



# NORTH CANNON RIVER



## WATERSHED MANAGEMENT ORGANIZATION

### 2024 Annual Report

**Mission Statement:** “Managing groundwater and surface water to prevent property damage, maintain hydrologic balance, and protect water quality for the safety and enjoyment of citizens and the preservation and enhancement of wildlife habitat through collaboration among member communities.”

#### ABOUT US

The North Cannon River Watershed Management Organization (NCRWMO) formed in 1983 through a joint powers agreement signed by eight townships and three cities in southern Dakota County. Its jurisdiction covers approximately 150 square miles, containing four streams, two lakes, and hundreds of wetlands. This rural region depends on groundwater as its primary source of drinking water and agricultural irrigation. This area is the northern part of the hydrological Cannon River Watershed. The sub-watersheds within the NCRWMO boundaries are Chub Creek, Trout Brook, Pine Creek, Mud Creek, and the Cannon River from Northfield to Lake Byllesby.

Minnesota Statute 103B.201 states that the purposes of a Watershed Management Organization shall be to:

1. **Protect**, preserve, and use natural surface and groundwater storage and retention systems.
2. **Minimize** public capital expenditures needed to correct flooding and water quality problems.
3. **Identify** and plan for means to effectively protect and improve surface and groundwater quality.
4. **Establish** more uniform local policies and official controls for surface and groundwater management.
5. **Prevent** erosion of soil into surface water systems.
6. **Promote** groundwater recharge.
7. **Protect** and enhance fish and wildlife habitat and water recreational facilities.
8. **Secure** the other benefits associated with the proper management of surface and groundwater.

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## A. BOARD OF MANAGERS

Member	Appointee
Castle Rock Township	Primary: Heather Mavencamp Alternate: Vacant
Douglas Township	Primary: Jeff Reed (Chair) Alternate: Vacant
Eureka Township	Primary: Melanie Storlie Alternate: Brian Storlie
Greenvale Township	Primary: Wayne Peterson (Vice Chair) Alternate: Tom Wirtzfeld
Hampton Township	Primary: Dan Peine Alternate: Vacant
City of Miesville	Primary: Vacant Alternate: Vacant
City of New Trier	Primary: Vacant Alternate: Vacant
City of Randolph	Primary: Todd Carlock Alternate: Vacant
Randolph Township	Primary: Tom Krauter Alternate: Vacant
Sciota Township	Primary: Jill Trescott Alternate: Vacant
Waterford Township	Primary: Frank Wergin (Treasurer) Alternate: Vacant

## B. CONTACT INFORMATION

### ADMINISTRATION

The Dakota County Soil and Water Conservation District (SWCD) provides administrative and technical support to the NCRWMO through an annual Joint Powers Agreement. Dakota County SWCD can be contacted at:

