



# State of the Environment: Promoting Clean Water and Healthy Soil

2020 Update

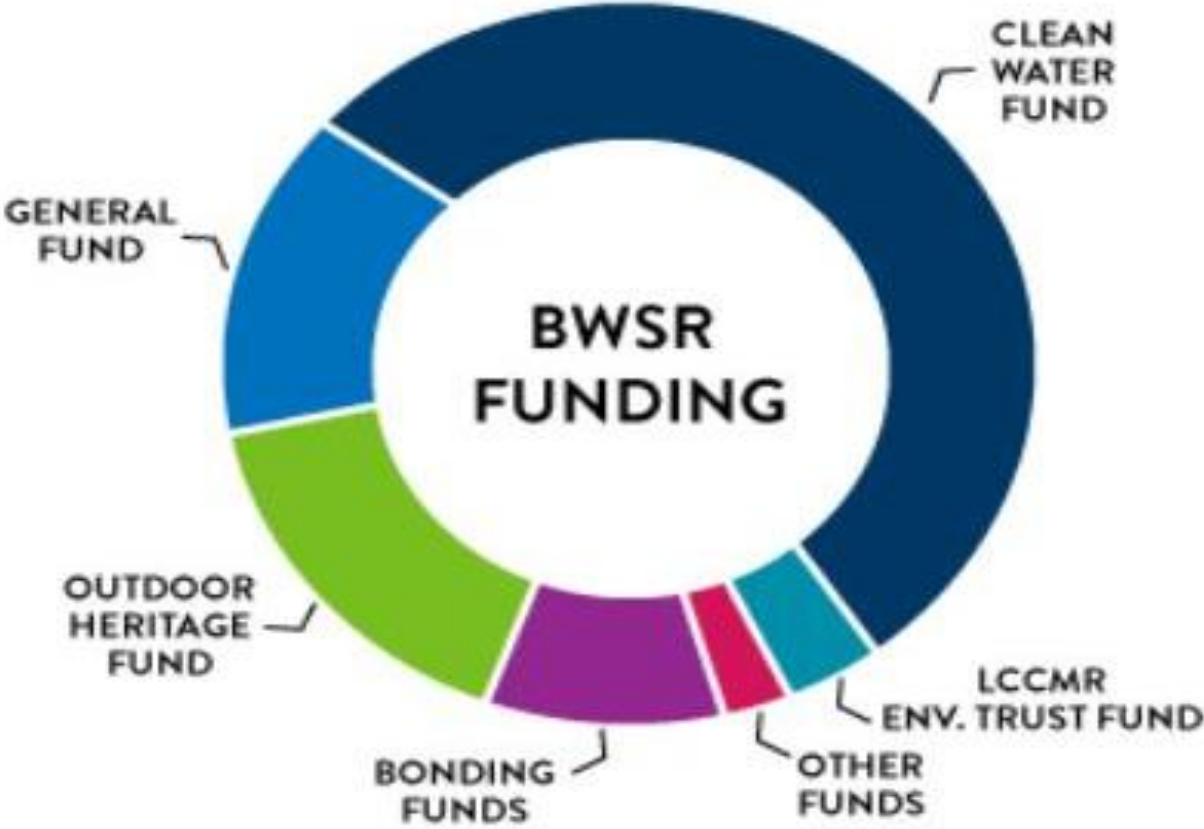
Presented by John Jaschke

Executive Director, Minnesota Board of Water and Soil Resources (BWSR)

# BWSR Mission

*BWSR's mission is to improve and protect Minnesota's water and soil resources by working in partnership with local organizations and private landowners.*

