TEP Academy

BOARD OF WATER AND SOIL RESOURCES

BWSR Wetland Section | www.bwsr.state.mn.us/wetlands

Minnesota Wetland Professional Certification Program

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MN Wetland Professional Certification Program

Program goal: Provide relevent, accessible and affordable technical and adminstrative training for all wetland professionals.

- Nationally recognized voluntary training program that certifies 500 individuals working in both private and public sectors from the upper midwest and beyond.
- Provide technical wetland delineation training and adminstrative training for implementing the MN Wetland Conservation Act.
- Certified individuals must pass In-training and Professional exams and complete continuing education during 3-year renewal periods.

bwsr.state.mn.us/minnesota-wetland-professional-certification-program

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2025 MWPCP Training Courses

Introduction to Wetland Delineation and Regulations

- **Introduction to Wetland Delineation and Regulations:** MNDOT Training Center, Shoreview- June 9-13
- **Introduction to Wetland Delineation and Regulations:** Northland Arboretum, Baxter - September 8-12
- **Introduction to Wetland Delineation and Regulations:** MNDOT Training Center, Shoreview - October 6-10

Professional Exams

MWPCP Exams will be offered at 1pm on: June 13 in Shoreview, September 12 in Baxter, October 10 in Shoreview

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2025 MWPCP Training Courses

Regulatory Training

- **WCA 101 virtual training**- February 4-5 (2 half days) (3 online CEC per day)
- **WCA 201 Virtual training**- February 19 (1 half day) (3 online CEC)

This virtual training will provide an overview of the 2024 statute amendments relevant to the Wetland Conservation Act. Topics to be discussed include wetland classification, jurisdiction of deepwater habitat, agricultural activities exemption provisions and changes to the drainage, de minimis and utility exemptions.

- **TEP Academy**- St Cloud MNDOT training center- April 16 & 17- Two one-day classes (6 CEC per day)

This course is intended for professionals who serve on a Technical Evaluation Panel (TEP) implementing WCA. The course is designed to focus on roles, procedures, important concepts and some common scenarios TEP members encounter. Participants should have some basic level knowledge of how the WCA is implemented but direct experience on a TEP is not required. The content is introductory to intermediate. Participants can choose either date as they will be identical courses.

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2025 MWPCP Training Courses

Technical Training

- **Soils on the Landscape**- Robert Nye Regional Park -April 29 & 30- Two one-day classes (6 CEC per day)
- **Wetland Delineation Methods w Field Practicum**- Cloquet Forestry Center- May 20-22 (18 CEC)
- **Plant ID**- Shoreview MNDOT Training Center (July 14) and Cloquet Forestry Center (July 16)-Two one-day classes (6 CEC per day)
- **MWPCP Regional Wetland Training- Northeast MN-** Hermantown City Hall- August 12-13 (6 CEC per day)
- **Hydrogeomorphic Method of Classifying Wetlands -** Hartley Nature Center, Duluth- October 28-29- Two one-day classes (6 CEC per day)
- **Wetland Banking & Monitoring for Consultants-** Shoreview MNDOT Training Center- November 12-13 (12 CEC)

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Registration Information

Registration for 2025 MWPCP courses will be staggered and open on the following dates:

- Registration for Virtual Training Courses- 8am on January 21
- Registration for Introduction to Wetland Delineation & Regulation classes- 8am on February 24
- Registration for April- June Classes- 8am on March 3
- Registration for July-October classes- Week of June 16

Email reminders will go out to the MWPCP and BWSR Wetland Conservation Act (WCA) email contact lists for registration dates.

- Email bwsr.mwpcp@state.mn.us to be added to list

MWPCP maintains a waitlist for all full classes

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Certification Updates

- Need 18 continuing education hours (6 online)
- Current renewal period ends on December 31, 2025 for individuals who passed exams in 2022.
- Do not need to report MWPCP classes
- Use Credit Reporting Form
- List of approved classes on MWPCP page
- If not listed, use Credit Determination Form
- Notify us if you change jobs or email

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TEP Academy Agenda

- Agenda:
- Overview of a WCA TEP
- TEP Procedures:
  - Common Decisions
  - Replacement Plans
  - Wetland Banking
  - Local Road Program
- Enforcement Procedures

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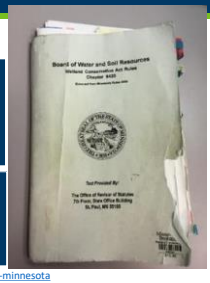
WETLAND CONSERVATION ACT (WCA)

State Law passed in 1991

MN Statute **103G** and parts of 103A,B,E,F

MN Rule Chapter 8420



https://bwsr.state.mn.us/wetlands-regulation-minnesota

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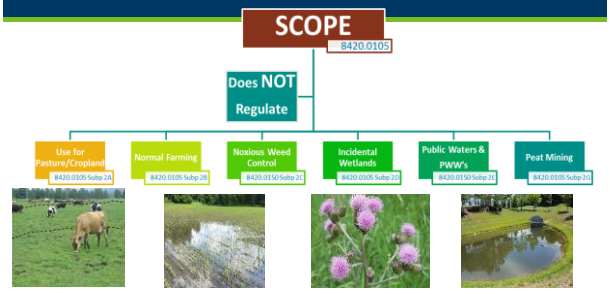
Scope of the Wetland Conservation Act



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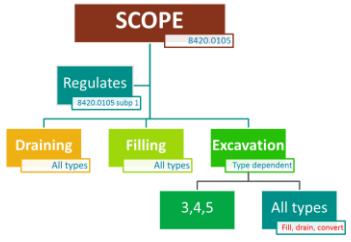
Scope of the Wetland Conservation Act



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What is an Impact?

A loss in quantity, quality, or biological diversity of a wetland *caused* by draining or filling in all types or by excavation in types 3, 4, or 5.

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What is Fill?

Any solid material added or redeposited in a wetland

- Alters cross-section or hydrological characteristics,
- Obstructs flow patterns,
- Changes Boundary, or
- Converts to non-wetland.

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Wetland Fill

- Does not include posts for walkways, bridges, powerline poles, etc.

- Does not include slash or woody vegetation as long as it originated from vegetation growing in the wetland and does not impair flow or circulation of water.

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What is Excavation?

Removal of soil by any method if it results in an impact*.

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What is Drainage?

Any method for removing or diverting waters from a wetland

- Excavation of a ditch
- Tile Installation
- Filling
- Diking
- Pumping
- Diverted water
- Etc.

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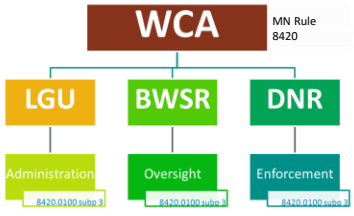
Key Roles Implementing the Wetland Conservation Act



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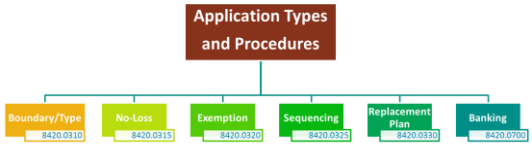
WCA Decision and Application Types



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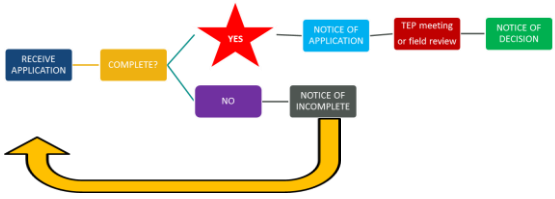
Typical WCA Application Process



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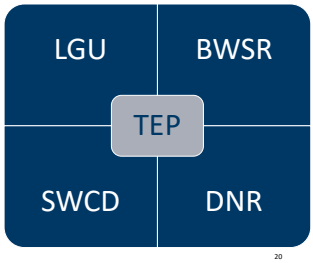
Technical Evaluation Panel

- Plays a key role in implementation.
- Representative from LGU, SWCD, BWSR and DNR (if project effects public waters and/or in shoreland zone).
- Primary role is to advise LGU on decisions. Some decisions depend on TEP recommendation.
- TEPs often advise landowners/applicants during pre and post application reviews.



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When should you hold a TEP meeting?

- Complex or difficult projects
- Visible, high-profile, or public projects
- LGU is applicant
- Enforcement cases
- Bank plan and monitoring report reviews
- Local Government Road Wetland Replacement Program projects

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When does TEP have to be involved?

- At least one member of TEP makes site visit before making findings
- Extension for temporary impacts
- "certifying" SWCD projects and wildlife exemptions
- Extending restoration orders
- Local Road projects
- Wetland Credit Deposits

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TEP Meetings

- Step 1: Define purpose of TEP discussion/review (set a formal agenda)
- Step 2: Have an open discussion (there will be disagreements)
- Step 3: Summarize and agree to conclusions (find common ground)
- Step 4: Write Findings Report (be clear and concise)

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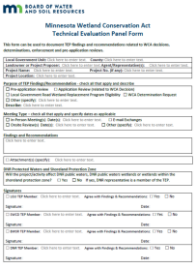
TEP findings & recommendations

- Communicate the cumulative result of field visits, report reviews & informal discussions.
- Give the applicant/landowner direction on next steps (if any).
- Often provide the LGU with the basis for their decision.

TEP Form



BOARD OF WATER AND SOIL RESOURCES

Minnesota Wetland Conservation Act
Technical Evaluation Panel Form

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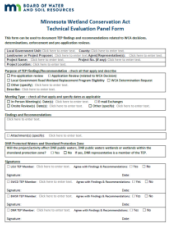
Description of each section of form

- Project Info
- Purpose of TEP Findings
- Findings
- DNR
- TEP Members Signature



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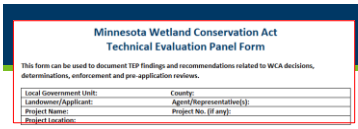
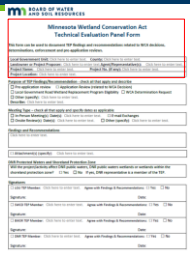
Project Info


Minnesota Wetland Conservation Act
Technical Evaluation Panel Form

This form can be used to document TEP findings and recommendations related to WCA decisions, determinations, enforcement and pre-application reviews.

Local Government Unit:	County:
Landowner/Applicant:	Agent/Representative(s):
Project Name:	Project No. (if any):
Project Location:	

- Project name: Landowner & Nature of Project (i.e. Smith Driveway Exemption)
- Project number: LGU numbering (i.e. 2025- W023)
- Project location: be specific when location is important (i.e. shoreland side of Johnson residence on Round Lake)



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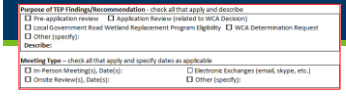
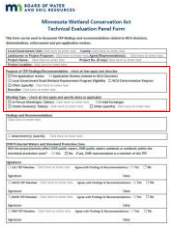
Purpose of TEP Findings


Purpose of TEP Findings/Recommendation - check all that apply and describe
☐ Pre-application review ☐ Application Review (related to WCA Decision)
☐ Local Government Road Wetland Replacement Program Eligibility ☐ WCA Determination Request
☐ Other (specify):
Describe:

Meeting Type – check all that apply and specify dates as applicable
☐ In-Person Meeting(s), Date(s): ☐ Electronic Exchanges (email, skype, etc.)
☐ Onsite Review(s), Date(s): ☐ Other (specify):

- Pre-application review- who requested?
- LGRWRP- use esp. for complex projects when not all impacts qualify
- WCA Determinations: incidental wetlands, no-loss, potential violations



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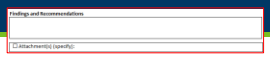
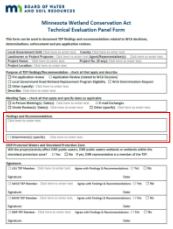
TEP Findings





Findings:
- concise and *focused on the decision that needs to be made*.
- Should include technical findings
- Include specific Rule citations
- Stand up in court/hearings involving appeals.
- Give clear direction to applicant/landowners.

- Protect the TEP from "he said, she said" issues.
- Avoid subjective language (the LGU feels…)
- Avoid Legal Ease (i.e. herein)

Attachments:
- Include data sheets, maps, pictures, well data, etc.