**victoria.ranua@co.dakota.mn.us**  
**4100 220th St West, Suite 102**  
**Farmington, MN 55024**

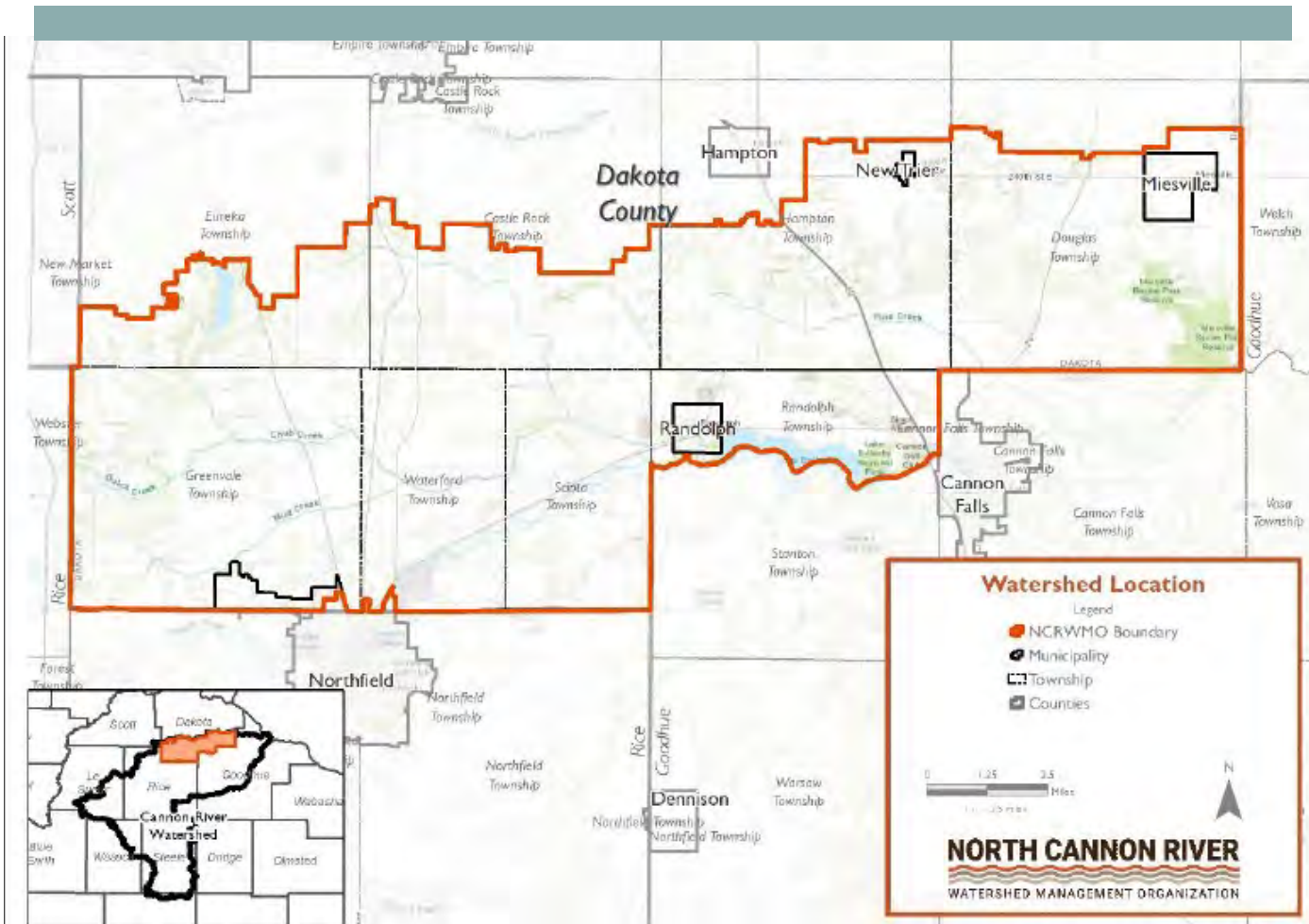
**(651) 480-7717**

### 2025 MEETING SCHEDULE

January 15  
 April 16  
 July 16  
 November 19  
*Locations to be Determined*

### WEBSITE

[www.northcannonriverwmo.org](http://www.northcannonriverwmo.org)



## C. 2024 ACTIVITIES ASSESSMENT & EXPENDITURES

In 2024, the WMO funds contributed to:

- Agricultural Practices—25 Projects
- Water Monitoring—12 sites
- Wetland Health Evaluation Program (WHEP)—2 wetlands
- Landscaping for Clean Water— 1 project