# BWSR funding



# Prioritize, Target, Measure

**Priority setting based on science.**

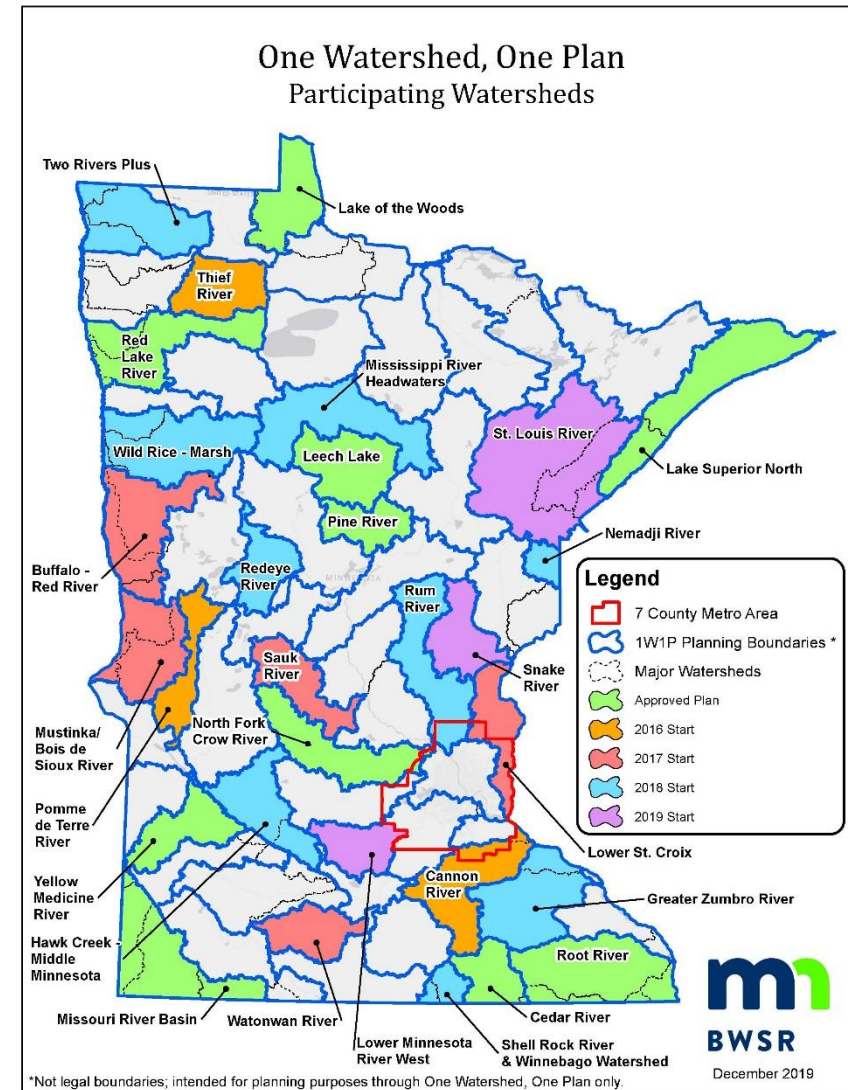


# Watershed Management

## One Watershed, One Plan

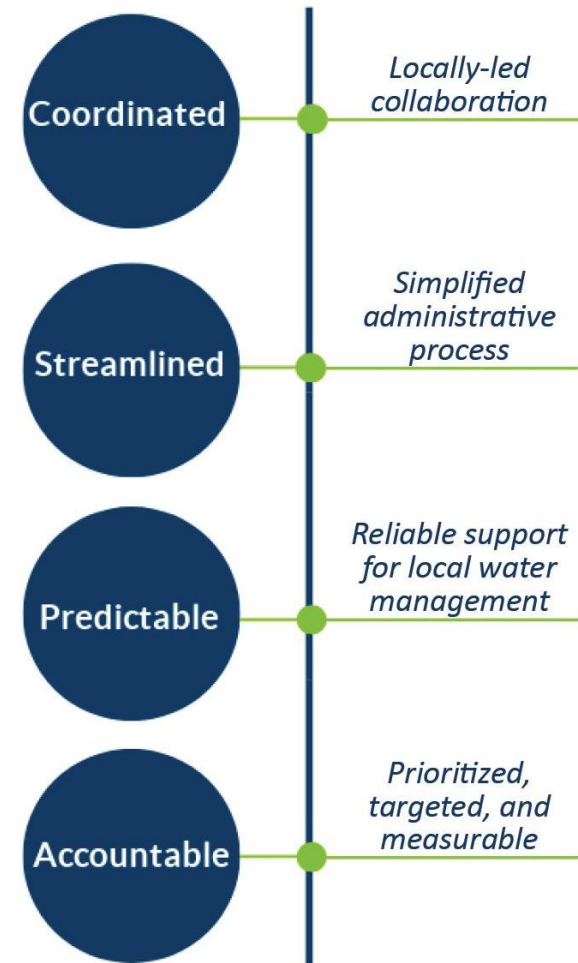
Planning on a watershed scale encourages collaboration among local governments and directs funding to the highest priority projects.