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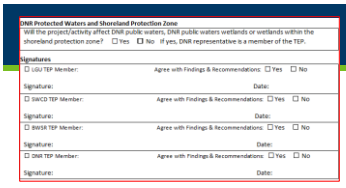
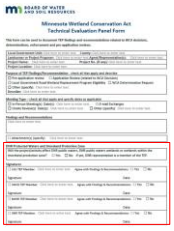
TEP Signatures





- DNR= official member of TEP in shoreland
  - Must be included in findings
- Try to find consensus

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TEP recommendations

- TEP may recommend approval, approval with conditions or denial
- LGU must consider TEP findings and recommendations
- TEP cannot make findings without having at least one member make a site visit
- Findings and recommendations must be endorsed by a majority of members

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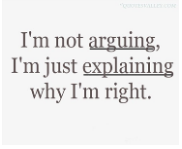
What if the LGU doesn't agree with TEP?

- The LGU must provide detailed reasons for rejecting the [TEP] finding of fact or recommendation in its record of decision; otherwise, the LGU has not sufficiently considered the TEP report.



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Detailed reasons for not following TEP recommendation?

"The Board felt that the TEP's recommendation to deny the application was unreasonable and therefore we approve the application."

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Reasons for not following TEP recommendation

"The Board finds that the TEP's recommendation to reject the application based on the availability of a reasonable and prudent alternative alignment to the proposed road (impacting less wetland) did not give due consideration to the decreased public safety associated with alternative alignments. The alternative alignments mentioned in the TEP's recommendation result in unsafe sighting distances at road intersections according to national safety standards. Therefore, the Board finds that there are no feasible and prudent alternatives and approves the application."

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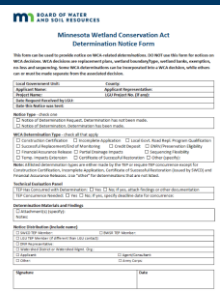
WCA Determination Form

- Used by LGUs or SWCDs to notify others of determinations
- Determinations include:
  - Construction certification
  - Local road wetland replacement program qualification
  - Certification of successful restoration
  - Sequencing flexibility

WCA Determination Form


Minnesota Wetland Conservation Act
Determination Notice Form

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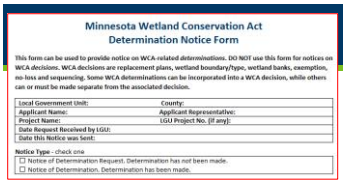
Minnesota Wetland Conservation Act
Determination Notice Form

This form can be used to provide notice on WCA-related determinations. DO NOT use this form for notices on WCA decisions. WCA decisions are replacement plans, wetland boundary/type, wetland banks, exemption, no-loss and sequencing. Some WCA determinations can be incorporated into a WCA decision, while others can or must be made separate from the associated decision.

Local Government Unit: | County:
Applicant Name: | Applicant Representative:
Project Name: | LGU Project No. (if any):
Date Request Received by LGU:
Date this Notice was Sent:

Notice Type - check one
☐ Notice of Determination Request. Determination has not been made.
☐ Notice of Determination. Determination has been made.

- This is a "Notice"
  - Date issued matters esp. for certifications
- Can be a notice that determination has been requested
  - Or
- Notice that determination has been made

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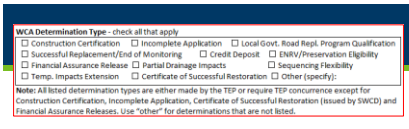
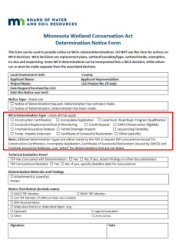

WCA Determination Type - check all that apply
☐ Construction Certification ☐ Incomplete Application ☐ Local Govt. Road Repl. Program Qualification
☐ Successful Replacement/End of Monitoring ☐ Credit Deposit ☐ ENRV/Preservation Eligibility
☐ Financial Assurance Release ☐ Partial Drainage Impacts ☐ Sequencing Flexibility
☐ Temp. Impacts Extension ☐ Certificate of Successful Restoration ☐ Other (specify):
Note: All listed determination types are either made by the TEP or require TEP concurrence except for Construction Certification, Incomplete Application, Certificate of Successful Restoration (issued by SWCD) and Financial Assurance Releases. Use "other" for determinations that are not listed.

- Common determinations:
  - Certificate of Successful Restoration, Construction Certification
- Note all determination types listed
- Determinations are not decisions


Minnesota Wetland Conservation Act
Determination Notice Form

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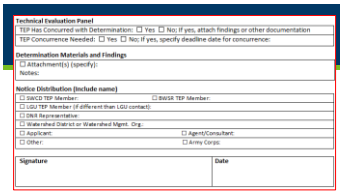
Technical Evaluation Panel

TEP Has Concurred with Determination: ☐ Yes ☐ No; If yes, attach findings or other documentation

TEP Concurrence Needed: ☐ Yes ☐ No; If yes, specify deadline date for concurrence:

Determination Materials and Findings

☐ Attachment(s) (specify):

Notes:

Notice Distribution (Include name)

☐ SWCD TEP Member: ☐ BWSR TEP Member:

☐ LGU TEP Member (if different than LGU contact):

☐ DNR Representative:

☐ Watershed District or Watershed Mgmt. Org.:

☐ Applicant: ☐ Agent/Consultant:

☐ Other: ☐ Army Corps:

Signature	Date


Minnesota Wetland Conservation Act
Determination Notice Form

- TEP members: can be used as notice to request concurrence with determination
  - Date may be specified
- Attach all relevent figures, maps, emails, pictures, etc.
- Sign and Date
  - Cert of Successful Restoration

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Topics of the Week

- Series of informal fact sheets providing practical information about implementing WCA


WCA Topics of the Week

WCA Topics of the Week

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WCA Forms and Guidance

- Series of forms and templates for implementation of WCA
  - Notice forms
  - TEP forms
  - WCA resolutions
- Wetland banking and easement forr are found on separate page:

  Wetland Bank Transaction Forr
- Joint application form page


WCA Forms and Templates

WCA Forms and Templates

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TEP review example

Consider the following slides:

Think about what questions should be asked

What findings could TEP generate?

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Pre-application consult

- Landowner proposes subdivision as second phase to development visible to the east
  - First subdivision was approved under de minimis
- Four proposed lots
- One road with individual driveways
- Each lot needs two septic locations
- Landowner wants to know if project is eligible for de minimis

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Findings:

- Reviewed previous de mimimis decision
  - Found no remaining de minimis
- Does not qualify for de minimis
- Project located in shoreland- DNR official TEP
- Lot A almost entirely wetland
  - 2 SSTS locations & building site?
- Can road cross at narrow spot in lot A?
- Can Lot A be reconfigured to meet zoning requirements?
- Can Landowner access lots from northwest?
- Recommend delineation & replacement plan

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TEP Procedures for Common Decisions

Items to Cover

Review Common Scenarios

TEP Forms/Resources

Documenting TEP Involvement

TEP Exercises

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Common TEP Scenario's

- Is this wetland delineation accurate?
- Is this a wetland impact?
- Does this qualify for an exemption?
- Does this replacement plan meet sequencing requirements?
- Does the site have potential for a wetland bank?
- Is this project eligible for the local road program credit use?
- Is this a violation? If so, how should it be restored?

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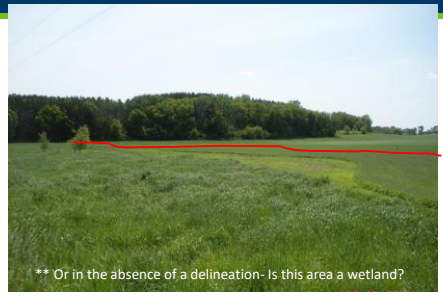
Scenario 1 Is this wetland delineation accurate?



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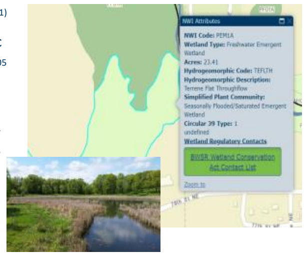
TEP Procedures and Considerations

- Boundaries must be delineated using USACE 1987 Manual and Supplements (8420.0405 subp 1)
- Types must be ID'd using Hydrogeomorphic Method (new Statute) and Eggers and Reed (8420.0405 subp 2)
- Requires NOA and NOD (LGU).
- Technical Decision- at least one member of TEP should make a site visit – often full TEP



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Wetland Delineation Review Checklist

Wetland Delineation Review Checklist for Minnesota

This document is intended to provide those reviewing wetland delineations for regulatory purposes with a checklist of basic components that should be considered when reviewing wetland delineations. It can also serve as a useful guide for those conducting delineations and preparing reports. This checklist is for most routine wetland delineations in Minnesota. Other report components and review considerations may be applicable depending on the characteristics of the site being evaluated. Users should consult the 1987 Corps of Engineers Wetland Delineation Manual, any applicable regional supplement, and Board of Water & Soil Resources guidance documents for more specific information and explanations.

Basic Report Components (check to make sure these are in the report)

- ☐ Site location map
- ☐ National Wetland Inventory (NWI) map
- ☐ Soil survey map (use web soil survey at http://websoilsurvey.nrcs.usda.gov/app/)
- ☐ MN Dept. of Nat. Resources Protected Waters Map
- ☐ Recent air photo with sampling point locations, site boundary, and wetland boundaries
- ☐ Survey map (optional depending on local requirements)
- ☐ Wetland delineation data forms corresponding to indicated sampling point locations

Report Contents (review report and data forms for these elements)

General

- ☐ Circular 39 wetland types and Eggers & Reed plant community types identified for each wetland
- ☐ Vegetation and landscape position of all adjacent upland areas identified and described
- ☐ Wetland-upland transitions described for each wetland in terms of vegetation, soils, and hydrology
- ☐ Methodology for identifying potential wetland areas described
- ☐ All potential wetlands from hydric soil, NWI, and other mapping sources adequately investigated and described in the report

Wetland Delineation Data Form Review

- ☐ "Normal circumstances", "disturbed" and "problematic" designations properly identified
- ☐ Vegetation classified into appropriate layers (herb, shrub, tree, vine)
- ☐ Scientific name and indicator status identified
- ☐ 50/20 dominance rule applied properly for each vegetation layer
- ☐ Soil described to at least 20 inches from the soil surface
- ☐ Soil textures and Munsell colors given for each soil layer in sample

Field Review (conduct a field review and verify the following elements)

- ☐ Appropriate number of sampling transects (see notes on page 2)
- ☐ Sample points representative of the plant community and landscape position being sampled (see notes on page 2)
- ☐ Appropriate vegetation sample plot sizes used (see notes on page 2)
- ☐ Vegetation properly identified and quantified
- ☐ Soil pits deep enough to document presence/absence of all potential hydric soil indicators
- ☐ Soil layers properly described in terms of texture, color, and redox features
- ☐ Hydric soil indicators properly applied
- ☐ Hydrology indicators properly applied (see notes on page 2)
- ☐ Delineation flag spacing appropriate (see notes on page 2)

Other Items

Offsite Hydrology

Scheduling and Access Approval

Flagged or GPS

Consultant attendance

Antecedent Conditions

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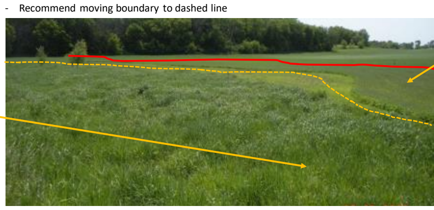
Scenario 1- Is this wetland delineation accurate?

TEP Findings:
- Noted hydric soils in DP 1 correlating with hydrophytic plant community/mow line;
- Saturation observed (Primary hydrology indicator)
- Lacking primary or secondary hydrology indicators at DP 2
- DP 2 reflects upland soil conditions – no hydric indicator
- Original boundary to far up landform
- Recommend moving boundary to dashed line



DP 2

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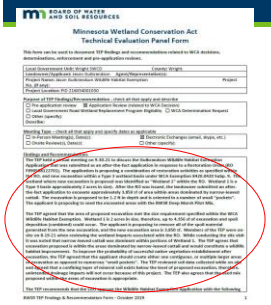
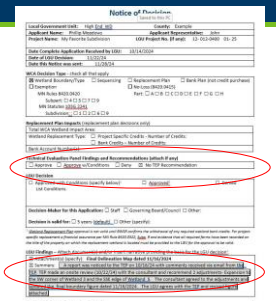
Scenario 1 – Documentation

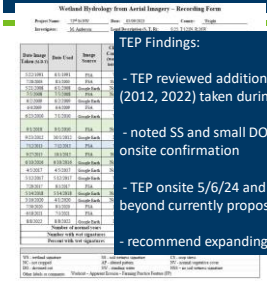

Minnesota Wetland Conservation Act
Technical Evaluation Panel Form

OR


Notice of Decision

49

Scenario 2- Offsite Hydrology in Ag Areas


Wetland Hydrology from Aerial Imagery – Recording Form

TEP Findings:

- TEP reviewed additional aerial photography from County (2012, 2022) taken during normal antecendent cond.