## 2024 BUDGET AND YEAR-END

REVENUES	Budget	Year End
Member Contributions	\$41,000	\$40,363.04
Interest— Savings Account	\$300	\$38.28
<b>Total</b>	<b>\$41,300</b>	<b>\$40,401.32</b>
EXPENSES		
<b>Administrative Services</b>		
Administrative Services	\$17,250	\$20,810
Organizational Dues	\$500	\$500
Advocacy, Education, and Outreach	\$2,375	\$4,250
Support Existing E & O	\$2,700	\$3,490
CS— Agricultural Projects	\$4,000	\$4,000
CD— Landscaping for Clean Water	\$4,450	\$850
Water Quality Monitoring	\$10,525	\$5,903.81
<b>Watershed Plan Reserve</b>	<b>\$1,500</b>	
<b>Use of Fund Balance</b>	<b>\$11,500</b>	
<b>Total</b>	<b>\$43,300</b>	<b>\$39,803.81</b>
<b>Net Surplus/Deficit</b>	<b>-\$2,000</b>	<b>\$597.51</b>
<b>Total Fund Balance</b>		<b>\$51,439.29</b>

## 2024 CONSERVATION PRACTICES

An interactive map of projects is available on the Dakota County SWCD website:

### STRUCTURAL

**Stein**  
Basin  
(Hampton) Pine Creek

**Hoff Trust**  
Basins  
(Eureka) Chub Creek

### PERENNIAL COVER

**Barsness**  
Native Prairie  
0.9 acres  
(Castle Rock) Chub Creek

**Sharing Our Roots**  
Native Prairie  
3.4 acres  
(Greenvale) Mud Creek

**Strauss**  
Native Prairie  
2.5 acres  
(Greenvale) Pine Creek

**Groves**  
Harvestable Cover  
25 acres  
(Greenvale) Mud Creek

### IRRIGATION WATER MANAGEMENT

**Mulvihill** 136 acres  
(Castle Rock) Chub Creek

**Volkert** 21 acres  
(Sciota) Chub Creek



### NEW COVER CROPS

**Levgold** 123 acres  
(Castle Rock, Waterford) Chub Creek

**Mulvihill** 153 acres  
(Castle Rock) Chub Creek

**Piene Farms** 110 acres  
(Douglas) Pine Creek

**Stein** 43 acres  
(Douglas) Pine Creek

**DST LLP**  
153 acres  
(Douglas) Trout Brook

**Volkert** 99 acres  
(Sciota) Chub Creek

### CONSERVATION TILLAGE

**Levgold** 123 acres  
(Castle Rock, Waterford) Chub Creek

**Mulvihill** 153 acres  
(Castle Rock) Chub Creek

### NUTRIENT MANAGEMENT PLAN

**Levgold** 123 acres  
(Castle Rock, Waterford) Chub Creek

**Mulvihill** 153 acres  
(Castle Rock) Chub Creek

**Piene Farms** 100 acres  
(Douglas) Trout Brook

**Volkert** 21 acres  
(Sciota) Chub Creek



## D. 2025 ACTIVITIES ASSESSMENT & WORK PLAN

### 2025 MEMBER DUES

The Joint Powers Agreement for the WMO states, “The annual contribution of each Member shall be based on fifty percent (50%) on the assessed valuation of all real property and fifty percent (50%) on the basis of the total area of each Member within the boundaries of the watershed each year to the total area in the North Cannon River Watershed.”

The WMO Board set a budget of \$46,733 for 2025. So the calculation for 2025 is:

$$(\$23,366.50 \times \text{Member's \%Tax Capacity}) + (\$23,366.50 \times \text{Member's \% Area}) = \text{Member's Dues}$$

Community	Tax Capacity in Watershed (2024)*	% Tax Capacity	% Area of Watershed	Member Dues
Castle Rock Township	\$184,517,722	11.31%	10.31%	\$5,053.57
Douglas Township	\$209,231,852	12.83%	17.78%	\$7,152.91
Eureka Township	\$101,336,692	6.21%	7.43%	\$3,187.81
Greenvale Township	\$283,651,946	17.39%	19.97%	\$8,729.77
Hampton Township	\$208,394,124	12.78%	15.68%	\$6,649.23
Randolph Township	\$240,530,566	14.75%	6.98%	\$5,078.58
Sciota Township	\$146,325,128	8.97%	9.99%	\$4,430.92
Waterford Township	\$160,235,606	9.83%	9.90%	\$4,609.82
City of Miesville	\$29,318,277	1.80%	1.17%	\$693.42
City of New Trier	\$9,777,702	0.60%	0.12%	\$168.38
City of Randolph	\$57,445,111	3.52%	0.67%	\$978.62
<b>Total Dues</b>				<b>\$46,733.00</b>

