.
- **The price of credits is negotiated between the buyer and the seller.**

Wetland Banking

Private Bank Sites - Existing Credits May 2011



Available Credits

Statewide, wetland bank sites primarily serve transportation and development project replacement needs. Relatively fewer serve agricultural wetland replacement needs.

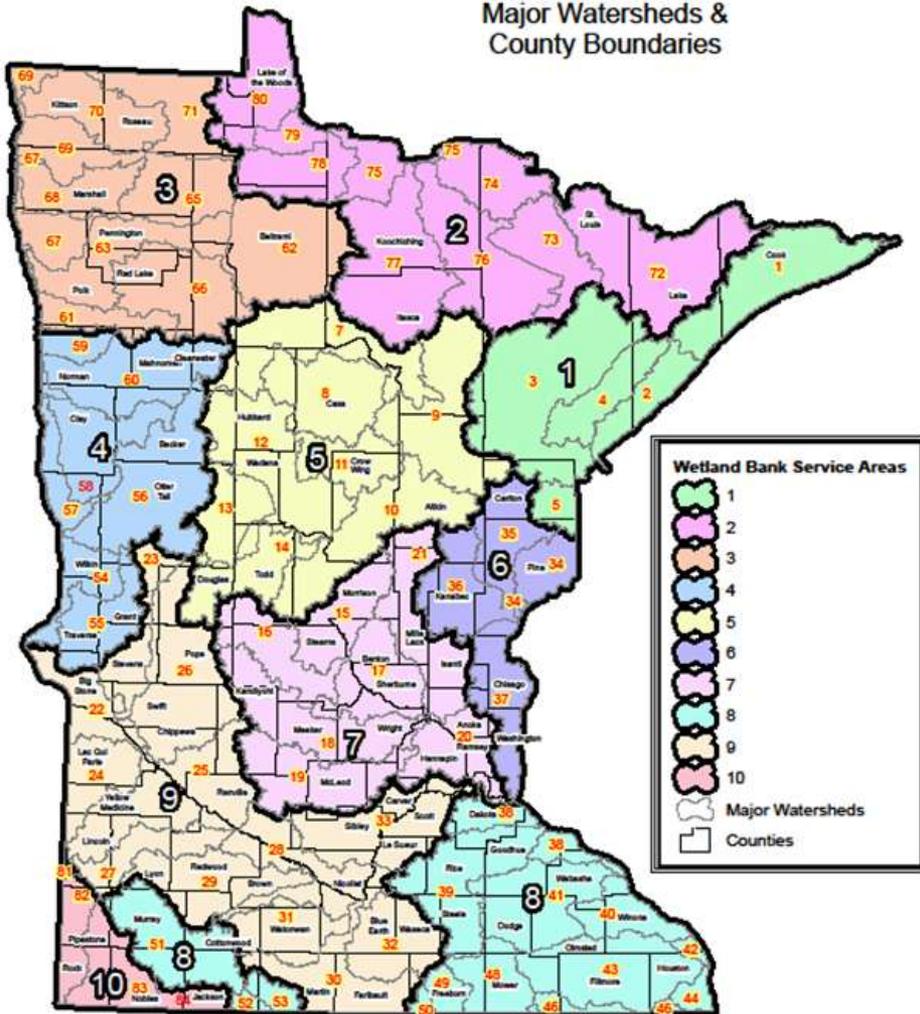
Opportunities in Banking

- Capitalize on wet, marginal land.
- Landowners, organizations, or interest groups can develop wetland credits for their own use or for sale.
- BWSR lists available credits on the website available to potential buyers.
- Convenient for landowner, more efficient for regulatory agencies, higher quality wetlands benefit our natural resources,

“Bank Service Areas”