- noted SS and small DO in Wetland 2 resulting in need for onsite confirmation

- TEP onsite 5/6/24 and confirmed geomorphic setting beyond currently proposed boundary

- recommend expanding boundary 50-75 ft to north

Followed

est more

50

Scenario 3 – Solar Panels/Arrays

Impacts - a loss in quantity, quality, or biological diversity of a wetland *caused* by draining or filling in all types or by excavation in semi/perm. Flooded wetland areas

Wetland fill - *does not* include posts and pilings unless it turns wetland into a *nonaquatic use or significantly alters its functions and value*.

51

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Scenario 3 – Solar Panels/Arrays


BOARD OF WATER AND SOIL RESOURCES

Guidance on Reviewing Solar Panel Projects for Wetland Conservation Act (WCA) Compliance

Solar Projects vs Other Project Types

Outline of TEP Evaluation of Potential Impacts of Solar Panels on Posts/Pilings

TEP Involvement/Resources

- Review Project/ID potential Impacts
- Review Available Guidance

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Scenario 3 – Solar Panels/Arrays

TEP Considerations?

- Evaluate Current Conditions
- Determine Current Function/Value
- Evaluate Effect of Project on Condition/Function
- Discuss Project Modifications
- Develop Findings/Recommendation

53

53

Scenario 3 – Solar Panels/Arrays

TEP Findings:

- Sloped, Wet Meadow
- Cultivated/row crop & sparse Yellow Nutsedge
- Typical/Reasonable size/layout with posts not resulting in fill
- Wetland functions as recharge to downslope resource 1500 ft away and marginal wildlife use;
- Proposed design allows natural hydrology movement
- Vegetation enhancement/management was added
- Maintains primary wetland functions and cont. aquatic use.
- Not an impact based on layout/design/operation

54

54

Scenario 4 - De minimis

De minimis Changes**

Table 1: Maximum de minimis exemption amounts for per MS 103G.2241 (Aug. 1, 2024)

Impacts to wetlands, excluding permanent and semipermanently flooded areas of wetland	Presettlement area of state	Impact area up to (acres):	Impact area up to: (square feet):
Outside of Shoreland Wetland Protection Zone	Greater than 80 percent area	One-quarter (1/4)	10,890
	50 to 80 percent area	One-tenth (1/10)	4,356
	Less than 50 percent area	One-twentieth (1/20)	2,178
Within Shoreland Protection Zone, but beyond structure setback	Statewide	N/A	100
Within Shoreland Protection Zone and structure setback	Statewide	N/A	20 ▲(100)
Impacts to permanent and semipermanently flooded areas of wetlands	Statewide	N/A	400

▲ Increased amount shown in parenthesis my be allowed if wetland is isolated from the public water, or if permanent water runoff retention or infiltration measures are established in proximity to the impact and approved by the shoreland management authority.

55

Scenario 4- De minimis

De minimis Reminders

- Covers small impacts (driveways, roads, small projects, etc.)
- Once exceeded on a project, must replace all.
- Impacts do not require a decision **
- Cannot be combined on a project
- Very specific (i.e. location in state/pre-settlement area, shoreland/setback distance, hydro regime, etc.)
- *Does not apply* to calcareous fens, banks or replacement wetlands

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Scenario 4 – De minimis

TEP Considerations/Findings

Purpose- Helpful but may not affect outcome

Community/Hydro Regime - Seasonally Flooded/Shallow/Deep Marsh Area(s)with Impacts outside semi/perm flooded

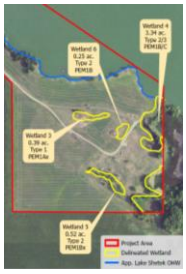
Location in State - SW County, <50% pre-settlement area

Proximity to Shoreland -900 ft to public water basin w/shoreland classification

Net Impacts
- 5250 sq ft of fill impacts to wetlands

57

Scenario 5 – Regulated Wetland under WCA?



58

Regulated Wetland?

BWSR Wetland Section | www.bwsr.state.mn.us/wetlands

59

Regulated Wetland?


1938


1981


2003

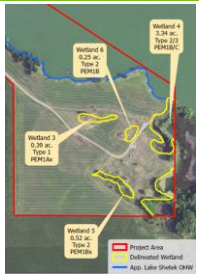
BWSR Wetland Section | www.bwsr.state.mn.us/wetlands

60

Regulated Wetland?

TEP Review and Findings…

- Wetland Indicators met; Approved delineation
- Proposed to ……
- Soil/NWI…..
- Aerial photo review….
- Wetlands 3 and 6 meets def. of Incidental; out of scope (8420.0105 Scope)
- Wetlands 4 & 5 need more information; or replacement



61

Exercise

TEP Charge

Review Submittal

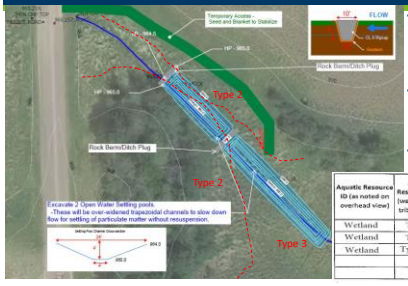
Request Additional Info?

Develop Findings

Make Recommendation

62

Exercise



- SWCD applying to implement Water Qality/TP reduction project for public waters basin 75' to west
- Excavate and Fill in FWM/SM along ditch prior to outlet into lake
- Rock berms approx 1 ft above adjacent grade

Aquatic Resource ID (as noted on overhead view)	Aquatic Resource Type (wetland, lake, tributary etc.)	Type of Impact (fill, excavate, drain, or remove vegetation)	Duration of Impact Permanent (P) or Temporary (T)?	Size of Impact[2]
Wetland	Type 2	Fill/Excavate	Permanent	2,000
Wetland	Type 3	Fill/Excavate	Permanent	5,000
Wetland	Type 2/3	Fill/Grading	Temporary	6,000

63

Exercise: Regulated? No Loss/Exe/Repl?

TEP Findings/Recommendation

- Fresh Wet Meadow/Shallow Marsh Wetland Impacts occurring (fill for rock berms and excavate for settling areas)
- Regulated activity
- Primary purpose is improvement to lake basin water quality by reducing TP input from incoming ag ditch
- SWCD acting as applicant (public agency)
- Ag Exemption, Item C

Recommend approval via Ag Exemp Subp. 2, C. & Require Certification statement submittal by SWCD (post TEP review)

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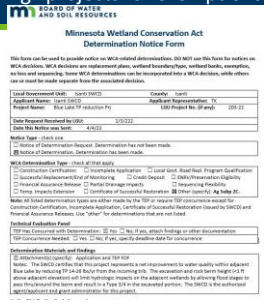
SWCD or TEP "certifying" projects for exemptions

- SWCD projects (Subp. 2C)
- Wildlife habitat (Subp.9)
- Options: determination form, email, letter,



BOARD OF WATER AND SOIL RESOURCES

Minnesota Wetland Conservation Act Determination Notice Form

This form can be used to provide notice on WCA-related determinations. DO NOT use this form for notices on WCA decisions. WCA decisions are replacement plans, wetland boundary/type, wetland banks, exemption, no-loss and sequencing. Some WCA determinations can be incorporated into a WCA decision, while others can or must be made separate from the associated decision.

Local Government Unit:	Isanti SWCD	County:	Isanti
Applicant Name:	Isanti SWCD	Applicant Representative:	TK
Project Name:	Blue Lake TP Induction Prj	LGU Project No. (if any):	039-22
Date Request Received by LGU:	2/3/2022		
Date this Notice was Sent:	4/4/22		

Notice Type - check one
☐ Notice of Determination Request. Determination has not been made.
☑ Notice of Determination. Determination has been made.

WCA Determination Type - check all that apply
☐ Construction Certification ☐ Incomplete Application ☐ Local Govt. Road Rout. Program Qualification
☐ Successful Replacement/End of Monitoring ☐ Credit Deposit ☐ DNR/Preservation Eligibility
☐ Financial Assurance Release ☐ Partial Drainage Impacts ☐ Sequencing Flexibility
☐ Temp. Impacts Extension ☐ Certificate of Successful Restoration ☑ Other (specify): Ag Subp 2C.

Note: All listed determination types are either made by the TEP or require TEP concurrence except for Construction Certification, Incomplete Application, Certificate of Successful Restoration (issued by SWCD) and Financial Assurance Release. Use "other" for determinations that are not listed.

Technical Evaluation Panel
TEP Has Concurred with Determination: ☑ Yes ☐ No. If yes, attach findings or other documentation
TEP Concurrence Needed: ☐ Yes ☐ No; If yes, specify deadline date for concurrence:

Determination Materials and Findings
☑ Attachment(s) (specify): Application and TEP PDF
Notes: The SWCD certifies that this project represents a net improvement to water quality within adjacent Blue Lake by reducing TP (44 lbs/yr from the incoming trib. The excavation and rock berm height (+1 ft above adjacent elevation) will limit hydrologic impacts on the adjacent wetlands by allowing flood stages to pass thru/around the berm and result in a Type 0/A in the excavated portion. The SWCD is the authorized agent/applicant and grant administrator for this project.

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Ag Exercise

- impacts to wetlands on agricultural land labeled prior converted cropland and impacts to wetlands resulting from drainage maintenance activities authorized by the United States Department of Agriculture, Natural Resources Conservation Service, on areas labeled farmed wetland, farmed-wetland pasture, and wetland. For purposes of this item, "authorized" means the landowner has provided written confirmation from the Natural Resources Conservation Service verifying that the specific activity is authorized under Code of Federal Regulations, title 7, part 12 as amended, or, in the absence of such written confirmation, the maintenance activity does not exceed the hydrologic conditions resulting from drainage manipulations that occurred prior to December 23, 1985 and that existed during the wet portion of the growing season during normal climatic conditions.
- This item is subject to the following conditions:
- (1) the prior-converted cropland, farmed wetland, farmed-wetland pasture, or wetland must be labeled on a valid final certified wetland determination issued by the Natural Resources Conservation Service in accordance with Code of Federal Regulations, title 7, part 12;
- 2) for areas labeled prior converted cropland to be eligible for the exemption under item A, the area must have been planted with an annually seeded crop at least once before December 23, 1985 and must not have supported woody vegetation as of December 23, 1985

*** Not complete language and language subject to change during Rulemaking

TEP Goals

Review Submittal

Develop Findings

Make Recommendation

66

Ag Exercise

- Findings:
  - What areas qualify for the Ag Exemption?
  - Annually seeded crop?
  - Woody vegetation?
- Recommendation:
  - Approve as submitted?
  - Approve with Conditions?
  - Need more information?
  - Deny?

67

Ag Exercise #2

TEP Goals

Review Submittal

Discuss Findings

Other Information Needed

Recommendations?

68

2024 WCA Statute Changes
The New Agricultural Exemption

Replacement plan is not required for:

"PC"

- impacts to wetlands on agricultural land labeled prior converted (PC) cropland and

"Maintenance"

- impacts to wetlands resulting from drainage maintenance activities authorized by the Natural Resources Conservation Service, on areas labeled farmed wetland, farmed-wetland pasture, and wetland.

Applicable to both

The prior converted cropland, farmed wetland, farmed-wetland pasture, or wetland must be labeled on a valid final certified wetland determination issued by the Natural Resources Conservation Service.

Landowner is responsible to provide a copy of the final certified wetland determination (026 and CWD map) to, and allow the Natural Resources Conservation Service to share related information with, the local government unit and the board for purposes of verification;

69

Ag Exercise #2

Project Assumptions

- Open Ditch running thru FWP #3 currently drains into property to south.
- Final plan establishes new outlet.
- NRCS verbally indicated to LGU Final plan would not likely raise any red flags for USDA.

70

Ag Exercise #2

Valid Final CWD?
- Enough data?

Tile in existing Ditch?
- Same depth throughout most
- Fill over top

New Outlet?
- Prior outlet into main basin
- New outlet would bypass 30-40% of watershed…..

Ag Exemption Met? Critical Piece?

71

Ag Exercise #2

TEP Findings
- Valid final CWD was provided wetlands
- FWP and PC/NW labeled areas affected
- Currently ditch has restricted outlet to S
- New outlet would result in indirect drainage impacts (diversion) to wetland outside the CWD area (south)
- Diversion of watershed will result in loss of quantity/quality.
- No CWD or label known on south wetland.