\*Data Source: Dakota County Assessor, Payable Market Values (2024) Report Dated 02/27/2024 using “Taxable Mkt Value” Column



#### Dues are matching funds to access other grants

Clean Water Land and Legacy funding through the Board of Water and Soil Resources (BWSR) now offers non-competitive Watershed Based Implementation Funding (WBIF). Watershed Based means that Watershed Plans are referenced in order to prioritize and target funding for measurable results. NCRWMO has participated in three WBIF funding rounds. Partners work together and are funding activities throughout the watershed. Dakota SWCD manages these grants.



Dakota County supports Dakota SWCD cost-share programs by providing annual funding for projects and practices. Projects and practices are implemented through Dakota SWCD, which helps the County achieve goals in their plans, including the Agricultural Chemical Reduction Effort (ACRE) Plan and Land Conservation Plan.

## D. 2025 ACTIVITIES ASSESSMENT & WORK PLAN

In 2025, the WMO will help fund:

- Agricultural Practices—# TBD Projects
- Water Monitoring—12 sites
- Wetland Health Evaluation Program (WHEP) 2 wetlands
- Landscaping for Clean Water— 3 projects





Erosion along an old grassed waterway before it was reconstructed.



One week of oat cover crop growth after sweet corn harvest.



Completed grassed waterway with erosion control blanket.

## E. BIENNIUM PROGRESS TOWARDS WATERSHED PLAN

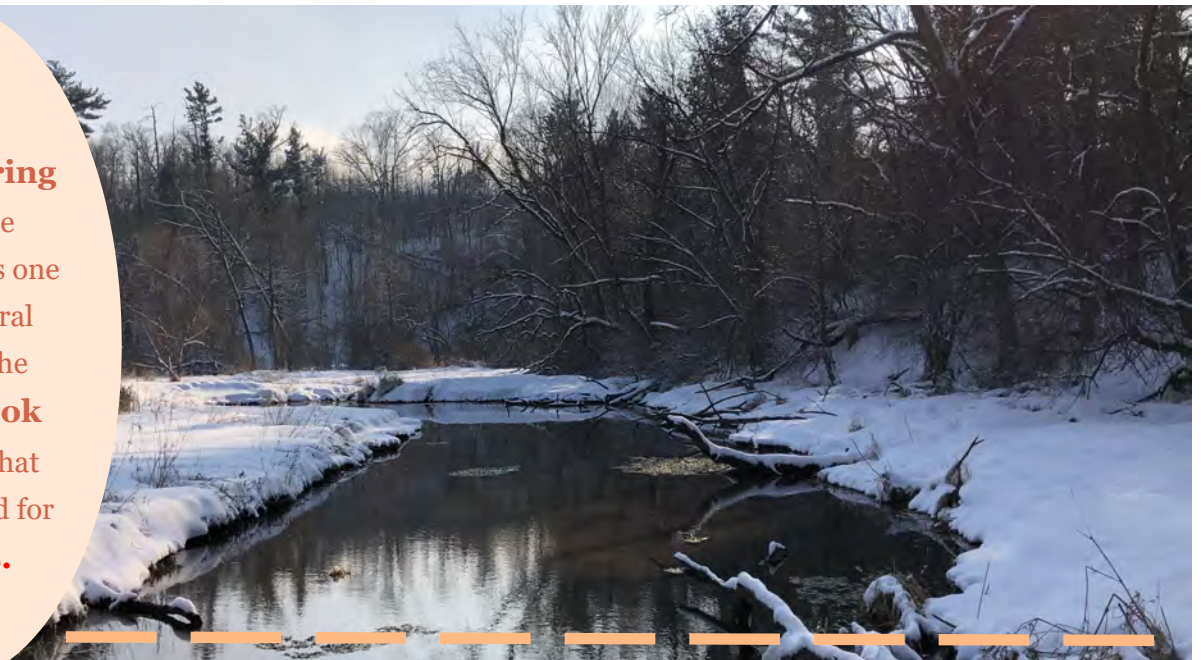
The NCRWMO Watershed Management Plan in 2023 identified the following activities and goals:

Issue	Measurable Goals	Activities Completed in 2023	Progress
Surface Water	Establish 5,000 acres of cover crops.	New SWCD contracts in 2023-2024 totaled 2,401 Estimated 3,000 additional acres installed through NRCS or independently.	Significant progress made
Surface Water	Increase wetland area within WMO by 60 acres.	Work continues on private wetland bank application, outreach to landowners regarding Local Government Road Wetland Replacement Program, and report completed to prioritize potential restoration and retention sites.	Significant progress made
Surface Water	Establish 10 nutrient management plans.	No plans written, future funding through NRCS Climate-Smart Ag practices will help further this goal.	Need to increase efforts
Surface Water	Reduce runoff of sediment by 7,300 tons/yr total phosphorus (TP) by 500 lbs/yr and total nitrogen by 8,500 lbs/yr. These reductions will achieve progress towards meeting the reduction goals identified in the Cannon River WRAPS.	Structural practices installed in 2023 reduce TSS by 250 tons/yr and phosphorus by 1,000 lbs/yr over the lifespan of the practice (10 years). Management practices, all cover crops in 2023, reduce nitrogen by 2,900 lbs/yr.	Significant progress made
Surface Water	Continue current Dakota County jurisdiction over county ditches in the watershed.	SWCD and County staff continue to work with landowners as needed.	Current efforts sufficient
Ground-water	Establish 5,000 acres of cover crops.	New SWCD contracts in 2023-2024 totaled 2,401 Estimated 3,000 additional acres installed through NRCS or independently.	Significant progress made
Ground-water	Establish 2,000 acres utilizing Irrigation Water Management	Irrigation Management Assistant users increased by 2 for a total of 19 users. Acres unknown, but most users likely operate multiple center pivots that cover at least 80 acres each.	Current efforts sufficient
Ground-water	Enroll 2,000 into Conservation Crop Rotation	No contracts through SWCD, efforts through NRCS unknown.	Need to increase efforts
Ground-water	Establish 1,000 acres of Perennial Crops	Contracted 55 acres of new perennial crops.	Need to increase efforts

## E. PLAN PROGRESS CONTINUED....

Policy and Regulation	Complete gaps analysis of ordinances and establish three model ordinances, then encourage all member LGU's to implement consistent ordinances.	Model Mining Ordinance written and provided to members for review and/or incorporation into local ordinances as they choose.	Current efforts sufficient
Policy and Regulation	Coordinate 2 meetings per year for partner entities to discuss enforcement of existing ordinances and improve coordination efforts between entities. Meetings should address any hurdles identified with coordination and enforcement of ordinances.	Use existing NCRWMO meetings to discuss ordinances.	Current efforts sufficient
Outreach and Education	Track effort and location of actions for surface water and groundwater outreach and education at least once every other year.	Efforts are tracked every year.	Current efforts sufficient
Outreach and Education	Develop three new surveys that will be sent to landowners following key project milestones (post outreach, post project, and during project lifespan).	No surveys completed in 2023 or 2024, efforts being made on survey for future years.	Need to increase efforts
Outreach and Education	At least twice in the life of the plan evaluate survey results, record findings, and update approach if needed.	No action needed in 2023 or 2024	Current efforts sufficient
Habitat	Develop one adaptive lake management plan for Chub Lake.	Gathered data for development of plan in 2025.	Current efforts sufficient
Data and Studies	Complete one comprehensive gaps analysis.	No gaps analysis completed in 2023 or 2024.	Need to increase efforts
Data and Studies	Revisit gaps analysis 5 years into planning period to assess what data/studies require updating.	No action needed in 2023 or 2024	Current efforts sufficient
Emerging Issues	Biannually, incorporate at least one piece of information into O&E.	Discussion at regular NCRWMO meetings.	Current efforts sufficient