- 30 active planning partnerships
- 9 approved comprehensive watershed management plans



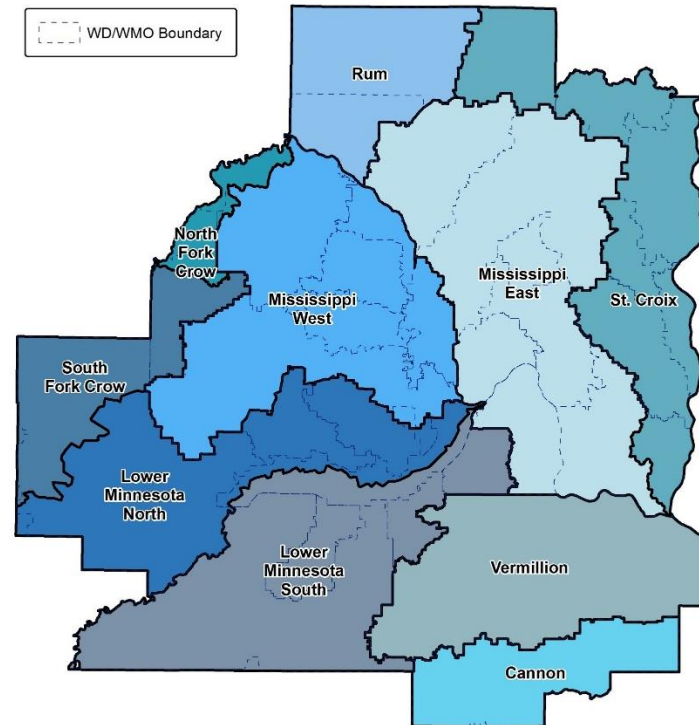
# Watershed Management

**Watershed-based  
Implementation Funding:  
\$24 million approved in  
September 2019**

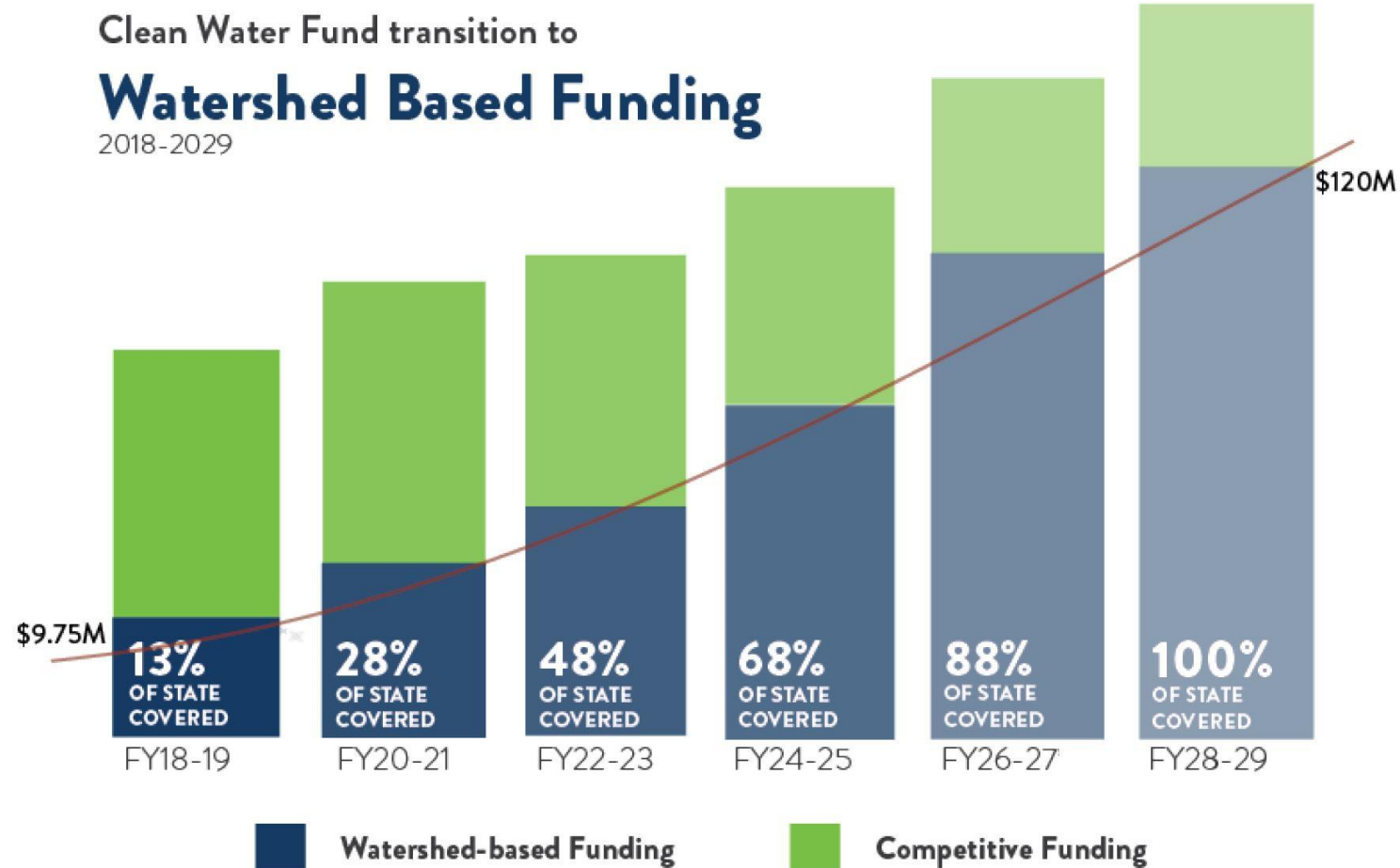


# Watershed Management

Twin Cities Metro area allocation map  
for watershed-based implementation  
funding program



# Watershed Management



Percentage increases are approximate



# Conservation Easements

## MN CREP

- Targets the highest priority areas for reducing nitrogen, phosphorus and sediment
- Protects drinking water
- Enhances grassland and wetland habitats