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Replacement Plan Applications

BOARD OF WATER AND SOIL RESOURCES

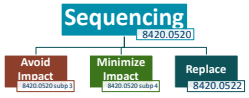
Minnesota Wetland Professional Certification Program

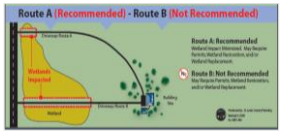
73

Replacement Plans

8420.0330 REPLACEMENT PLAN APPLICATIONS.

Subpart 1. **Requirement.** A landowner proposing a wetland impact that requires replacement under this chapter must apply to the local government unit and receive approval of a replacement plan before impacting the wetland.





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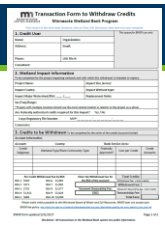

Replacement Plans

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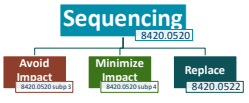

75

Preapplication Meeting

- Prior to preparation of an application;
- Meet with the LGU/TEP, provide basic information of the project
- LGU/TEP inform the applicant of sequencing requirements and criteria to evaluate the replacement plan


PART ONE: Applicant Information

PART TWO: Site Location Information

PART THREE: General Project/Site Information

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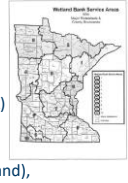
Application Contents

- Information necessary to be considered a complete application (a lot of this info can be pulled from the delineation report)
- For the impacted Wetland:

1. The amount of wetland impact (in sq ft or acres) by type
2. Minor/Major watershed, County, and Bank Service Area (BSA)
3. Soil survey of site, identify hydric soils
4. Hydrologic inlets and outlets, adjacent Public Waters (shoreland), floodplain



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77

Application Contents Continued…

5. Information pertaining to special considerations (8420.0515) (T & E, rare communities, cultural resources, etc.)
6. List of known local, state, and federal permits required for the activity
7. Identify project purpose and need and alternatives considered

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Application Contents Continued…

- C. for the replacement wetland when the replacement consists of wetland bank credits:
- (1) the wetland bank account number;
- (2) the minor watershed, major watershed, county, and bank service area; (3) the amount of credits to be withdrawn in square feet; and
- (4) a completed application for withdrawal of wetland credits from the wetland bank in a form provided by the board or a purchase agreement signed by the applicant and bank account holder; and
- D. a description of the required replacement as determined according to the proposed replacement actions and the replacement standards in part 8420.0522.

79

79

Special Considerations (8420.0515)

These factors must be considered by the applicant before submitting a replacement and by the LGU during the review

1. Endangered and threatened species (DNR natural heritage/nongame)
2. Rare natural communities (DNR natural heritage)
3. Special fish and wildlife resources (fish spawning, water birds, waterfowl, deer wintering/wildlife corridor)
4. Archaeological, historic, or cultural resource sites (National Register of Historic Places, State Historical Preservation Office)
5. Groundwater sensitivity (Decorah edge, Geologic Sensitivity)

80

Special Considerations Continued…

6. Sensitive surface waters (trout stream)
7. Education or research use (Cedar Creek, Anoka Co)
8. Waste disposal site (former dump, superfund, TCAAP/AHATS)
9. Consistency with other plans (watershed management, land use, planning and zoning)

81

Sequencing: 8420.0520

- LGU **MUST NOT** approve a wetland replacement plan unless the LGU finds the project complies with sequencing.

82

Key Concepts

- Sequencing is a MUST for all replacement plans
- TWO avoidance alternatives
- Evaluate projects…can wetlands be avoided?
- Are impacts minimized?
- Long term effects
- 8420.0520 Subp C – Page 45 of 2009 Rule book

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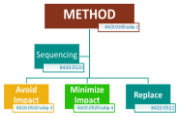
Sequencing

- **Avoid**
- **Minimize**
- **Replace**



84

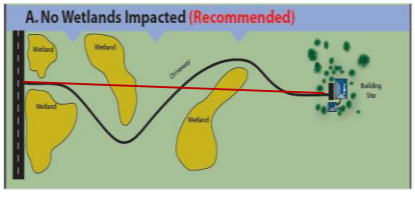
How does applicant *demonstrate* sequencing?

- Clearly define the **purpose** of the project.
- Identify the physical, economic, and/or demographic **requirements** of the project.
- **Justify** why this project should or must go on this site.
- Show (concept plans, discarded grading plans, etc.) and describe other *reasonable* **alternatives** that were considered or could be considered.

85

Impact Avoidance

- If LGU finds that a Feasible and Prudent Alternative exists that avoids impacts, the application must be denied.



86

Alternatives Analysis

What is *feasible* and *prudent*?

WCA rule tells us (8420.0520 subp 3C(2)):

- Can be done from an engineering perspective
- Is in accordance with accepted engineering standards and practices
- Is consistent with public health, safety, and welfare requirements
- Is environmentally preferable based on social, economic, and environmental impacts
- Would not create any truly unusual problems

87

Evaluating Alternatives (continued)

- LGU must consider (8420.0520 subp 3C(3)):
  - Could the size, configuration, or density of the project be modified to avoid wetlands?
  - Has the applicant made efforts to remove constraints (zoning restrictions, ordinance requirements, etc.) that are causing wetland impacts (i.e. request for variances, PUD, conditional use permit, etc.)?

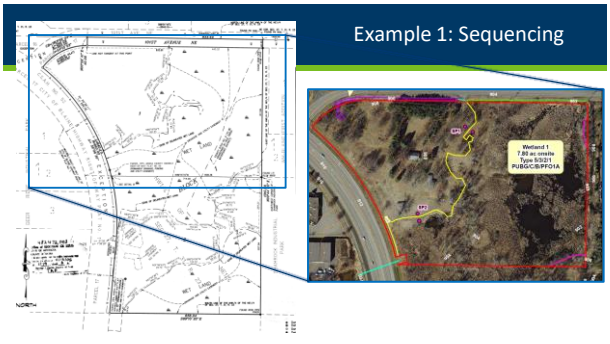
88

What if an avoidance alternative DOES exist?

- If the LGU determines that a feasible and prudent alternative exist that avoids wetland impacts, it MUST DENY the replacement plan.

89

Example 1: Sequencing



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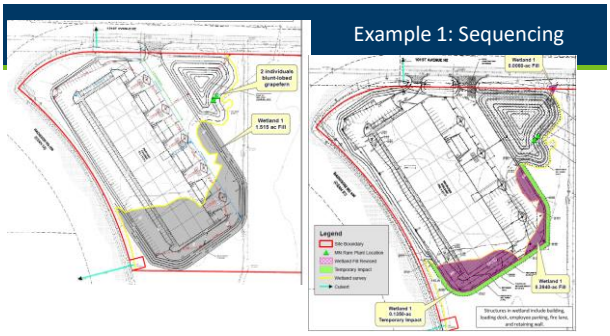
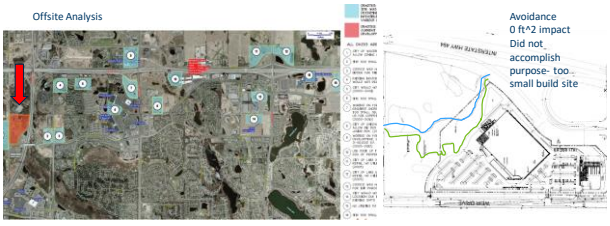
Example 1: Sequencing



91

Example 2: Sequencing



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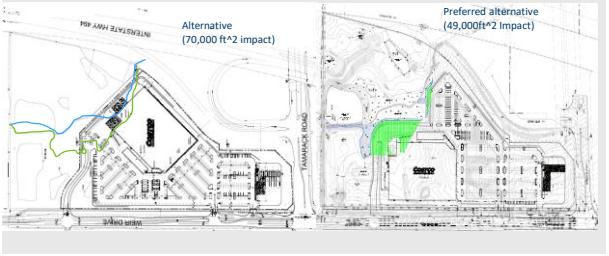
Example 2: Minimization



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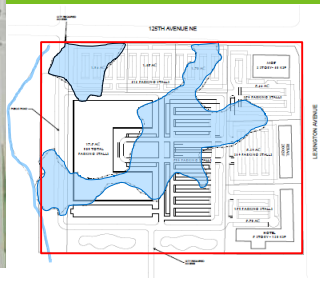
Sequencing exercise



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Considerations

- What issues?
  - Special Considerations (MN Rule 8420.0515), RNC, T&E, Consistency with other plans: coordination with DNR?
  - Sequencing MN Rule 8420.05250
    - Subp. 3 Impact Avoidance: Can the applicant show avoidance?
      - C. Alternative Analysis, LGU must consider the following… Other site to accomplish Purpose and Need?
    - Subp. 4, Impact Minimization: Has the applicant attempted to modify size, scope, configuration?
    - Subp. 5, Temp impacts: Are there any? Entire wetlands on site impacted.
    - Subp. 6, Reduction or elimination of impacts over time: Are there any? Entire wetlands on site impacted.

95

Alternatives Analysis Continued…

Future considerations when reviewing a site and potential off-site impacts

96

Alternatives Analysis Continued…

- Direct and secondary impacts:

A wetland may not be directly impacted (filled/drained/excavated) but can be impacted through loss of hydrology (storm pond, curb/gutter, pipes, etc.)

Figure 4 - Proposed Plan and Wetland/Tributary Impacts

97

What if an avoidance alternative does NOT exist?

- LGU evaluates:
  - Minimization
  - Rectification
  - Reduction/Elimination of impacts over time
  - Replacement

98

Impact Rectification

- Temporary impacts must be rectified by repairing, rehabilitating, or restoring the affected wetland to pre-project conditions

99

Reduction or Elimination of Impacts Over Time

- Once complete, further impacts must be reduced or eliminated and preserve or maintain wetland functions
- Best Management Practices (BMP)
- Silt fence
- Storm-ponds
- Buffers
- Drainage areas

100

Sequencing Flexibility

- Allowed at the discretion of the LGU if:
  1. Impacted wetland degraded;
  2. Avoidance results in severe degradation;
  3. Upland site of the project or replacement has greater function and value;
  4. Human health and safety is a factor.

101

Sequencing – Replacement

Final Review Step

LGU must evaluate if unavoidable impacts will be adequately replaced AND if correctly sited.

Adequate Replacement

- Must replace the functions and values at an equal or greater level than that which was lost.
- Uses wetland area as the unit of measurement (acreage or sq. ft.)

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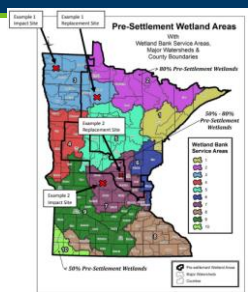
Replacement Siting

- Must follow a priority order:
  - Minor watershed
  - Major watershed
  - Same BSA
  - Another BSA



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Replacement Ratios

Minimum Replacement Ratios: Banking		
Location of impact	Replacement	Minimum replacement ratio
>80% area or agricultural land	Outside bank service area	1.5:1
	Within bank service area	1.1
<50% area, 50-80% area, and nonagricultural land	Outside bank service area	2.5:1
	Within bank service area	2:1

Must follow a priority order:
Minor Watershed
Major Watershed
Same BSA
Another BSA

104

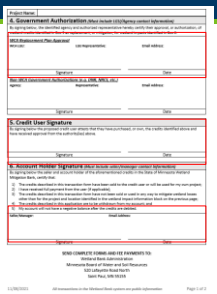
Result?

A formal NOD document that summarizes the decision, is supported by technical findings and is valid for 5 years.

105

Application to withdraw wetland credits


Credit Withdrawal Form
Minnesota Wetland Bank Program



- Be sure to complete all sections!
- Form auto calculates fees
- Signatures

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Wetland Banking Overview

BOARD OF WATER AND SOIL RESOURCES

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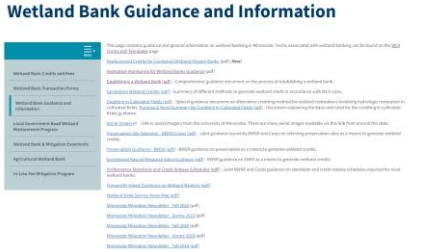
Guidance

- Wetland Bank Guidance and Information


Wetland Bank Guidance and Information

108

What are Wetland Banks?