Wetland Bank Service Areas

With
Major Watersheds &
County Boundaries

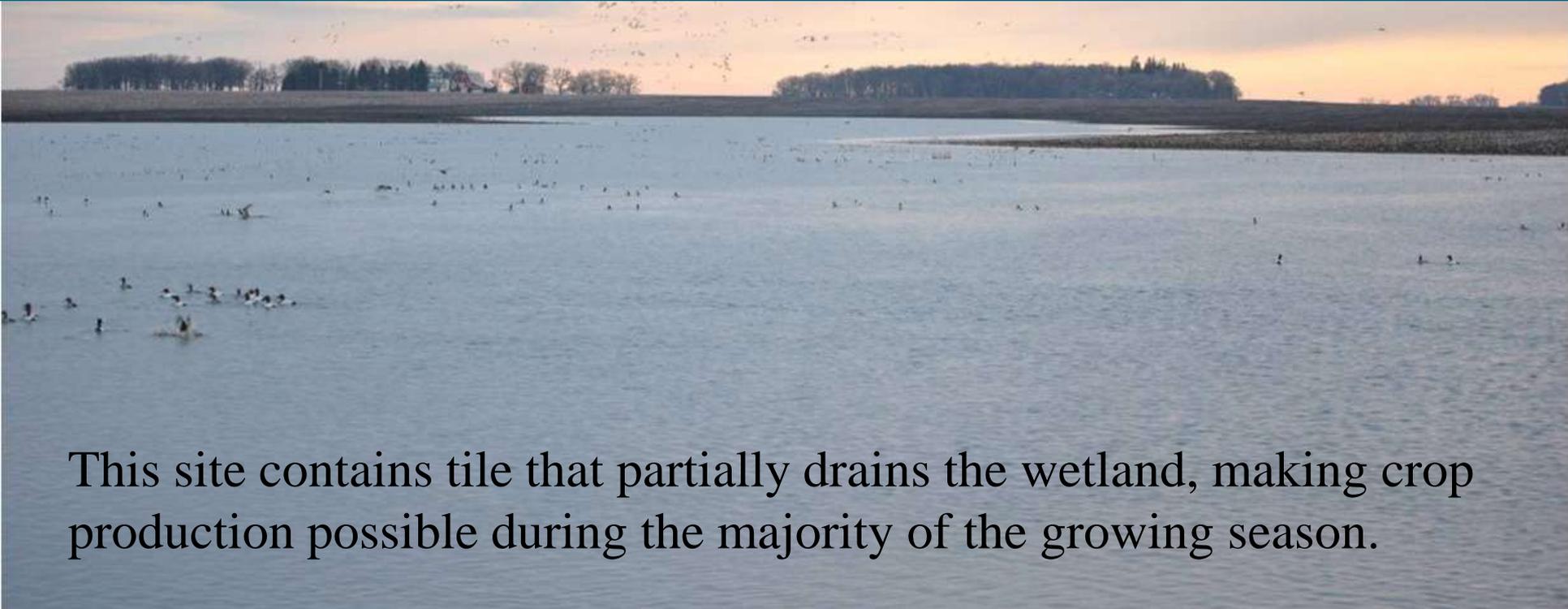


➤ For the purposes of wetland banking, the State is divided into “Bank Service Areas”

➤ Based on major drainage basins

Eligibility for Banking Credit

- In general, the site must contain a wetland that has been drained, filled, or degraded by cropping, that can now be restored.



This site contains tile that partially drains the wetland, making crop production possible during the majority of the growing season.

Eligibility - Specifics

- Prior approval: A bank plan must be approved by the WCA LGU prior to undertaking the restoration actions.
- Exemptions: Wetlands impacted under a WCA exemption are not eligible for 10 years.
- Violations: Restoration of wetlands impacted in violation of WCA or Swampbuster are not eligible.

Eligibility - Specifics

- Type conversion: Modification or conversion of non-degraded wetlands from one type to another is not eligible.
- Funding restrictions: The wetland may not be restored with financial assurance from public conservation programs or for unrelated regulatory purposes.
- Restored wetlands only: WCA allows flexibility for agricultural impacts that are replaced through wetland restoration.

Land Ownership

- MN Rule 8420.0111, Subp. 36.
- “Landowner” means a person or entity having the rights necessary to drain, excavate, or fill a wetland or to establish and maintain a replacement or banked wetland.

Land Ownership

- Typically, the landowner is a fee title owner or a holder of an easement, license, lease, or rental agreement providing the necessary rights.
- The right must not be limited by a lien or other encumbrance that could override the obligations assumed with the replacement or banking of a wetland.

Conservation Easement

- No credits may be deposited in the state wetland bank until a perpetual conservation easement is granted to and accepted by the State.
- The bank sponsor must also provide an acceptable title insurance policy naming the State as the insured.

Conservation Easement

PERPETUAL CONSERVATION EASEMENT FOR WETLAND BANK

Grantor: _____ BWSR Easement # _____

Grantee: State of Minnesota, acting by the Board of Water and Soil Resources, hereinafter referred to as "State".

Location: within Section _____, Township _____, Range _____, County of _____

This Perpetual Conservation Easement for Wetland Bank ("Easement") is made on _____ (date) by the undersigned, hereinafter referred to collectively as the "Grantor":

RECITALS

A. This Easement is made pursuant to and in furtherance of the Wetland Conservation Act of 1991, as amended, Minn. Stat. §103G.222, *et. seq.* ("WCA") and the rules implementing WCA, Minn. R. ch. 8420 ("WCA Rules").

B. This Easement pertains to all or part of the real property in _____ County, Minnesota, which is legally described on *Legal Description* attached hereto and made a part hereof ("Real Property").