- Seeking \$16.5 million contribution in 2020 legislative session

## Outcomes

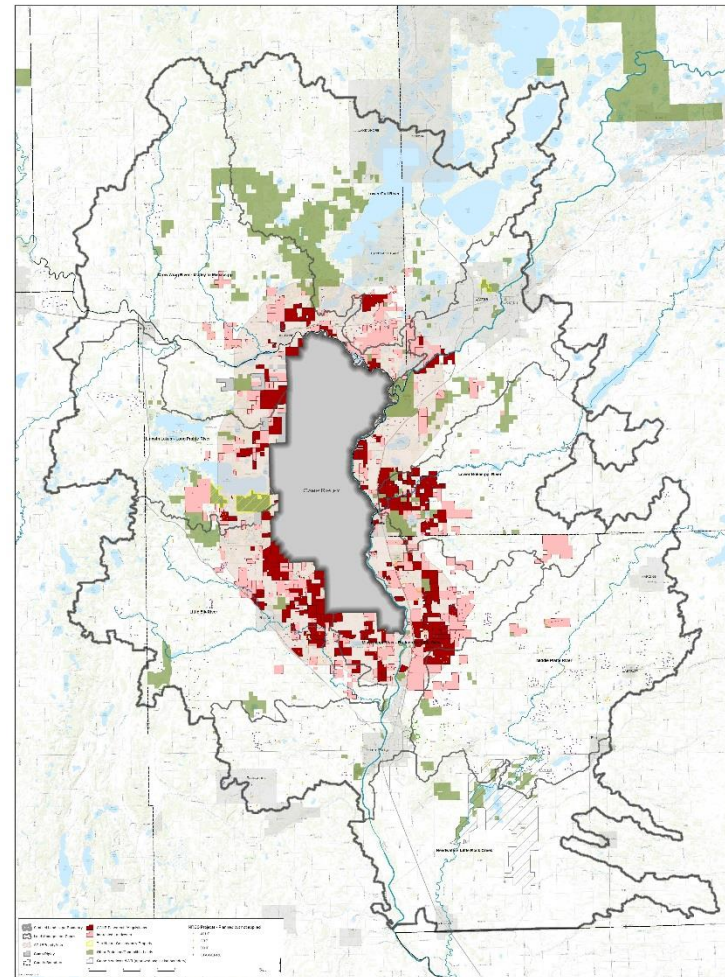
- Approximately 24,000 acres enrolled to date
- 450 applications received



# Conservation Easements

## Army Compatible Use Buffer (ACUB) Program

Permanently protects private lands within a 3-mile radius around Camp Ripley from residential and commercial development.



# Conservation Easements

## Reinvest in Minnesota (RIM) Wild Rice Conservation Easement Program

Protects lakes acting as critical wild rice habitat through permanent conservation easements on privately owned lands in Minnesota's Northern Forest Region. Funded by the Outdoor Heritage Fund and the Clean Water Fund.