**Beaver Spring**  
in Miesville  
Ravine Park is one  
of four natural  
springs in the  
**Trout Brook**  
Watershed that  
are monitored for  
**Nitrates.**



## F. MONITORING DATA TRENDS

The NCRWMO helps fund monitoring data at various locations throughout the watershed:

- Chub Creek (4 sites)
- Pine Creek (1 site)
- Trout Brook (3 sites, plus 4 spring sites)

These waters are monitored for:

- Physical, Continuous: Stage (depth), Streamflow, Continuous Temperature
- Physical Water, Snap-shot: Chlorophyll a, Conductivity, Dissolved O2, pH, Sediment, Temperature
- Nutrients: nitrates and phosphorus
- Bacteria: *E. coli*



Description	Trend
<b>Chub Creek</b>	
Chub Creek originates at Chub Lake and has 169 miles of stream channel that includes tributaries. It is impaired for Macroinvertebrates, Fishes, and Fecal Coliform, and its tributaries are impaired for the same, as well as <i>E.coli</i> .	Water quality generally meets water quality standards. Low Dissolved O2 , <i>E. coli</i> , and high nitrates an issue along some parts of the creek. T
<b>Pine Creek</b>	
Pine Creek is 5.8 miles and drains approximately 21 square miles of flat agricultural land. Most of the creek's length was ditched and straightened to create County Ditch #1 in 1960. The creek is designated as a trout stream downstream of Highway 52. It has been impaired for Nitrates since 2010. and Macroinvertebrates and <i>E. coli</i> was added in 2024.	Meets most standards consistently , except for nitrates and <i>E.coli</i> .
<b>Trout Brook</b>	
Is a groundwater fed stream located in karst topography with a surrounding agricultural land use. This stream has the steepest drop in elevation over its course of any stream in the watershed and flows through Miesville Ravine Park Reserve. It has a flashy flow during rain events. The lower section of the stream is a DNR designated trout stream. It is impaired for Nitrates, Turbidity, Macroinvertebrates, and <i>E. coli</i>	Water quality consistently meets standards, except for nitrates which show increasing levels (a combination of surface water and groundwater inputs*)
<b>Trout Brook Springs</b>	
This groundwater fed stream is fed by a series of springs. Four of the feeders springs to the stream have been monitored for nitrate on a semi-regular basis since 1985. Starting in 2018, these springs have been monitored quarterly.	Nitrate levels increasing*

\*"Age" of groundwater is indicative of past conditions. Lag time in ability to see surface management improvements in the water

## WETLAND HEALTH EVALUATION PROGRAM

For the eighth consecutive year the NCRWMO sponsored a Wetland Health Evaluation Program (WHEP) team and two wetlands were monitored. Over the eight years data has been collected at three different sites.

WHEP helps the NCRWMO reach their Watershed Plan goals for Education and Outreach. Each year a team of volunteers learns about wetland health and how to monitor macroinvertebrates and vegetation. The monitoring results are then used to look at the health of a wetland over time. Most importantly, the program familiarizes watershed residents with their local water resources and the benefits wetlands provide.

Below is a summary of results from 2024 based on the Index of Biotic Integrity (IBI). The IBI is a tool for assessing the health of a body of water by analyzing how the biology—including creatures living in the water—are responding to human behavior. The plants established early in the restoration effort may be responsible for the poor trends. A full report of the WHEP program can be viewed on the program website at [www.mnwhep.org](http://www.mnwhep.org).