C. The Real Property is the subject of a wetland bank plan pursuant to Minn. R. 8420.0700 to Minn. R. 8420.0755.

D. The Grantors include all of the following (1) all the fee owners of the Real Property and (2) the applicants under the bank plan if different from the fee owners. The term "Grantor" includes all of the Grantors if there is more than one. The Grantors are jointly and severally responsible for

See the BWSR website for a copy of the conservation easement for wetland banking.

Long-Term Responsibilities

- The easement does not restrict changes in property ownership – it follows the land.
- In general, the wetland cannot be altered and the site must remain in a natural condition. Activities that 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.

Other Allowable Activities

- Activities included in approved bank plan.
 - ❑ Vegetation management.
 - ❑ Wildlife management.
 - ❑ Other specified activities that do not degrade the wetland's ability to function over time.

- *Provides opportunities for ownership and/or long-term management by conservation organizations.*

Long-Term Maintenance



- Embankments and outlet structures affect wetland hydrology, and must be maintained to ensure the wetland remains in perpetuity.

Construction Design Standards

- Banking requires high standards for construction design in order to minimize maintenance needs and the potential for failure in the long term.
- This is an important goal for any landowner as well as the agencies involved.

Actions Eligible for Banking Credit

- WCA rules describe several actions eligible for wetland credit, several relevant to agriculture.
- Maximum amount of credit varies.
- Amount of work, total costs, and likelihood of success vary from site to site and the actions necessary to restore the wetland.

Restoration of completely drained or filled wetland areas

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



Restoration of partially drained or filled wetland areas

- Partially drained wetlands with cropping history in at least 10 of the last 20 years can be eligible for credit equal to the percent of years the wetland was cropped (up to 100%).
- Partially drained wetlands without cropping history are eligible for up to 50% credit.
- Both natural hydrology and native vegetation must be restored.

Example: Partially Drained Wetland with Cropping History



Vegetative restoration of farmed wetlands

- Eligibility and credit determined by % of last 20 yrs the wetland was annually seeded.
- 50% credit, except up to 90% in BSAs 2, 3, and 4.
- Restoration of native, noninvasive vegetation.



Protection of wetlands previously restored via conservation easements

- Up to 75% credit for the area restored under the contract or easement.
- Contract or easement must give the landowner the right to drain the wetland after termination and must expire prior to the allocation of credit.
- The site must meet WCA replacement standards.

Example: CRP Site and Excellent Candidate for Banking



Diverse wet meadow fringe to shallow marsh.

Upland buffer areas

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

Actions Eligible for Credit

**Board of Water and Soil Resources
Wetland Conservation Act Rules
Chapter 8420**

Extracted from Minnesota Rules 2009



Text Provided By:

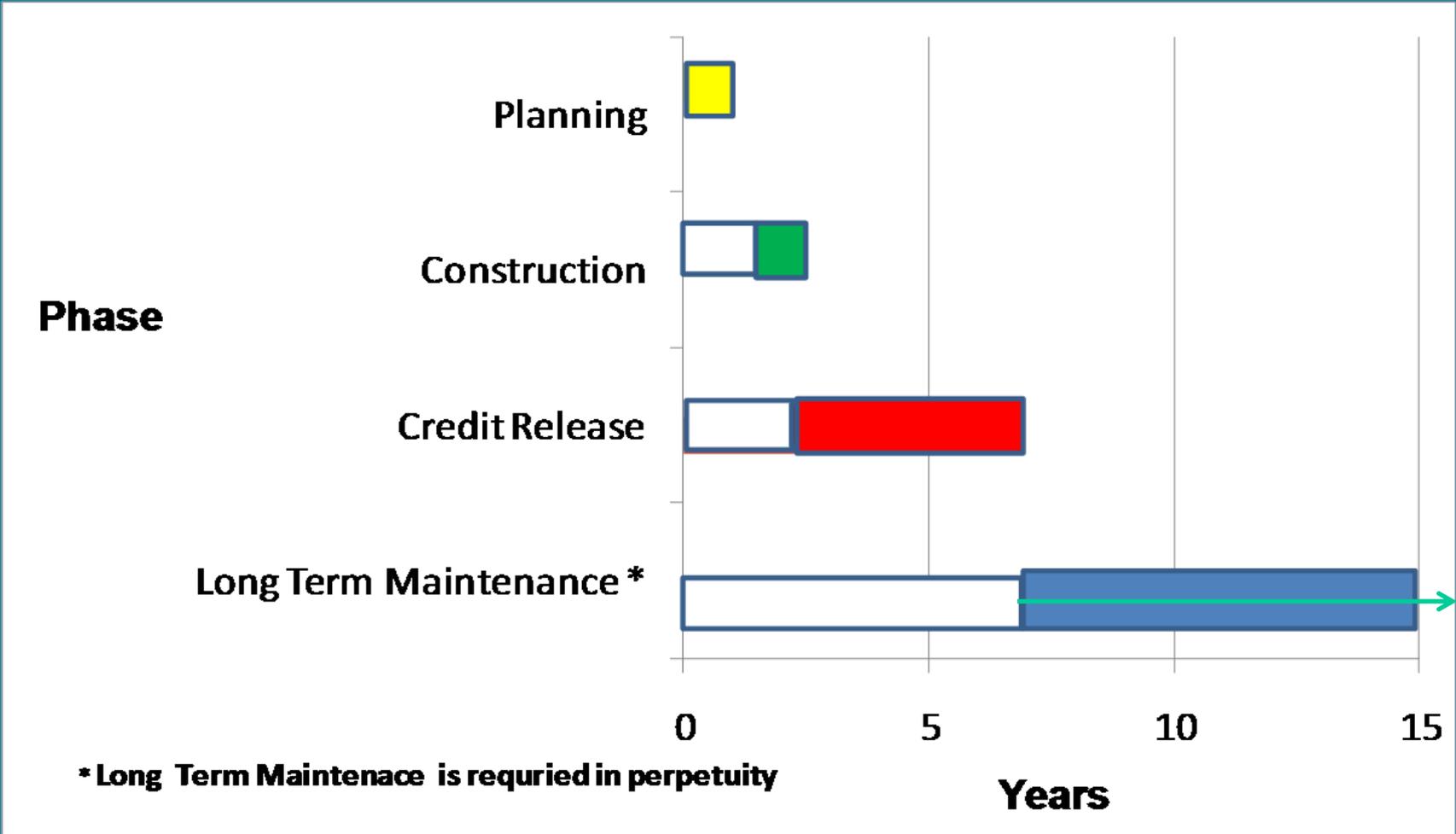
**The Office of Revisor of Statutes
7th Floor, State Office Building
St. Paul, MN 55155**