- Market-based commodity system using “Credits”
- Credits are generated by wetland restoration, enhancement, creation, or preservation
- Deposited into account
- Sold to others to offset wetland losses

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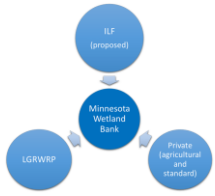
Bank types

- Private
  - Standard- Landowners establish bank on private land to mitigate impacts on non-ag or transportation projects
  - Agriculture- Credits can only be used for Ag projects
- In-lieu Fee (proposed)
  - Mitigation NOT completed in advance
  - Open to only government and NGOs, mitigation completed in advance, requires compensation planning framework
- Local Government Road Wetland Replacement Program (LGRWRP)
  - Replaces impacts resulting from local transportation projects



110

Why are Banks Preferred

Wetland banks are the preferred replacement type

- Larger more ecologically valuable sites
- Approved using rigorous scientific and technical analysis, planning, and implementation
- Entire site permanently protected by BWSR conservation easement
- Success demonstrated BEFORE credits are released
- Reduced risk and uncertainty

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Why are Banks Preferred

Bank sponsor's plan is approved
⇩
Project is built and protected
⇩
Demonstrate success
⇩
Credits released/deposited
⇩
Credits sold to offset impacts

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BOARD OF WATER AND SOIL RESOURCES

How Credits are Generated

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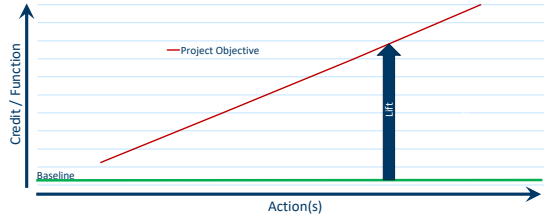
How are Credits Generated



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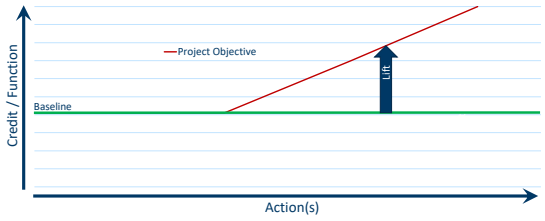
How are Credits Generated



115

How are Credits Generated

WCA Credit Actions	Corps Credit Actions
Subp. 2 – Buffer	Buffer
Subp. 3 – Restoration, completely drained	Re-Establishment
Subp. 4 – Restoration, partially drained	Rehabilitation
Subp. 5 – Vegetation on farmed wetland	Enhancement
Subp. 6 – Protection, previously restored	Extended Restoration
Subp. 7 – Creation	Establishment
Subp. 8 – ENRV	Any or None
Subp. 9 – Preservation	Preservation

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What about the new Cultivated Field Credit (CFC)?

WCA Credit Actions	Corps Credit Actions
Subp. 2 – Buffer	Buffer
Subp. 3 – Restoration, completely drained	Re-Establishment
Subp. 4 – Restoration, partially drained	Rehabilitation
Subp. 5 – Vegetation on farmed wetland	Enhancement
Subp. 6 – Protection, previously restored	Extended Restoration
Subp. 7 – Creation	Establishment
Subp. 8 – ENRV	Any or None
Subp. 9 – Preservation	Preservation

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Establishing a Wetland Bank

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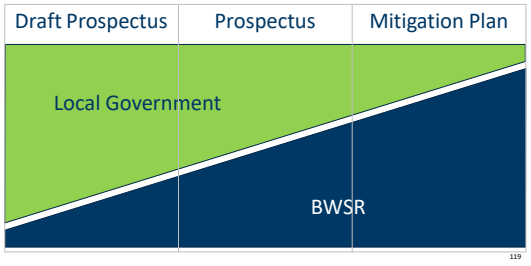
Establishing a Wetland Bank



119

Draft Prospectus

- Optional
- No decisions required
- Complex or difficult projects
- Minimal investment

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Draft Prospectus

BWSR Role:

- Staff review and comments
- Identify easement issues
- Identify opportunities and constraints
- Evaluate general feasibility

TEP/LGU Role:

- **Provide and compile comments**
- **Site visit**
- **TEP meeting to discuss and review comments**
- **Provide local input**
- **TEP writes Findings and recommendation for bank sponsor**

*Comments commensurate with information provided**

121

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Could this site be a wetland bank?

123

Prospectus


Wetland Mitigation Proposal
Prospectus

- Not required by WCA*
- Required by Corps
- Baseline Information
- Concept Plans
  - Justify Credit Actions
  - Justify Credit Allocation

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Prospectus

General Considerations

- Use the form, read the headings, and provide the requested information
- Focus on Baseline Information to justify credit actions and allocations (objectives)
- Some credit actions require more or specific information
- Concept considered but detailed plans not required

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Prospectus

BWSR Role:

- Evaluate easement issues
- Staff comments now include engineering
- Statewide consistency
- Technical answers and interpretations
- Coordination with Corps

TEP/LGU Roles:

- **Verify previous comments addressed**
- **Verify sponsor adequately described the site**
- **Review wetland delineation or determination**
- **Review ag history (if necessary)**
- **Provide local perspective**

*Comments commensurate with information provided**

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Mitigation Plan


Wetland Mitigation Proposal
Mitigation Plan (Full Application) BWSR

- Required (WCA Notices)
- LGU Decision Required*
- Section 15.99 time-limits!
- Detailed vegetation, construction and monitoring plans
- Final Crediting and performance standards

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Mitigation Plan

General Considerations

- Button-up baseline information
- Accurate credit calculations
- Credit release schedule
- Performance standards
- Detailed vegetation establishment and management plans
- Detailed construction plans
- Detailed monitoring plans

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Mitigation Plan

BWSR Role

- Evaluate easement Issues
- Verify all components are acceptable and meet WCA requirements
- Engineering review of final plans

TEP/LGU Roles

- **Follow WCA notification and decision procedures**
- **Track 15.99 time-limit and extend as needed (it will be needed)**
- **Coordinate TEP meeting and site visit**
- **Compile and evaluate all comments**
- **TEP findings and recommendation**

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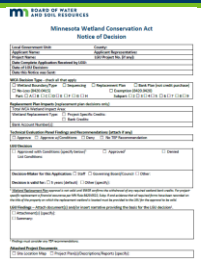
Mitigation Plan Decision

- Track 15.99 time limits, extensions needed
- Most Mitigation Plans will require some revision
- Make final decision in accordance with section 15.99
- Clearly identify and retain approved Mitigation Plan
- When possible the WCA and Corps approved plans should be the same


BOARD OF WATER AND SOIL RESOURCES

Minnesota Wetland Conservation Act
Notice of Decision

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BOARD OF WATER AND SOIL RESOURCES

Certification and Credit Releases

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Easement Acquisition

BWSR Easement staff will lead this process

Typically initiated after Mitigation Plan approval

Often takes 6 months or more

No easement = no bank = no credits

No credits can be deposited until a perpetual conservation easement is granted to and accepted by the state

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Construction Certification

Construction as-built documentation provided to LGU:

- Surveyed elevations of slopes, contours, outlets, and embankments
- Seed tags and contractor receipts
- Site preparation activities described
- Surveyed construction and seeding maps
- Construction photos showing relevant work
- Evidence engineered features were designed, overseen, and certified by licensed PE
- Comparison of as-built vs. design specifications and rationale for significant changes

133

Construction Certification

Once as-built documentation is received the LGU must:

- Complete an on-site inspection
- Determine whether as-built conditions comply with construction specifications in the approved plan
- Ensure an engineer has certified the construction
- If not in compliance, notify the bank sponsor what is needed to gain compliance
- If in compliance, the initial credit release can be authorized

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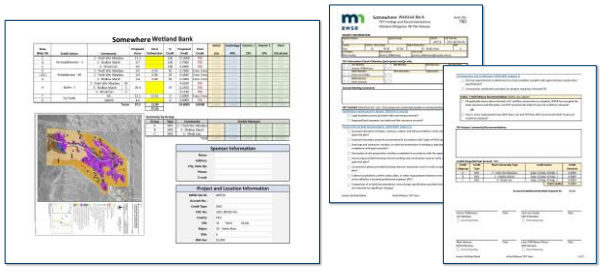
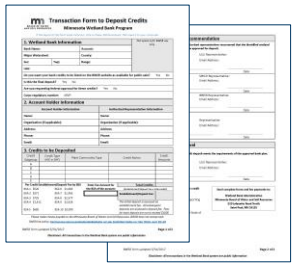
Deposits



135

Deposits

- Up to 15% of credits can be deposited after construction certification and easement is accepted
- Remaining credits released based on schedule and performance standards in the approved Mitigation Plan
- Releases reviewed by the TEP and LGU
- Deposit form and fee is sent to BWSR banking administrator for entry into the state wetland bank
- Subject to MS 15.99!!!


Transaction Form to Deposit Credits
Minnesota Wetland Bank Program

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Credit Release Schedule

Determines "when" credits can be released and in what proportion

Typical release schedule*

- Initial (≤15%)
- Hydrology (0 - 45%)
- Interim 1 (variable)
- Interim 2 (variable)
- Final (≥ 20%)
- Performance standards and credit release guidance

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Performance Standards

Performance standards determine "if" credits can be released

- Observable or measurable physical, chemical, and/or biological attributes confirming project objectives are met
- Demonstrate improvement beyond baseline condition
- Show progression to the Final release
- All credit areas and actions need to achieve their standard(s) for credits to be released

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Performance Standards

Common hydrology metrics

- Meet standard for 2 full growing seasons
- Reference site (± 20%) - critical for drought conditions
- Water table/inundation timing and duration measurements
- Expect wells with daily readings

A. Success Criteria Summary

Summary of Success Criteria Standards and Current Metrics for 2017.

Metric	Success Criteria	Measured Criteria	Success Criteria Met?	Comments
Hydrology – Standards used for 2011 - 2016				
Elevation	Water between 6 inches above and one foot below ground surface	Measured hydrology is between 6 inches above and one foot below ground surface	Yes	*Formal hydrology monitoring not required for 2017. Success based on direct site observations*
Duration	Majority of the growing season	Hydrology was within the desired range for the majority of the growing season.	Yes	
Vegetation				
Diversity	Minimum of five native species	79 native species have been observed	Yes	Species diversity increased from 2016 to 2017
Composition	minimum two sedges and two grasses	Eight sedges and eight grasses have been identified	Yes	Species composition stable
Invasive species coverage	No more than 10% total cover	Total cover of invasive species is less than 10%, and has been effectively controlled.	Yes	Reed canary grass is less than 5% coverage.
Invasive species concentration	No single areas greater than one-quarter acre in size	Invasive species remain under control with no single area greater than one-quarter acre in size	Yes	Slight increase of along ditches, but sprayed again in fall 2017 to control

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Performance Standards

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Common vegetation metrics

- Interim 1 met for 2 consecutive seasons
- Interim 1 NNI relative cover ≥ 50%
- Final NNI relative cover ≥ 70% - 90%
- Species richness of 5, 10, and 15 NNI species for most communities
- > 50% hydrophytes for wetland communities
- Maximum bare ground/open water area

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Monitoring Reports

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Monitoring Reports

WCA reference: 8420.0810, subpart 4

- WCA requires monitoring reports annually – December 31 deadline to LGU
- First report due the first full growing season after construction certification
- Monitoring period is typically 5 growing seasons (minimum of 3)

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TEP Roles

WCA reference: 8420.0800, subpart 3

The LGU (TEP) "must inspect and certify" as-built documentation

WCA reference: 8420.0820, subpart 1, Item A

The LGU (TEP) "must evaluate all monitoring reports received …" to determine if the goals of the approved plan are being met

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Monitoring Schedule

- Monitoring must begin no later than first full growing season after construction certification
- Typically continue for 5 full growing seasons
- If unsuccessful, the LGU may extend the monitoring period (<5 additional years)
- Actual monitoring schedule may vary for different bank types (restoration vs preservation)