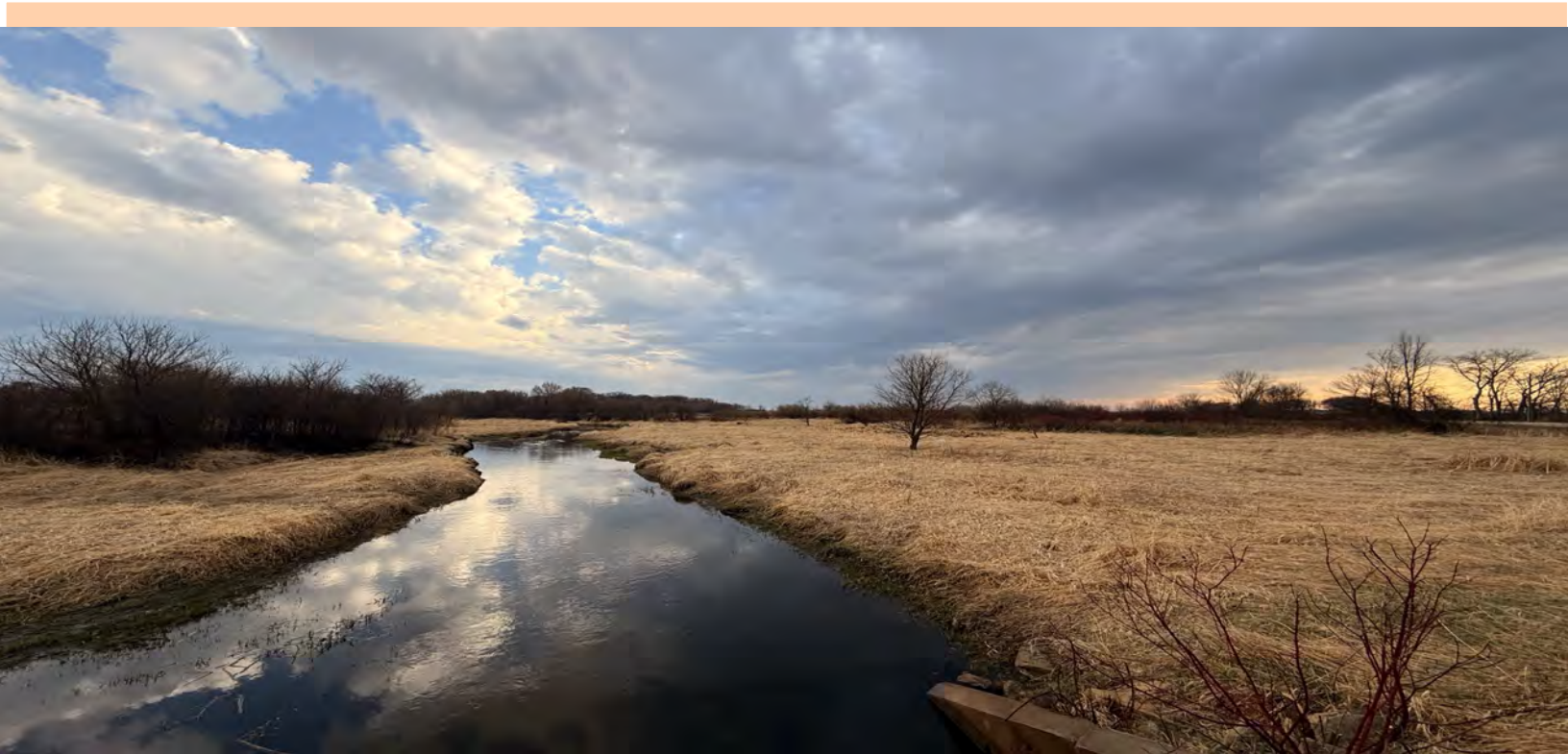
Wetland Code	Description	Vegetation Trend	Invertebrate Trend
NCR-1	A 0.5 acre restoration completed in 1996	Stable	Variable
NRC-2	Not monitored in 2024	—	—
NRC-3	A 36 acre restoration completed in 2019	Not Enough Data	Not Enough Data



## G. COPY OF ANNUAL COMMUNICATION

The WMO posts its Annual Report on its website and this serves as the annual communication as required under 103B.227 and Administrative Rule 8410.0105 Subpart 4.