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

Process to Establish a Bank Site

- The process to develop a wetland bank site includes four distinct phases:
 - 1) Planning
 - 2) Construction
 - 3) Monitoring and Credit Release
 - 4) Long Term Maintenance

Typical Timeline for Bank Site Establishment



1) Planning Phase – First Step

➤ Pre-Application Scoping.

- ✓ Help determine eligibility and consistency with banking goals and requirements.
- ✓ Identify potential problems/limitations early.
- ✓ Evaluate feasibility, long-term sustainability, costs, and potential credit yields.
- ✓ Allows for more informed decisions prior to making substantial investments in the site.

1) Planning Phase – 2nd Step

- Concept Plan (Application Part A).
 - ✓ Draft of the restoration plan.
 - ✓ Provides additional detail and incorporates findings from Scoping phase.
 - ✓ Allows for modifications prior to substantial expenditures on engineering and materials.

1) Planning Phase – 3rd Step

- Final Bank Plan (Application Part B).
 - ✓ Incorporates all previous comments and recommendations.
 - ✓ Allows for major issues to be worked out prior to formal application.
 - ✓ Results in TEP recommendation and formal Bank Plan approval or denial by the LGU.

2) Construction Phase



2) Construction Phase

- Construction begins after Bank Plan approval.
- LGU certifies construction upon completion.



3) Monitoring and Credit Release Phase

- Monitoring begins after construction, typically continues for 3-5 years.
- Documents the progress of restoration relating to hydrology and vegetation.
- Credit is allocated based on the achievement of restoration success.

3) Monitoring and Credit Release Phase



Hydrology
monitoring.

3) Monitoring and Credit Release Phase

Hydrology monitoring.



3) Monitoring and Credit Release Phase

➤ Vegetation monitoring.



3) Monitoring and Credit Release Phase

- Credit release is requested by the bank sponsor by submitting an “Application to Deposit Credit” to the LGU.
- Requests are reviewed by the TEP, who provides a recommendation to the LGU.
- Based on the credit allocation schedule in the approved bank plan.

4) Long Term Maintenance

- The landowner is ultimately responsible for maintaining the wetland, including:
 - ✓ Embankments and water control structures.
 - ✓ Controlling noxious weeds.
 - ✓ Addressing structural problems in coordination with BWSR and the LGU.
- BWSR will inspect the site periodically over the long-term.

Clean Water Act Coordination

- Non-isolated wetlands are also regulated under the Federal Clean Water Act, administered by the U.S. Army Corps of Engineers (St. Paul District).
- Bankers may choose to seek Corps approval of their credits.
- The 3-step application process and other requirements are similar, but can vary.

Success depends on you!

- Wetland banking is a private enterprise.
- Any landowner, group, or organization can establish a wetland bank site.
- Multiple landowners or organizations can develop partnerships to achieve mutually compatible goals and reduce costs for both.