# Buffers

## Benefits of riparian buffers

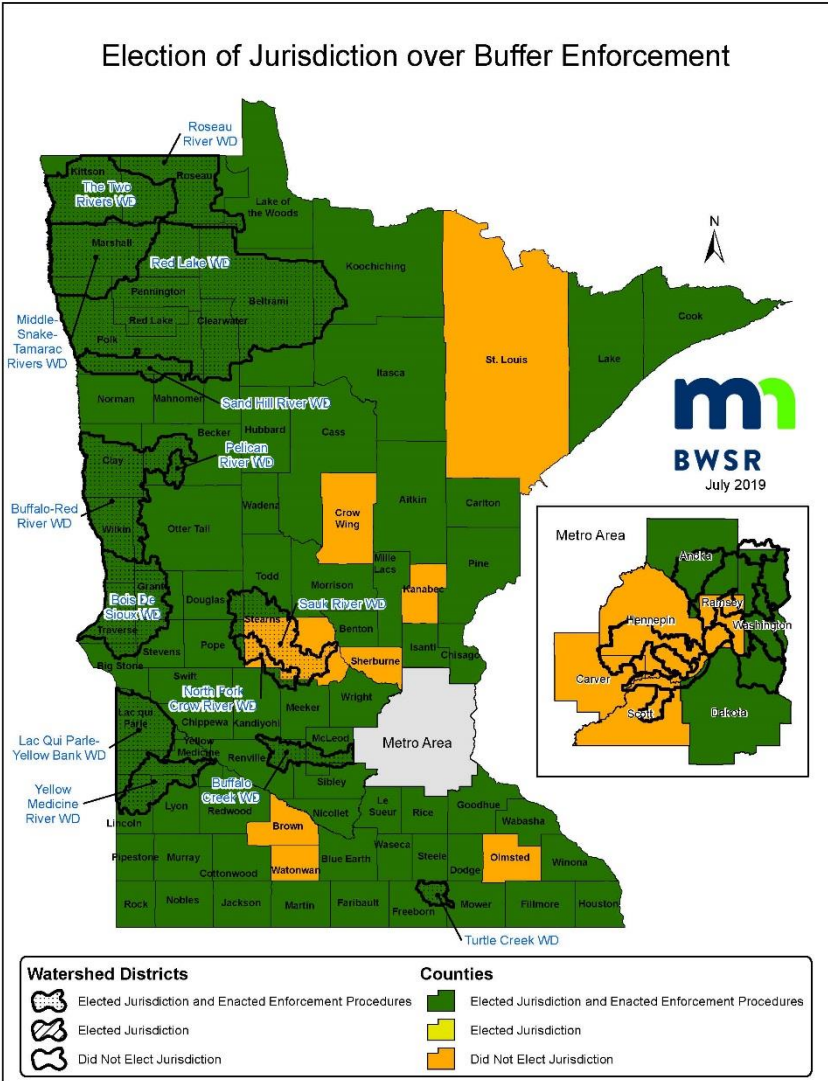
- Filter out phosphorus, nitrogen, and sediment to keep water clean
- Create habitat for aquatic life and pollinators
- Restore water quality
- Mitigate erosion



# Buffers

## BWSR Enforcement

BWSR is responsible for enforcement in the following counties: Brown, Carver, Hennepin, Kanabec, Scott, Sherburne, Watonwan



# Buffers

## Statewide Enforcement (January 2020)

### Process to address noncompliant parcels

**Step 1:** Compliance determinations are made by SWCDs on a parcel basis

**Step 2:** If a parcel is determined noncompliant, a Notice of Non Compliance (NON) is issued to the entity responsible for enforcement (County, Watershed District, or BWSR)

**Step 3:** Upon receipt of a NON the enforcement entity will issue a Correction Action Notice (CAN) to the landowner providing a list of corrective actions and timeline to meet the requirements

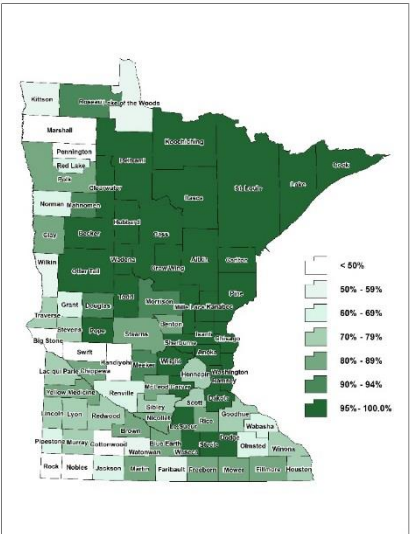
**Step 4:** Implementation and Enforcement is done through the issuance of an Administrative Penalty Order (APO) or misdemeanor citation