The WMO also posts its annual Water Monitoring Report to the website.



## H. SOLICITATION FOR PROFESSIONAL SERVICE

In accordance with Minnesota Statute 103B.227 Subd. 5 *“a watershed management organization shall at least every two years solicit interest proposals for legal, professional, and technical consultant services before retaining services...”*

In 2024, the NCRWMO was in the middle of a two year solicitation period and did not advertise a request for proposal. At this time, the WMO only retains legal counsel.



## I. LOCAL WATER PLAN ADOPTION AND LOCAL IMPLEMENTATION

The WMO did not adopt any revisions in 2024 to its 2023 Watershed Plan. Shown is local water plan adoption over the past decade

Entity	Adopted	Entity	Adopted
<b>Castle Rock Township</b>	2018 2040 Comprehensive Plan, Local Management Plan (adopted 2013 plan, not the 2030 plan)	<b>Sciota Township</b>	
<b>Douglas Township</b>	2018 2040 Comprehensive Plan, Local Management Plan (adopted 2013 plan, not the 2030 plan)	<b>Waterford Township</b>	2018 2040 Comprehensive Plan, Local Management Plan (adopted 2013 plan, not the 2030 plan)
<b>Eureka Township</b>		<b>City of Miesville</b>	2018 2040 Comprehensive Plan, Local Management Plan (adopted 2013 plan, not the 2030 plan)
<b>Greenvale Township</b>	2018 Dakota County Rural Collaborative 2040 Comprehensive Plan, Local Management Plan (adopted 2013 plan, not the 2030 plan)	<b>City of New Trier</b>	2018 2040 Comprehensive Plan, Local Management Plan (adopted 2013 plan, not the 2030 plan)
<b>Hampton Township</b>	2018 2040 Comprehensive Plan, Local Management Plan (adopted 2013 plan, not the 2030 plan)	<b>City of Randolph</b>	2018 2040 Comprehensive Plan, Local Management Plan (adopted 2013 plan, not the 2030 plan)
<b>Randolph Township</b>	2018 2040 Comprehensive Plan, Local Management Plan (adopted 2013 plan, not the 2030 plan)		



## J. STATUS OF LOCALLY ADOPTED ORDINANCES OR RULES

The WMO does not have any locally adopted ordinances or rules, however it has aided in the created two model ordinances:

- Erosion Control and Stormwater Management Ordinance (2005)
- Mining Ordinance (2023)

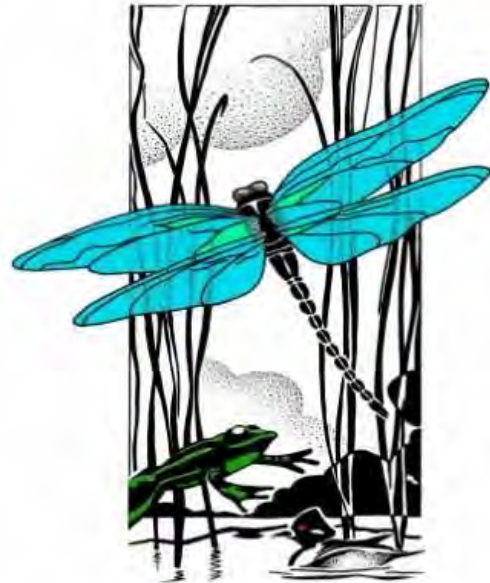
## K. SUMMARY OF PERMITS OR VARIANCES

Summary of permits and variances issued or denied and violations under rule or ordinance requirements of the local organization or local water plan.

**None for 2024.**



## GET INVOLVED!



Wetland Health  
Evaluation Program