Partnership Example: Agriculture and Conservation

Adequate availability of
wetland mitigation
(Goal of Ag)



Improved Wildlife Habitat
(Goal of Cons. Groups)



Better water quality, more
wildlife, etc.
(Shared goals)



Opportunity
for
Partnerships
in Banking

Agriculture and Conservation Partnership Example

- Joint selection of potential bank sites.
- Conservation organization goals for the site included in the bank plan.
- Ag groups responsible for site approvals and credit establishment.
- Conservation organization takes over long term site ownership and/or management.
- **Early coordination is essential!**

Where to begin?

- For more information, or to begin the process, contact either your:
 - ❑ Local Soil and Water Conservation District,
 - ❑ WCA Local Government Unit, or
 - ❑ BWSR Wetland Specialist
- See the BWSR website at www.bwsr.state.mn.us for directories.

Questions?





The Minnesota Wetland Bank for Agriculture

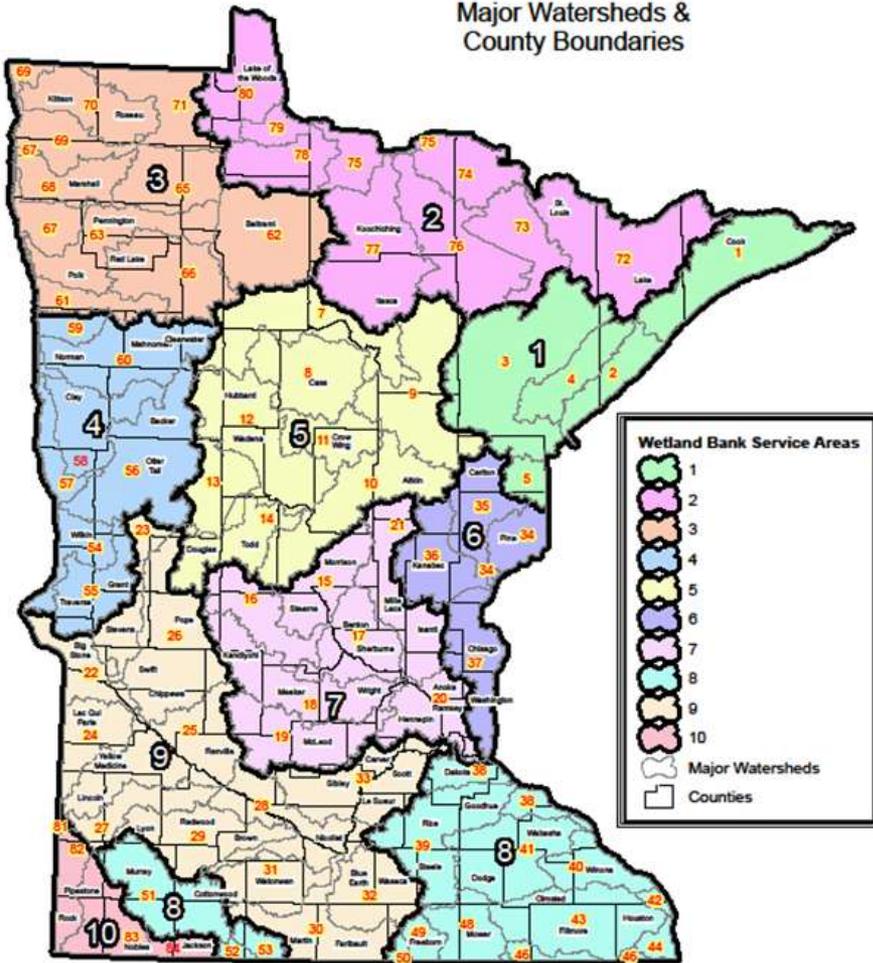
Considerations for Site Selection



2006  2011

Locating Ag Bank Sites

Wetland Bank Service Areas
With
Major Watersheds &
County Boundaries



- Majority of ag impacts will be in BSAs 3, 4, 7, and 9.
- Even distribution of bank sites throughout these BSAs may be an early goal to provide options for landowners.

Site Selection?

- Site selection is one of the most important factors in determining wetland mitigation success.
- This is important both from an ecological perspective and a financial perspective.

Function and Sustainability

- The functions and associated benefits provided by restored wetlands are related to the type/quality of vegetation, hydrologic characteristics, soils, and other factors directly related to the wetland itself.

Function and Sustainability

- Numerous external factors also contribute to the wetland's ability to function and provide the desired benefits:
 - ❑ adjacent land use
 - ❑ proximity to other habitats/resources
 - ❑ protection of adjacent riparian areas
 - ❑ consistency with watershed needs
 - ❑ other factors that affect function and long-term sustainability

Site Selection Concepts

- A site adjacent to a Wildlife Management Area or containing a stream are typically better suited for banking than a site bordered primarily by cropland.
- The restoration of a prairie pothole in the vicinity of other potholes or waterfowl habitat will generally be better than a site that is substantially isolated.