- Total # of parcels with enforcement process = **1,519**
- Parcels brought into compliance = **619**

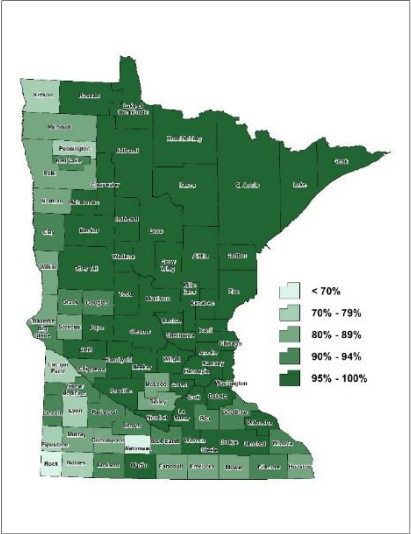
# Buffers

## Compliance to date (January 2020)

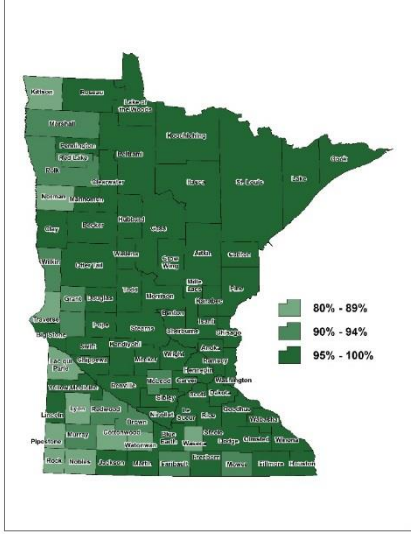
<b>All Waters</b>	<b>Public Waters</b>	<b>Public Ditches</b>
<b>99.1%</b>	<b>99.6%</b>	<b>9579%</b>



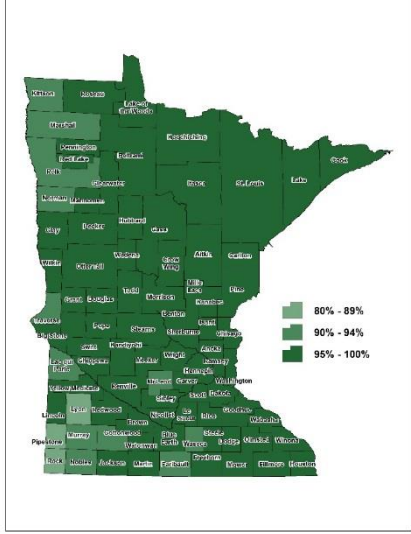
January 2017



January 2018



July 2018



January 2019

# Wetlands

## Examples of noncompliant (filled) wetlands





# Wetlands

## Wetland Banking Program

- In addition to over 10,000 lakes, Minnesota has over 10.62 million acres of wetlands.
- An abundance of drained wetlands creates ample opportunities for wetland restoration
- Minnesota is home to a robust wetland banking market
- Private and state-sponsored wetland banks issue credits used to mitigate authorized wetland impacts

# Restoration of Drained Wetlands

Year 1



Year 5



# Wetlands

## 404 Assumption

Section 404 of the Federal Clean Water Act:

- Regulates activities in lakes, streams, and wetlands.
- Currently implemented by U.S. Army Corps of Engineers.