Credit Release Schedule

Area	WCA Credit Actions and Corps Type of Compensation	Acres	Type of Wetland Credit	Credit Ratio	Final Projected Credits	Initial Release (15%)	Hydrology Performance Standards (release of additional 20% of total projected credits)	Interim 1 Vegetation Performance Standards (release of additional 20% of total projected credits)	Interim 2 Vegetation Performance Standards (release of additional 20% of total projected credits)	Final Vegetation Performance Standards & Approval of Final Wetland Delineation Report (25% final release)
1	Rehabilitation - CFC	16.0	2 - Fresh Wet Meadow	100%	16.0000	2.4000	3.2000	3.2000	3.2000	4.0000
2	Reduced Wetland Credit - CFC	0.9	2 - Fresh Wet Meadow	50%	0.4500	0.0675	0.0900	0.0900	0.0900	0.1125
3	Rehabilitation - CFC	14.9	3 - Shallow Marsh	100%	14.9000	2.2350	2.9800	2.9800	2.9800	3.7250
4	Reduced Wetland Credit - CFC	0.5	3 - Shallow Marsh	50%	0.2500	0.0375	0.0500	0.0500	0.0500	0.0625
5	Rehabilitation - CFC	15.7	4 - Deep Marsh	100%	15.7000	2.3550	3.1400	3.1400	3.1400	3.9250
6	Buffer - 2	48.0	2 - Fresh Wet Meadow	25%	4.2000	0.6300	0.8400	0.8400	0.8400	1.0500
			3 - Shallow Marsh	25%	3.8400	0.5760	0.7680	0.7680	0.7680	0.9600
			4 - Deep Marsh	25%	3.9600	0.5940	0.7920	0.7920	0.7920	0.9900
NA	Non Credit (Excess Upland Buffer)	20.8	NA	0%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NA	Non Credit (Fill)	0.10	NA	0%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NA	Non Credit Existing Wetland	0.70	NA	0%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total Easement Acres		117.6	-	-	59.3000	8.8950	11.8600	11.8600	11.8600	14.8250

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Bank Plan – Monitoring

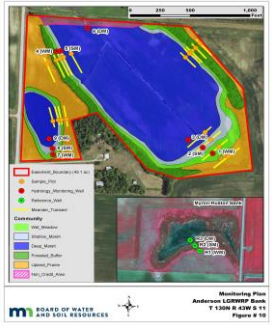
Monitoring (Duration typically 5-years):

Vegetation Monitoring Techniques/Plan

a) Timed Meander
b) Step-Point
c) Sample-Plot
d) FQA

Hydrology Monitoring Techniques/Plan

a) Monitoring Wells / Stilling wells / staff gauge
b) Reference Site



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Monitoring Report


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2 SITE DESCRIPTION 1
3 SITE ACTIVITIES AND MAINTENANCE 1
4 MONITORING METHODS 1
4.1 HYDROLOGY 1
4.2 VEGETATION MONITORING 2
5 RESULTS 2024 2
5.1 SITE CONDITIONS 2
5.2 HYDROLOGY RESULTS AND COMPARISON TO PERFORMANCE STANDARDS 3
5.3 VEGETATION RESULTS AND COMPARISON TO PERFORMANCE STANDARDS 4
6 EVALUATION OF SITE SUCCESS 7
6.1 CONSTRUCTION AND SEEDING 7
6.2 HYDROLOGY 7
6.3 VEGETATION 7
7 ADAPTIVE MANAGEMENT FOR 2025 8
8 REFERENCES 9

EXHIBITS

Exhibit 1 Location Map
Exhibit 2 Hydrology Monitoring Map
Exhibit 3 Vegetation Monitoring Map

APPENDICES

Appendix A Site Photographs
Appendix B Hydrology Monitoring Data
Appendix C Vegetation Monitoring Data
Appendix D Seeding Information
Appendix E Excerpt from Vegetation Establishment and Management Plan

Report Contents:

- **Project location map**
- **Description of performance standards**
- **Activities completed and planned**
- **Hydrology measurements & graphs**
- **Veg assessments & communities map**
- **Comparison of results to performance standards**
- **Color photographs (same points year to year)**
- **Other information specified from approved plan**

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US Army Corps Monitoring Report Template


US Army Corps of Engineers
St. Paul District

Mitigation Monitoring Report Template
USACE St. Paul District
April 2024 Version 1

Sponsors for compensatory mitigation banks and in-lieu fee sites are required to demonstrate in their monitoring reports whether sites are meeting performance standards or on a trajectory to meeting performance standards. Sponsors must collect accurate and complete data and report that data in their monitoring reports to support their assessment of site conditions relative to the required performance standards.

While sponsors do not have to follow this outline precisely, or present data as tables exactly as illustrated here, the U.S. Army Corps of Engineers St Paul District (Corps) has developed these suggestions in coordination with agencies on the Interagency Review Team (IRT) to aid sponsors in preparing and submitting complete monitoring reports. IRT members will be able to efficiently review reports that are prepared by sponsors who implement these suggestions. Efficient agency review of monitoring reports will result in more timely decisions on credit release requests, to include decisions to release credits when warranted or decisions to not release credits and instead provide direction on measures that sponsors should take before submitting another request for a credit release. The Corps will update this template as needed in coordination with IRT members and based on any feedback we receive from sponsors.

The Corps Project Manager (PM) will conduct site inspections, typically during the growing season, to field verify the monitoring and performance documentation before making a decision on credit releases. If sponsors expect to request a credit release following monitoring during the growing season, they should consider submitting as much data as possible before the growing season ends and they should request the Corps complete a site inspection before end of the growing season. then, they must submit complete monitoring reports by the due date (usually December 31st or January 31st).

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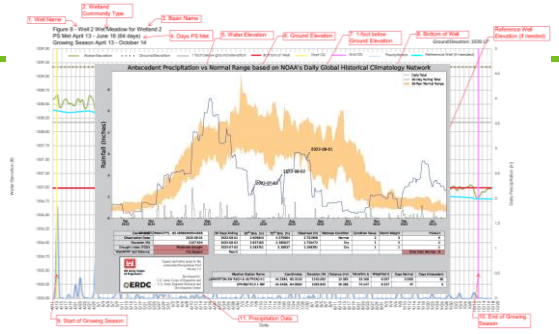

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Reviewing Monitoring Reports

A. Success Criteria Summary

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- **Know performance standards (from MP)**
- **Interpret data to determine whether the site meets those standards**
- **If not, document with data what is not meeting standard**
- **Consult with TEP & Corps**
- **Recommend corrective actions**

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Common Issues in Monitoring Reports

- Insufficient figures/graphs
- Data logger problems
- Performance standards not matching bank plan
- Incorrect monitoring techniques
- Data interpretation concerns

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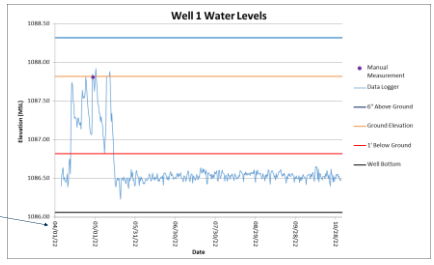
Hydrograph Issues



How do we verify that 28 consecutive days are met?

When does the growing season start?

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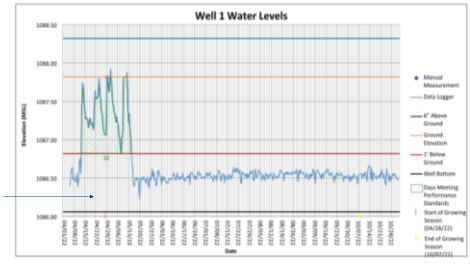
Hydrograph Issues



Lines depicting daily intervals

Now includes Start/End of the growing season

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Summary

- **Understand your role in reviewing bank applications and monitoring reports**
- **Understand performance standards**
- **Understand how to review a monitoring report**
- **Once the monitoring report is reviewed and is accurate, process deposit form**
- **Be cognizant of MS 15.99 timelines for the Mitigation Plan and credit deposit forms**

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Questions?

BOARD OF WATER AND SOIL RESOURCES

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Local Government Road Wetland Replacement Program

- BWSR is required to replace the associated wetland impacts so the local governments don't have to
- WCA does not require replacement plans for impacts resulting from qualifying local road projects
- These wetland credits also satisfy Corps of Engineers' Section 404 permit requirements

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What projects Qualify?

- **Repair, rehabilitation, reconstruction** or **replacement** of ***currently serviceable*** existing State, City, County or Town public road.
  - Provided that:
    - Project **minimizes impacts**
    - **Plans are provided** to the LGU
- What doesn't qualify?
  - New roads
  - Roads expanded solely for additional capacity lanes

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Local Road Program - Eligibility

- Cannot involve new roads or roads expansion for additional traffic capacity lanes in **anticipation** of future demand
- The project must involve repair, rehabilitation, reconstruction or replacement of a **currently serviceable road** to meet state/federal design safety standards/requirements
- Project must **minimize** wetland impacts

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What is a serviceable road?

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Roles/Responsibilities

Road Authority (RA)
- Develops project plans
- Provides application to LGU and USACE concurrently for review within required timelines
- Submits all documentation to BWSR

LGU Administrator/TEP
- Reviews delineation and plans for accuracy and eligibility
- Signs Attachment E if concurs with RA Information

Corps
- Separate review process
- Coordinates credit reservations w/ BWSR

DNR
- Reviews materials and signs Attachment E if within the shoreland zone of a Public Water

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Application Requirements

Local Road Authority must provide the TEP the following:

- Project plans depicting wetland boundaries
- Description of wetland impacts by type
- Information demonstrating wetland impact minimization

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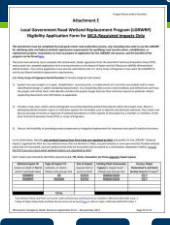
Reviewing Local Road Projects



Annual meeting with Local Road Authority → Review & approve delineation → Receive joint application with completed Attachment E → TEP determines whether impacts are eligible for program → TEP signs Attachment E → LGU returns signed Attachment E to Road Authority → Road Authority sends signed Attachment E with project plans to BWSR Central → BWSR & Corps determine mitigation requirements per Federal Mitigation Rule

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Common Errors

Project Name and/or Number:

PART FOUR: Aquatic Resource Impact[1] Summary

If your proposed project involves a direct or indirect impact to an aquatic resource (wetland, lake, tributary, etc.) identify each impact in the table below. Include all anticipated impacts, including those expected to be temporary. Attach an overhead view map, aerial photo, and/or drawing showing all of the aquatic resources in the project area and the location(s) of the proposed impacts. Label each aquatic resource on the map with a reference number or letter and identify the impacts in the following table.

Aquatic Resource ID (as noted on overhead view)	Aquatic Resource Type (wetland, lake, tributary etc.)	Type of Impact (fill, excavate, drain, or remove vegetation)	Duration of Impact Permanent (P) or Temporary (T)[2]	Size of Impact[3]	Overall Size of Aquatic Resource [3]	Existing Plant Community Type(s) in Impact Area[4]	County, Major Watershed #, and Bank Service Area # of Impact Area[5]
W-1	Wetland	Fill	P	0.37	N/A	Type 3	County, 3
W-2	Wetland	Cut	T	0.02	N/A	Type 2	County, 3
W-3/Spring Creek	Wetland/Trib	Fill	P	0.003	N/A	Type 1	County, 3
W-4	Wetland	Cut/Fill	P	0.26	N/A	Type 2	County, 3

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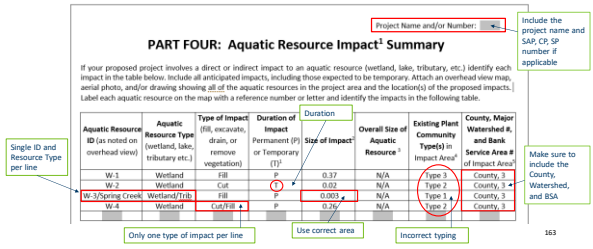
Errors



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Qualifying Project

CSAH 18 is currently listed as a 2-lane rural A Minor Arterial Expander Highway, with an east-west orientation. CSAH 18 has a posted speed limit of 55 mph and an Average Daily Traffic (ADT) count of approximately 5,300 (2017). Currently CSAH 18 has a poor pavement condition and a lack of sufficient shoulders and turn lanes. This has contributed to crashes along the corridor. Specifically, the Anoka County Roadway Safety Plan (July 2013) revealed that over a five-year period there were seventeen crashes, of which five were determined to be lane departure crashes, often associates with inadequate roadway shoulders. Based on this analysis Anoka County has determined a need to create a safer roadway.

CSAH 18 Crash Data 2013-2015

	ADT	Crash Rate*	Severity rate*	Difference
MnDOT state wide Average for Rural 2-lane roadway with 5,000 to 8,000 ADT	5,000 – 8,000	0.35	0.55	63% higher
Crash Rates for CSAH 18 between CR 19 and CR 62 (2013 – 2015)	5,300	0.57	0.86	56% higher

* Per million entering vehicle miles

164

164

Qualifying Project

Currently, the roadway structure has deteriorated, the width is narrower than Standards, slopes within clear zones are steeper than Standards, and the current bridge does not allow for crash-tested guardrail and guardrail end treatments. The purpose of the project is to reconstruct this segment of County Hwy 4 to meet State Aid Standards (Minn. Rule 8820.9920) in order to meet the transportation needs of the public. Attached is a set of plans for the area of impact.