Site Selection Concepts

- A wetland restored with an adequate upland buffer is more suitable than a wetland lacking a buffer adequate to prevent degradation from adjacent land use.
- Large wetland complexes are preferred over smaller, isolated wetlands – “bigger is better.”

Site Selection Example



Waterfowl
Production Area

Restoration
projects that directly
contribute to the
water quality of an
important resource
and/or provide
adjacent habitat
provide multiple
functional benefits.

Site Selection Example

Restoration of wetlands in river floodplains can provide multiple functional benefits and are excellent candidates for wetland banking.



Site Selection Example



Large wetland complexes provide multiple benefits and are more sustainable

“Bigger is better”

Site Selection Example

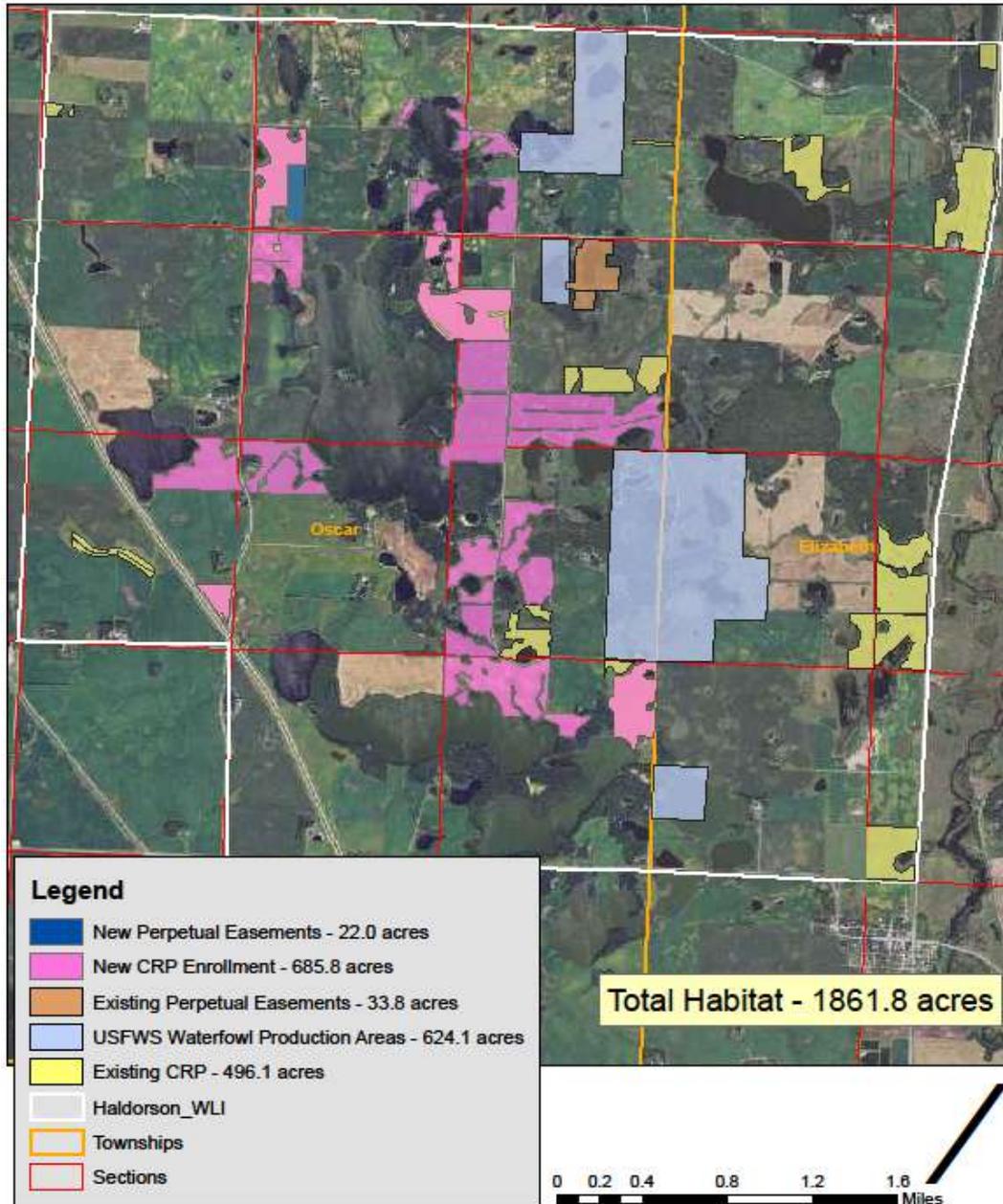


An adequate buffer protects the wetland from degradation and increases wetland function by providing adjacent habitat.