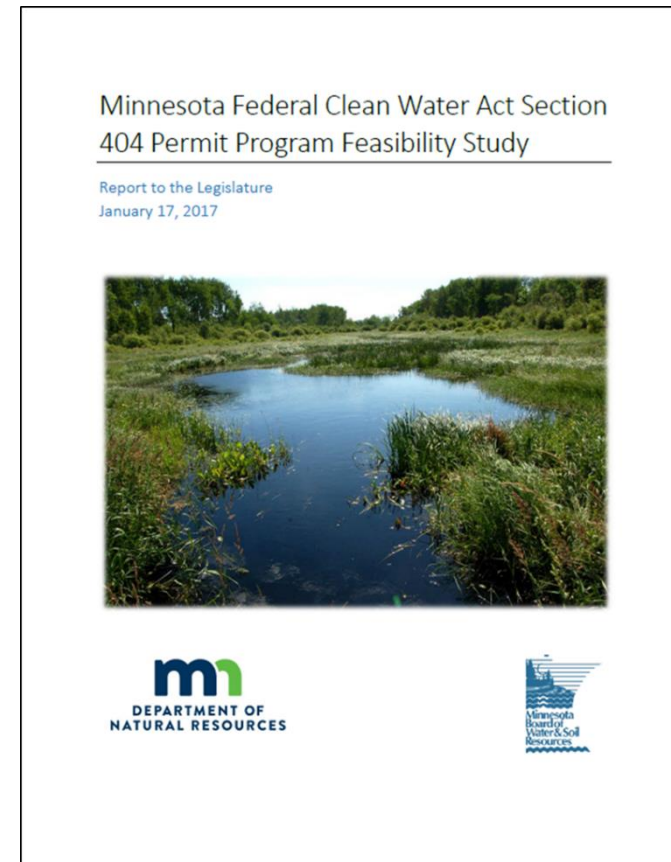
**Allows state implementation of equivalent program, eliminating the need for separate federal permits - AKA “404 Assumption.”**

33 U.S.C. § 1251(b): “It is the policy of Congress that the States... implement the permit programs under sections 1342 and 1344 of this title.” (1977)

# Wetlands

## Recent Efforts to Explore 404 Assumption in Minnesota

- 1) Minnesota Federal Clean Water Act Section 404 Permit Program Feasibility Study – January 17, 2017.
- 2) Analysis of Retained and Assumable Waters in Minnesota – May 3, 2018.



# Wetlands

## 404 Assumption: 2019 Legislation

### Laws of MN 2019, 1st Special Session, Chapter 4, Article 1, Section 2, Subd. 9(a)

“begin to develop and assemble the material” to assume 404.

By February 2021, submit to the legislature a report on:

- ✓ additional funding necessary to secure section 404 assumption, and
- ✓ additional funding needed to fully implement the state-assumed program.

### 2019 EPA Grant

Provides supplemental funding to:

- ✓ Hire a project coordinator.
- ✓ Develop a more complete application to allow for informed decision by legislature.

# Wetlands

## Minnesota Wetland Professional Certification Program (MWPCP)

**Purpose:** Increase and maintain level of knowledge and expertise for those conducting and reviewing professional work associated with wetland regulatory compliance in Minnesota.



# Achieve Purpose Through:

## Training, testing, certification, continuing education

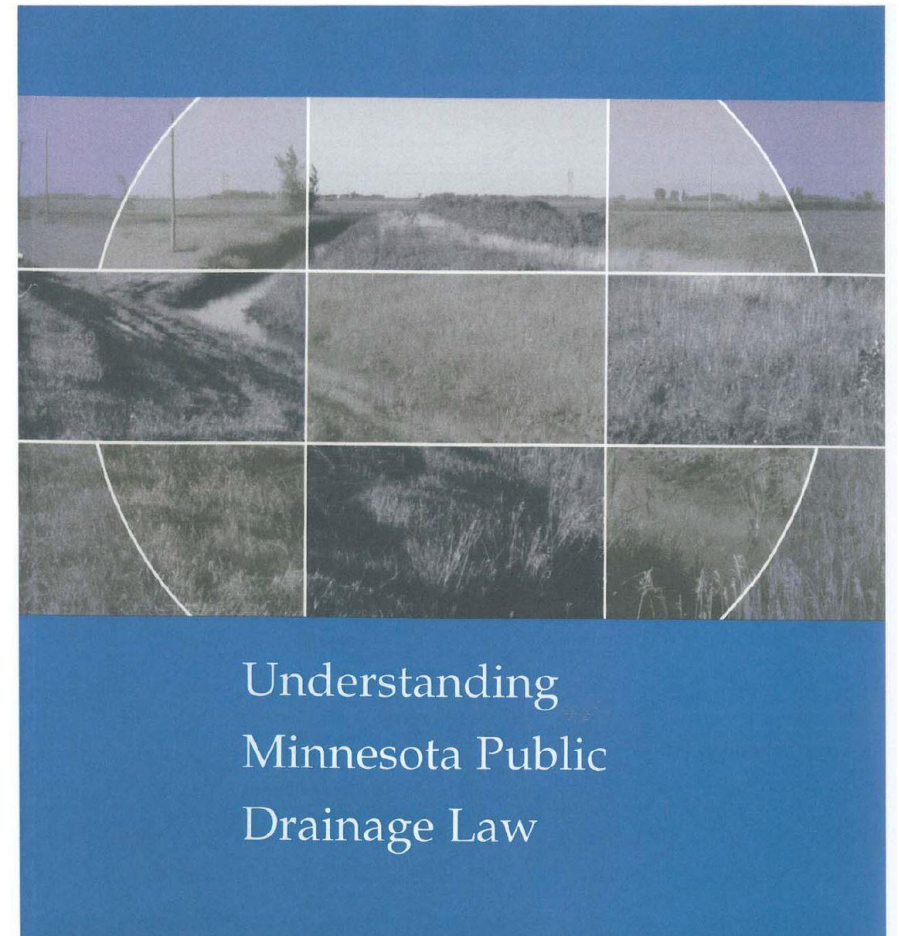
- Over 300 Certified
- 6-7 annual classes and testing
- 3-year renewal period
- 18 hours of continuing education required