Excessive traffic queueing on TH 19 (driven by large trucks utilizing the Flying J Travel Plaza) is congesting the in place CSAH 46/TH 19 intersection, causing significant safety concerns. The intersection will be realigned and the roadway will be designed to be in compliance with Chapter 8820 of State Aid Operations (extracted from MN Rules 2013, including amendments adopted through October 30, 2017), specifically 8820.9920 Minimum Design Standards: Rural and Suburban Undivided; New or Reconstruction Projects and 8820.9926 Minimum Design Standards: Rural and Suburban Undivided; Reconditioning Projects. In addition, the current edition of the MN Department of Transportation's "Standard Specifications for Construction", including all supplemental specifications, will apply to the project. Finally, MnDOT has provided design guidance and requirements for work associated directly to MN TH 19 improvements.

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165

Qualifying Project

MnDOT's Road Design Manual (2000) also recommends turn and/or bypass lanes for rural undivided roadways with traffic volumes over 1,500 ADT and speed limits above 45 mph. Current road condition compared with required and proposed are laid out in the table below.

	Existing	Required	Proposed
Lane Width (ft)	12	11-12	12
Shoulder Width (ft)	0-6	8	8
In-Slope	1:4	1:4	1:4

This project is proposed to improve CSAH 18 to meet today's State Aid Standards and improve safety along the corridor.

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166

Class exercise - determine eligibility

The project proposed is a Shoulder Widening and Aggregate Shouldering project, 7.56 miles in length from CSAH 13 to 0.18 miles west of TH 9.

The purpose of the project is to improve roadway safety.

The project's need is to meet current design standards by improving deficiencies in roadway width, inslopes, culverts and drainage.

Construction will consist of earthwork for shoulder widening requiring cutting, filling, and widening shoulders. The existing shoulders will be excavated and replaced with granular borrow and class 5 material. Existing culverts will be replaced with new culverts. Inslopes and blackslopes will be flattened and ditch bottoms graded for adequate drainage.

The purpose of this project is to improve safety and will affect 23 wetlands adjacent to the project. The proposed alignment follows the existing alignment, this will minimize large impacts to wetlands. The plan views and cross section sheets that impact these areas are included in the appendix for this permit.

Approximately 1.19 acres of tree removal will take place during the winter season and be completed by 3-31-24.

The schedule for implementation of this project is beginning in spring of 2024 and completion in the fall of 2024.

167

Class exercise - determine eligibility

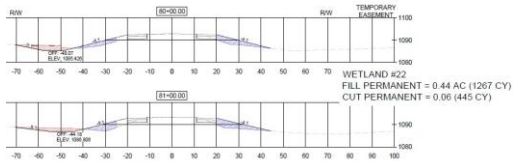
Becker County is proposing to reconstruct County Highway 34 from County Highway 21 to 300th Street (4.36 miles). Currently there are 12 foot bituminous lanes and 3 foot shoulders on each side of the roadway. We are proposing to widen the roadway to accommodate 12 foot bituminous lanes with 6 foot shoulders and flatten the in-slopes to a 4:1 slope along the entire project to correct the safety hazards associated with the narrow shoulders and steep in-slopes. All centerline culverts will be replaced and or extended and lined based on hydraulic studies. All approach culverts will be replaced with same type and size. This work is scheduled for Summer/Fall of 2023.

This segment of County Highway 34 has an ADT of 1004 vehicles a day with large numbers of truck traffic due to agricultural and logging use in this area of the County. This entire segment is insufficient in shoulder width, inslope ratio, clear zone and the culverts are over 60 years old and in need of replacement.

There is estimated to be 1.90 acres of tree clearing required with this project to ensure that the right of way and clear zone is free of hazards and to accommodate the required widening to allow for safety improvements. The trees to be cleared are a mix of deciduous and evergreen trees. Plan sheets showing areas of tree clearing are attached with areas highlighted for your review.

168

Class exercise – interpreting construction plans



169

Class exercise - interpreting construction plans

170

WCA & PW impacts

- Currently Serviceable Road
- Does not meet safety standards
- LRA proposing to raise road, extend shoulders, flatten slopes to meet safety and design standards
- Add "multi-use" trails on both sides of existing roadway
- Does this qualify?
- Who has jurisdiction? Can jurisdiction be waived?

Aquatic Resource ID	Aquatic Resource Type	Type of Impact	Duration of Impact	Size of Impact	Existing Plant Community Type in Impact Area	Roadway Impacts	Trail Impacts
1	Wetland	Fill	P	654 ft2	Seasonally Flooded Basin	0 ft2	654 ft2
2	Wetland	Fill	P	610 ft2	Shallow Marsh	392 ft2	218 ft2
3	Wetland	Fill	P	393 ft2	Shallow Marsh	88 ft2	305 ft2
4	Wetland	Fill	P	1133 ft2	Shallow Marsh	1133 ft2	0 ft2
5	Wetland	Fill	P	3440 ft2	Shallow Marsh	1482 ft2	958 ft2
					Total	3094 ft2	2135 ft2
OW-1	Lake	Fill	P	0.413 ac	Shallow Open Water	0.252	0.161
OW-2	Lake	Fill	P	2.545 ac	Shallow Open Water	1.748	0.797
					Total	2.000	0.758

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WCA & PW Impacts

- Summary
  - WCA
    - Road impacts - eligible
    - Trail impacts – not eligible
  - Public Waters
    - Public interest credits
  - USACE
    - Concurrence with LGRWRP on road impact
    - Required credit purchase for public waters impacts

Each impact type should be identified separately (i.e. Fill, Drain, Excavation are three separate impact types).

Wetland Impact ID (same as noted in Part 4 and on overhead view)	Type of Impact (fill, excavate, or drain) – Choose only one per line	Size of Impact (square feet or acres to 0.01)	Existing Plant Community Type(s) in Impact Area[1] – Choose only one per line	County, Major Watershed #, and Bank Service Area # of Impact[2]
2	Fill	392ft2	Seasonally Flooded Basin	Murray, 51, 8
3	Fill	88ft2	Shallow marsh	Murray, 51, 8
4	Fill	1133ft2	Shallow marsh	Murray, 51, 8
5	Fill	1482ft2	Shallow Marsh	Murray, 51, 8

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Attachment E – Joint Application

All impacts to aquatic resources

Project Name and/or Number: SAP 000-00-000

PART FOUR: Aquatic Resource Impact[1] Summary

If your proposed project involves a direct or indirect impact to an aquatic resource (wetland, lake, tributary, etc.) identify each impact in the table below. Include all anticipated impacts, including those expected to be temporary. Attach an overhead view map, aerial photo, and/or drawing showing all of the aquatic resources in the project area and the location(s) of the proposed impacts. Label each aquatic resource on the map with a reference number or letter and identify the impacts in the following table.

Aquatic Resource ID (as noted on overhead view)	Aquatic Resource Type (wetland, lake, tributary etc.)	Type of Impact (fill, excavate, drain, or remove vegetation)	Duration of Impact Permanent (P) or Temporary (T)[2]	Size of Impact[3]	Overall Size of Aquatic Resource[4]	Existing Plant Community Type(s) in Impact Area[5]	County, Major Watershed #, and Bank Service Area # of Impact Area[6]
W-1	Wetland	Fill	P	0.37	N/A	Shallow Marsh	County, 21, 3
W-2	Wetland	Fill	T (15)	0.02	N/A	Fresh Wet Meadow	County, 21, 3
W-3	Wetland	Fill	P	130 SF	N/A	Floodplain Forest	County, 21, 3
W-4	Wetland	Cut	P	0.26	N/A	Fresh Wet Meadow	County, 21, 3
Spring Creek	Tributary	Fill	P	75 (375)	N/A	N/A	County, 21, 3

Only impacts from Part Four **that meet the LGRWRP criteria**

Wetland Impact ID (as noted on overhead view)	Type of Impact (fill, excavate, drain)	Size of Impact (square feet or acres to 0.01)	Existing Plant Community Type(s) in Impact Area[1]	County, Major Watershed #, and Bank Service Area # of Impact[2]
W-1	Fill	0.37	Shallow Marsh	County, 21, 3
W-3	Fill	130	Floodplain Forest	County, 21, 3

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Attachment E – SIGN IT!!!

Project Name and/or Number:

Road Authority Signature: By signature below, the road authority attests that they have followed the process in MN Rules 8420.0544 and have determined that the wetland impacts identified in Attachment E are regulated by the MN WCA and eligible for the MN Local Government Road Wetland Replacement Program.

Local Road Authority Representative Name: Employer:

Signature: ______________________ Date:

Technical Evaluation Panel Concurrence:

By signing below, TEP members attest that each wetland impact listed in Attachment E is regulated by WCA and meets eligibility requirements for replacement by the LGRWRP.

LGU TEP Member Name: LGU Name:

Signature: ______________________ Date:

Check here ☐ if LGU and SWCD TEP member are one in the same and leave SWCD TEP member blank.

SWCD TEP Member Name: SWCD Name:

Signature: ______________________ Date:

BWSR TEP Member Name:

Signature: ______________________ Date:

DNR TEP Member Name:

Signature: ______________________ Date:

Minnesota Interagency Water Resource Application Form – Revised May 2021 Page 11 of 12

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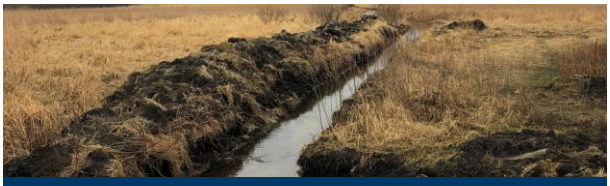

WCA Enforcement

BOARD OF WATER AND SOIL RESOURCES

175

Enforcement Procedure Overview

176

Assessing Wetland Impacts

177

SWCD Role in a violation

- Landowner contact for ROs
- Site visit- gather information/evidence
- Prepare Restoration/Replacement Order
- Monitor restoration/ replacement site.
- Certificate of Satisfactory Completion

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LGU Role in a violation

- Help Determine if site has permit for work or prior work done
- Landowner contact for CDO or RPN
- Set up site visits
- Assist SWCD with RO findings
- Assist with gathering evidence
- Receive ATF applications from landowner
- Track the cases

179

BWSR's Role in a violation

- Rule interpretation
- Bounce ideas back and forth
- May contact more specialist BWSR staff to assist in difficult projects
- Assist SWCD/LGU in developing RO's
- Assist in technical findings

180

DNR Role

As a member of TEP

- Provide technical assistance in case which require DNR as a member of TEP
- Provide information on instances where a public waters permit is needed
- Minnesota's endangered, threatened, and special concern species
- Bounce ideas back and forth

As an enforcement role

- Issue Cease and Desist(CDO)/Resource Protection Notice(RPN)
- Serve CDO/RPN
- Grant extensions
- Serve citations
- Liens

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Resource Protection Notices

Minnesota Department of Natural Resources
Wetland (WCA)
RESOURCE PROTECTION NOTIFICATION

Used as a notice when activity is complete and no sign it will continue

182

Cease & Desist Orders

Minnesota Department of Natural Resources
Wetland
CEASE AND DESIST ORDER

ANY VIOLATION OF THIS ORDER IS A MISDEMEANOR

Used when equipment is onsite and it appears the activity will continue to impact wetlands.

183

Off-Site Review

Review available data prior to site visit

- NWI
- FSA/Google Earth/Pictometry
- Web Soil Survey
- Topo
- LiDAR

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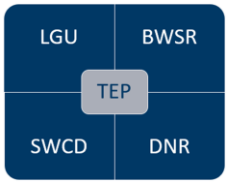
On-Site Investigation

Who

- Landowner/responsible party
- SWCD & LGU
- Conservation Officer when needed

What to bring

- Soil Auger
- Munsell
- Data collection app (ArcCollector/Trimble)
- Useful off-site information collected



185

On-site Investigation

Soft Skills

- Talk to landowner/responsible party to determine what happened and why
- Avoid putting the landowner/responsible party immediately on the defensive
- Do not apologize for doing your job

186

On-site Investigation

What to collect

- Map out the nature of the activity (areas of fill, excavation, etc.)
- Soil borings within areas of impact and adjacent
  - Take note of wetland indicators
  - Fill out data sheets
- Pictures, pictures, pictures
- You may only have one chance to be on-site

After the on-site

- Write up findings right after the site visit
  - **Findings should include all information that was found on-site. Assume every RO will be appealed or end up in court**
- Disagreement between landowner/responsible party? Require a delineation

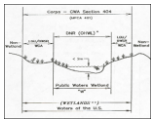
187

Soil borings

188

Public Waters & WCA Violations

- DNR present during initial site visit to make jurisdiction determination
- Define WCA and Public Waters Impacts
- Work with Area Hydrologist to issue Restoration Orders for both programs



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Drainage example

190

Writing an RO

191

Restoration/Replacement Order

Restoration Order

- An order that prioritizes the restoration of the impacted wetland
- This order will provide guidance to the landowner/responsible party on how to achieve successful restoration and a timeline

Replacement Order

- An order that requires replacement for wetland impacts
- This is used in situations where restoration is not possible or prudent

A combination of both orders can be used in certain situations

192

Voluntary Restoration

Voluntary or Formal?