Haldorson Lake Working Lands Initiative Target Area 2011

Coordinate with Others

Coordination with other planning efforts can help identify wetland restoration opportunities that will complement other natural resource amenities.



Technical and Financial Feasibility

Prior to moving forward with a banking project, it is important to consider:

1. Practicality and likelihood of success.
2. Costs associated with establishing credits.
3. Future maintenance needs and long term sustainability.

Sustainability

“Self-sustaining” refers to the ability of a wetland to provide the desired functions over time in a changing landscape without human intervention.

- Sustainability is important in regards to long term function as well as financial viability.

Sustainability

Sustainability is affected by many factors, including:

- Adequate buffers, adjacent land use, etc.
- Hydrologic characteristics (contributing watershed, bounce, etc.).
- Adjacent or upstream seed sources.
- Adequacy of construction features.

Construction Standards

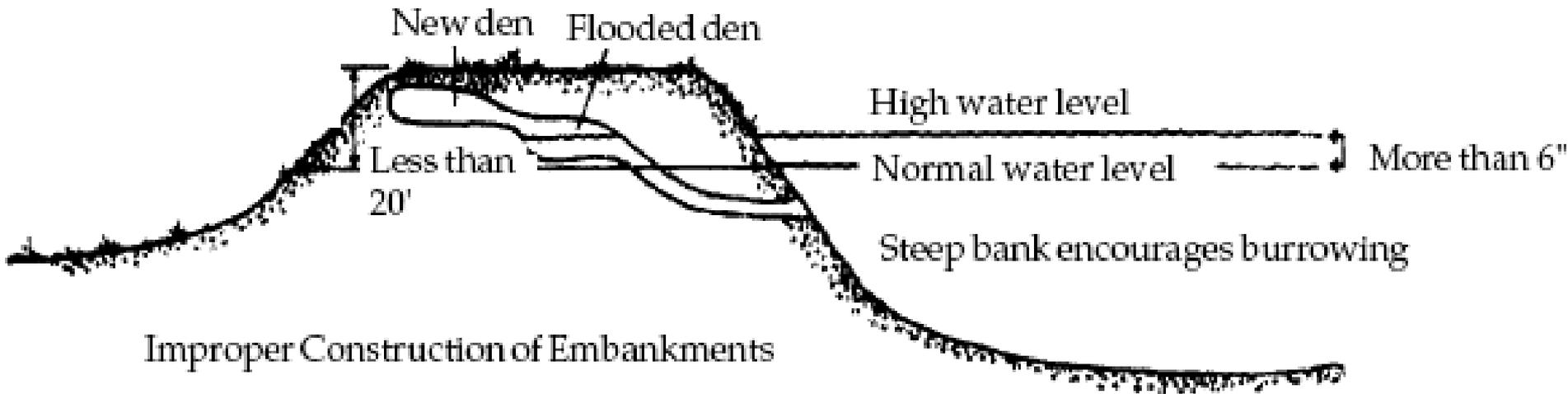
- Perpetual (Banking) vs. 10-30 yr (CRP)
 1. Sites with substantial reliance on long embankments or structures will typically be more costly and require more maintenance.
 2. Where structures are necessary, In the best interest of the agencies and the landowner to have well designed and constructed features.

Construction Feature Example









Improper Construction of Embankments

Water seepage begins, with a blowout soon to follow...



Result:

- 1) Issue with long term maintenance responsibilities and conservation easement.**
- 2) Angry downstream landowner with flooded cropland.**