# Drainage

## Drainage Management (Chapter 103E)

- Planning a drainage system project
- Managing drainage projects
- Drainage system repair
- Drainage appraisals
- Drainage appeals
- Best Management Practices





# Drainage Water Management



**Side inlet**



**Two-stage drainage ditch**

# Climate Change

## Gov. Walz Executive Order on Climate Change

- Signed December 2019
- Creates Climate Change Subcabinet that includes BWSR
- Will require new emission standards for vehicles sold in Minnesota, and will encourage transition to electric vehicles.
- Aims to expand on proposals to achieve 100% clean energy use in Minnesota by 2050.
- 15-member Climate Change Advisory Council to be formed



# BWSR Climate Action

## Climate Change Trends and Action Plan

- Most **agricultural best management practices** that improve water quality and soil health also help mitigate the effects of climate change.
- **BWSR's Wetland Banking program** has helped restore 11,800 wetland acres, reducing greenhouse gas emissions by 12,500 metric tons annually.
- **BWSR Easement programs** support conservation practices on more than 500,000 acres statewide. This is estimated to reduce greenhouse gas emissions by 300,000 metric tons annually.

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### Climate Change Trends and Action Plan

September 2019

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# Soil Health

## Healthy soil for healthy watersheds



# Soil Health

## Cover Crop Demonstration Grants

**Purpose:** Grants to increase establishment of cover crops in targeted areas where there will be water quality benefits to surface and/or groundwater.

- Build local knowledge
- Facilitate partnerships
- Demonstrate clean water benefits



### Anticipated Timeline



# Soil Health

## Minnesota Office for Soil Health (MOSH)

**MISSION:** To build local expertise to promote soil health and soil and water conservation

### HIGHLIGHTS

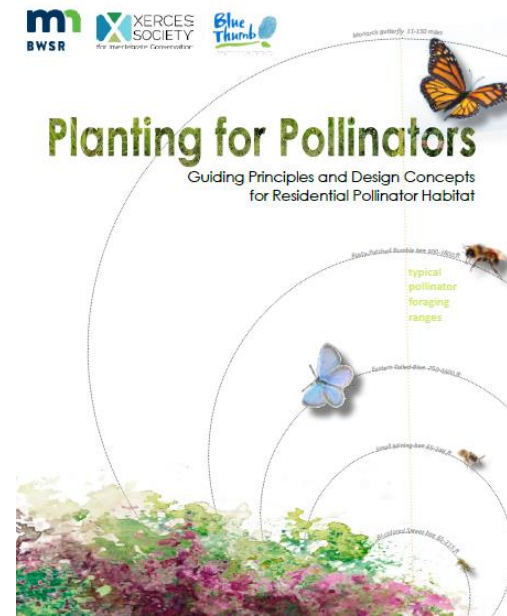
- **November 2017:** Office launched as collaboration between BWSR and University of Minnesota Water Resources Center
- **June 2018:** State Soil Health Specialist Anna Cates hired
- **April 2019:** Soil Health Forum with stakeholders



# Habitat

## Lawns to Legumes Program

- Assists Minnesota residents in installing pollinator-friendly plants in their yards by providing:
  - Planting guides
  - Free workshops
  - Coaching
  - Reimbursement for yard projects
- Open to all Minnesota residents; applications accepted through Feb. 28
- Focus on protecting the federally endangered state bee, the Rusty patched bumblebee.



# Thank you

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