- Benefits to a voluntary restoration
  - Faster timeline when the landowner/responsible party is willing to cooperate
  - Less heavy handed of an approach
  - Possibly easier restoration standards
- Downsides to voluntary restoration
  - Could delay overall restoration if the landowner/responsible party is unwilling
  - Good communication with DNR enforcement is needed

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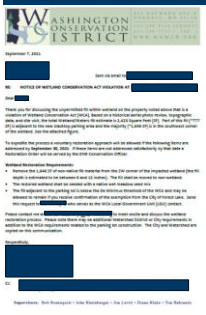
Voluntary Restoration



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The RO

Restoration Order Gives the Landowner Options

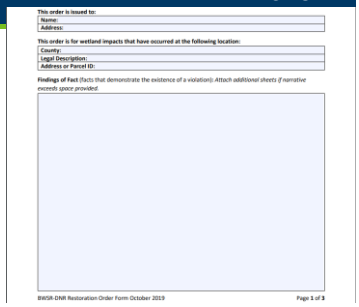
- Restoration is priority
- Apply for replacement, exemption, no-loss
- Appeal- w/in 30 days + $500 fee
- Court/Deed Restriction if no action is taken by landowner

195

The RO

What goes into a RO?

- LGU should help SWCD with findings
- The findings should bring the reader up to speed on all the important history of the violation and **how it was determined** to be a violation
- Include as much detail as possible incase of appeal/court
- Data sheets, maps, pictures, and off-site review items can all be added as supporting documents



This order is issued to:
Name:
Address:

This order is for wetland impacts that have occurred at the following location:
County:
Legal Description :
Address or Parcel ID:

Findings of Fact (facts that demonstrate the existence of a violation): *Attach additional sheets if narrative exceeds space provided.*

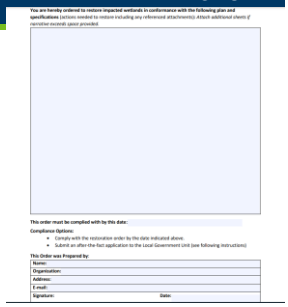
BWSR-DNR Restoration Order Form October 2019 Page 1 of 3

196

The RO

What goes into a RO?

- SWCD should provide the technical aspects of the restoration
- **Be specific (sometimes)**
  - How much fill needs to be removed (6" or 5')?
  - What type of seed mix should be used?
  - What BMPs are needed?
  - Where should the fill material go once removed?
  - Where should the tile be broken?
  - More details and clear guidance = faster restoration
- Don't forget the compliance date



You are hereby ordered to restore impacted wetlands in conformance with the following plan and specifications (actions needed to restore including any referenced attachments): *Attach additional sheets if narrative exceeds space provided.*

This order must be complied with by this date:

Compliance Options:
- Comply with the restoration order by the date indicated above.
- Submit an after-the-fact application to the Local Government Unit (see following instructions)

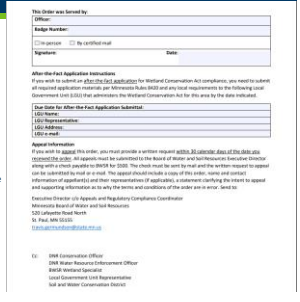
This Order was Prepared by:
Name:
Organization:
Address:
E-mail:
Signature: Date:

197

The RO

What goes into a RO?

- Be sure to include a due date for ATF applications
- Once the RO material is completed, SWCD should sign it and send it to the CO/WREO
- Make sure the CO/WREO sends you a signed copy when served
- Extensions are issued only by enforcement and if:
  - The landowner has a good reason for not getting it done
  - Has made some progress
  - Maybe weather related (heavy rains, early freeze)
  - Submitted application
  - Filed an Appeal



This Order was Served by:
Officer:
Badge Number:
☐ In-person ☐ By certified mail
Signature: Date:

After-the-Fact Application Instructions
If you wish to submit an after-the-fact application for Wetland Conservation Act compliance, you need to submit all required application materials per Minnesota Rules 8420 and any local requirements to the following Local Government Unit (LGU) that administers the Wetland Conservation Act for this area by the date indicated.

Due Date for After-the-Fact Application Submittal:
LGU Name:
LGU Representative:
LGU Address:
LGU e-mail:

Appeal Information
If you wish to appeal this order, you must provide a written request within 30 calendar days of the date you received the order. All appeals must be submitted to the Board of Water and Soil Resources Executive Director along with a check payable to BWSR for $500. The check must be sent by mail and the written request to appeal can be submitted by mail or e-mail. The appeal should include a copy of this order, name and contact information of appellant(s) and their representatives (if applicable), a statement clarifying the intent to appeal and supporting information as to why the terms and conditions of the order are in error. Send to:

Executive Director c/o Appeals and Regulatory Compliance Coordinator
Minnesota Board of Water and Soil Resources
520 Lafayette Road North
St. Paul, MN 55155
traci.user.mndnr@state.mn.us

Cc: DNR Conservation Officer
DNR Water Resource Enforcement Officer
BWSR Wetland Specialist
Local Government Unit Representative
Soil and Water Conservation District

198

Bad RO. What would you change?

Findings of Fact (facts that demonstrate the existence of a violation): *Attach additional sheets if narrative exceeds space provided.*

On September 6 2019 [redacted] recived a RPN Notice from the DNR about a potential wetland violation. This is involving a tiling activity on a 4 ac. parcel and a lift pump installation. This activitity didn't have a WCA application at this time. [redacted] SWCD tried to set up several meetings with [redacted] but he was having some medical procedure done. On 10/ 17/2019 I talked to [redacted] and we agreeded to meet on site on 10/21/2019. When I arrived at the site I was meet by [redacted] a friend of [redacted], he told me [redacted] had been hurt seriously in a farming accident. I told [redacted] that I would fill out a Wetland Application for him for a No Loss and submit the application for him. The application was denied. There is no cropping history on these acers and acers impacted exceed the exemption standard. (8420.0420) Part B, Subp. 2.

199

Bad RO. What would you change?

You are hereby ordered to restore impacted wetlands in conformance with the following plan and specifications (actions needed to restore including any referenced attachments): *Attach additional sheets if narrative exceeds space provided.*

1) [redacted] will either have to remove all tile and the lift pump from the impacted wetland acers or buy wetland credits from the Wetland Bank System from (BWSR) Board of Water Soil Resources.

200

Good RO

Findings of Fact (facts that demonstrate the existence of a violation): *Attach additional sheets if narrative exceeds space provided.*

5/15/20- SWCD received 2 complaint calls regarding excavation within wetland areas of the field.
5/21/20- SWCD investigated the complaint from the county road and determined that new drainage ditches were created within the wetland areas, and across the field.
5/22/20- SWCD Mailed letter to the landowner regarding the potential violation.
5/28/20- Landowner contacted SWCD by phone. The completed work was discussed, as well as the rules of the Minnesota Wetland Conservation Act
6/9/20- SWCD and BWSR staff reviewed the recent excavation within the wetland portions of the described parcel. It was found that the new ditches drain 3 separate wetlands in the field and share the same outlet into the fringes of Horseshoe Lake. Wetlands impacted include a 1.4 acre Type 2 Wet Meadow, 0.80 acre Type 2 Wet Meadow, and a 0.95 acre Type 3 Shallow Marsh. There is no evidence of any preexisting drainage features within any of the wetland basins. The impacted wetland areas have been reviewed for No-Loss and Exemption Standards within WCA. Specifically, Exemptions under Agricultural Activities. An aerial slide review and an onsite review of the field was completed. It is determined that the impacted wetlands do not meet any of the No-Loss or Exemption criteria. It is agreed that the completed work is a violation of the Wetland Conservation Act.

201

Good RO

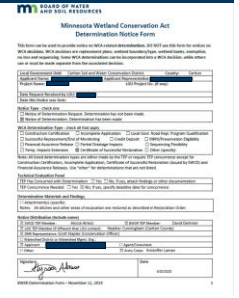
You are hereby ordered to restore impacted wetlands in conformance with the following plan and specifications (actions needed to restore including any referenced attachments): *Attach additional sheets if narrative exceeds space provided.*

All ditches dug must be restored back to pre-altered conditions. Ditches to be filled back to pre-altered conditions are identified on the attached "New Ditch Location" Map
- Ditches are to be filled level to land immediately adjacent to the ditch.
- Ditch fill will be compacted with the tracks of machine used to replace the fill.
- Oats will be spread over the disturbed ditch area to temporarily control erosion until the next cropping season.
-Contact Meeker SWCD 48 hours before restoration work will be completed.

202

Certificate of Successful Restoration

- Completed after restoration has been verified by SWCD
- Form should be completed by SWCD
- A certificate of satisfactory restoration or replacement may be issued with conditions that must be met in the future, such as for issues with wetland vegetation, weed control, inspections, monitoring, or hydrology.
- Failure to fully comply with any conditions that have been specified may result in the issuance of a new restoration or replacement order.
- Be sure to send a signed copy to the CO/WREO



BOARD OF WATER AND SOIL RESOURCES

Minnesota Wetland Conservation Act
Determination Notice Form

203

RO Non-Compliance

The landowner does not comply with the RO. Now what?

- Enforcement will work with you!
  - CO sends a letter
  - CO makes a phone call
  - Deed restriction in some cases
  - Landowner served a criminal citation
  - Court

Division of Enforcement
Region 2

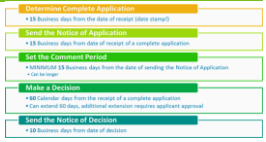
204

After the Fact Applications

205

AFT Applications

- Review the application like any other
- 21 days per rule to submit an ATF but there is flexibility
- Keep track of your timelines (15.99)
- What is the application requesting?
  - No Loss, Exemption, Replacement
- Keep an eye out for
  - Poor exhibits/figures – show what is needed
  - Second avoidance alternative
  - No loss/exemption specifics
  - Purpose and need not well defined… or not at all



206

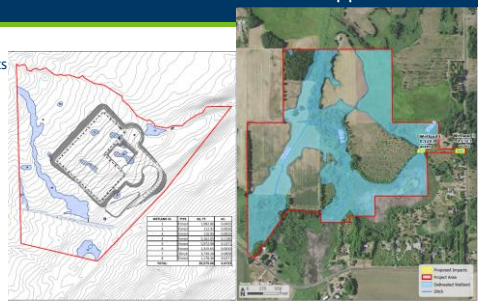
AFT Applications

Poor Exhibits

207

AFT Applications

Good Exhibits



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AFT Applications

Replacement

- Sequencing still applies
- The LGU must require the landowner/responsible party to replace impacted wetlands at twice the normal ratio

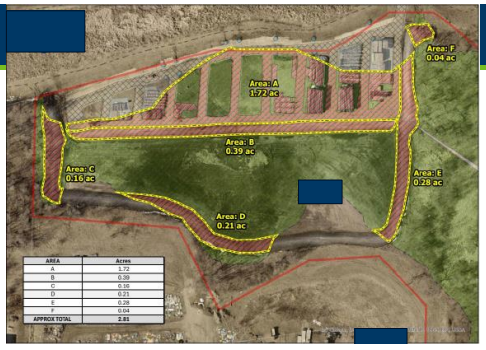
Minimum Replacement Ratios: Banking		
Location of impact	Replacement	Minimum replacement ratio
>80% area or agricultural land	Outside bank service area	1.5:1
	Within bank service area	1:1
<50% area, 50-80% area, and nonagricultural land	Outside bank service area	2.5:1
	Within bank service area	2:1

X 2 ATF

209

Mock Violation

210



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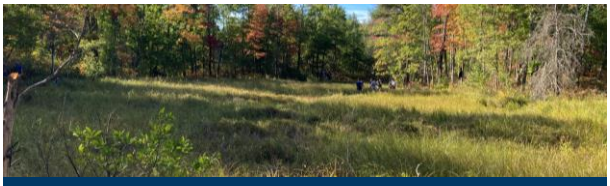

Questions?

BOARD OF WATER AND SOIL RESOURCES

Minnesota Wetland Professional Certification Program

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