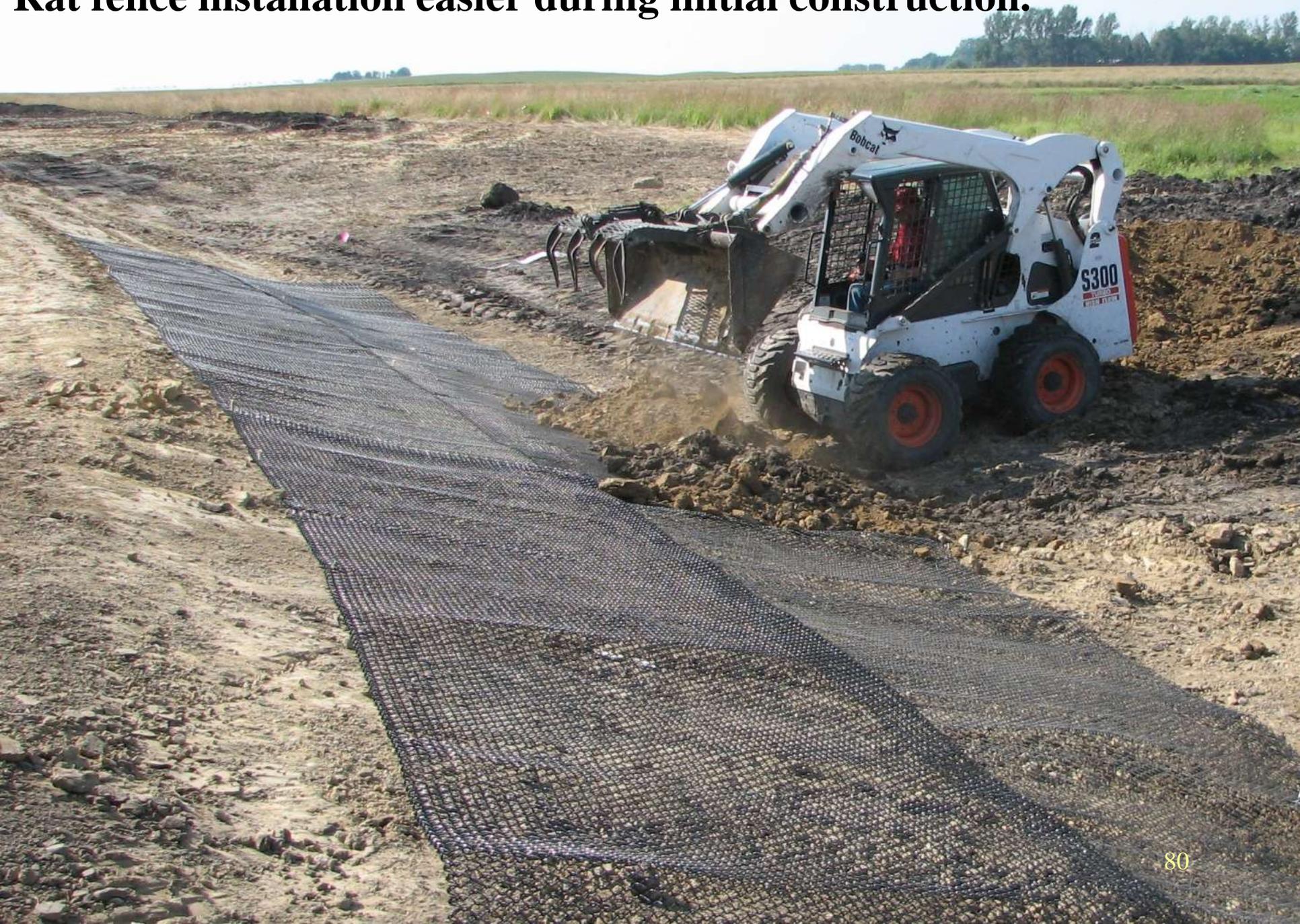
Reconstruction to add “rat fence”







Rat fence installation easier during initial construction.



Muskrats have some good uses!



Where structures are needed, there will be at least some maintenance.



Construction Features

- Be aware of potential construction needs.
- Target sites with a lesser reliance on embankments and structures.
- Prior to deposit of credits, site must meet current design standards.

Example: Expiring CRP

- For eligible sites in good condition, the cost of establishing credits can be lower than sites that require substantial work.
- Interest in banking could increase due to expected high CRP expiration rates.
- The factors for technical and financial feasibility are also relevant to CRP sites.

CRP Example: Eligibility

- The site must contain a wetland that was restored under CRP or naturally over the life of the contract.
- Pre-contract conditions can be assessed by reviewing the contract, aerial photos, cropping history, drainage system records, and other available info.
- The mere existence of a wetland on CRP does not necessarily qualify.

CRP Example: Vegetation

- Native, noninvasive vegetation must be established on all banking sites.
- Eligible sites that currently contain native vegetation will be less costly to bank and better meet wetland replacement requirements.
- Sites that require substantial vegetative improvements will cost more and can have reduced chances of success.

CRP Example: Vegetation



A site dominated by non-native invasive species, like this RCG monotype, would be both difficult and expensive to restore.

CRP Example: Construction Features

- Prior to the deposit of credit, the site must meet current design standards.
- Inadequate structures or embankments, or a lack of them where needed, will increase costs.
- Reliance on embankments and structures should be minimized.

CRP Example: Hydrology

- Replacement wetlands must be fully restored to the natural hydrologic conditions whenever feasible.
- The site may contain ditches or other drainage features that were not fully disabled.
- Fully disabling the drainage features could be required.

Summary

- Find good sites!
- Get early input from the agencies.
- Consider all relevant factors when deciding to move forward.
- Minimize reliance on structures and associated long-term maintenance needs.

Summary

- Doing these things will improve your chances of approval, increase your credit yield, and lower your costs.



Result: Win-Win for Agriculture and our Natural Resources

