

North Cannon River Watershed Management Organization

Serving the Townships of: Castle Rock | Douglas | Eureka | Greenvale | Hampton | Randolph | Sciota | Waterford And the Cities of: Miesville | New Trier | Randolph

BOARD OF MANAGERS MEETING Wednesday, January 20, 2020 7:00 pm

CASTLE ROCK TOWN HALL

2537 240th St W, Farmington, MN 55024 **ZOOM ONLINE**

https://dakotacountymn.zoom.us/j/94800021626?pwd=dElkbE5LMklhMklPOEdUdlM2RFdQQT09

Meeting ID: 948 0002 1626 Passcode: 329155

1. Call to Order and Roll Call

* Indicates that support materials are included within the packet

- 2. Approval of Agenda
- 3. Election of Officers
- 4. Audience

Anyone in the audience wishing to address the Board regarding an item that is not on the agenda may come forward at this time.

- 5. Consent Agenda
 - 5.1 October 7, 2020 Meeting Minutes*
 - 5.2 Invoices for Payment*
 - 5.3 Year-end Financial Summary*
- 6. New Business
 - 6.1 Watershed Based Implementation Funding
 - a. Metro Cannon through Dakota SWCD
 - b. Greater Cannon through Cannon River Watershed Joint Powers Board (CRWJPB)
 - 6.2 2020 Annual Report*
 - 6.3 Highlighted Grant Activities*
 - a. Wetland Restorations
 - b. Irrigation Water Management
 - c. Sub-Watershed Analysis
- 7. Agenda Items and Location for April 21, 2021 Meeting
- 8. Member Community Reports
- 9. Adjournment



North Cannon River Watershed Management Organization

Serving the Townships of: Castle Rock | Douglas | Eureka | Greenvale | Hampton | Randolph | Sciota | Waterford And the Cities of: Miesville | New Trier | Randolph

DRAFT MINUTES

BOARD OF MANAGERS

October 7, 2020 7:00 p.m. Castle Rock Townhall and Virtual Zoom

NCRWMO Managers Present:

Castle Rock Township Douglas Township Greenvale Township

Greg Langer Greenvale Township
Dan Peine Hampton Township
Tony Van De Steeg Sciota Township

Others Present:

Ashley Gallagher, Dakota County SWCD Staff Jayne Hager Dee, Dakota County SWCD Board Kristin Dieterman, MN Pollution Control Agency

1. Call to Order

Sandy Weber

Jeff Reed

Chair Weber called the meeting to order at 7:05 p.m.

2. Approval of Agenda

Motion by Jeff Reed second by Dan Peine to approve the agenda. Roll call vote:

Member	Appointee	Vote
Castle Rock Township	Sandy Weber	у
Douglas Township	Jeff Reed	у
Greenvale Township	Greg Langer	у
Hampton Township	Dan Peine	у
Sciota Township	Tony VanDeSteeg	у

3. Audience

Chair Weber asked if there was anyone in the audience that wished to address the Board on an item that is not on the agenda. No one appeared.

4. Consent Agenda

- 4.1 July 15, 2020 Meeting Minutes
- 4.2 Invoices and Year-to-date Financial Report

Motion by Dan Peine, second by Jeff Reed to approve the consent agenda. Roll call vote:

Member	Appointee	Vote
Castle Rock Township	Sandy Weber	у
Douglas Township	Jeff Reed	У
Greenvale Township	Greg Langer	У
Hampton Township	Dan Peine	у
Sciota Township	Tony VanDeSteeg	У

5. New Business

- 5.1 Cannon River Comprehensive Watershed Management Plan (1W1P) Update- The Plan was approved by BWSR and adopted by the Cannon River Watershed Joint Powers Board. After working with BWSR, a new resolution was prepared that clarified a few items, including the metro entities are not replacing existing plans. Staff have been working on several items needed for implementation including Practice and Project Funding Policies, a three-year workplan and reporting/tracking templates. The Technical Advisory Group met to review these items prior to bringing them to the CRWJPB. No action need by the NCRWMO.
- 5.2 Watershed Based Implementation Funding (WBIF) Update- The group met a few times to determine ranking criteria and a project list. BWSR did not cut any funding in the metro WBIF program, therefore the full planned amount of \$305,293 is available for the NCRWMO WBIF Grant. The current project list is included in the meeting materials. There are many projects within the NCRWMO and a small portion (\$15,000) goes towards supporting work in the greater Cannon River Watershed outside of the metro area. Proposal has Dakota SWCD serving as the fiscal agent, which will minimize sub-agreements and fund transferring. It also keeps the NCRWMO below the threshold for annual audits. Next steps include submitting a work plan to BWSR and executing a grant agreement. No action needed as NCRWMO Board previously delegated voting to the Administrator (Gallagher) and Sandy Weber is representing the cities/townships.
- **5.3 NCRWMO Joint Powers Agreement (JPA) Update-** All NCRWMO members were contacted regarding approving the revised Joint Powers Agreement (JPA). Notification was sent to both clerks and Board representatives in mid-August. If your township or city has not acted on the JPA, please do so as soon as possible. Currently only Castle Rock Township, Eureka Township, Randolph Township, City of Randolph and Sciota Township have sent in their signature pages.
- **5.4 Website Update-** The consultant started work on the templates and is looking to secure domain names for the WMO sites. It is suggested to have the NCRWMO website be www.northcannonriverwmo.org.

Motion by Jeff Reed, second by Greg Langer to approve the web address as www.northcannonriverwmo.org. Roll call vote:

Member	Appointee	Vote
Castle Rock Township	Sandy Weber	У
Douglas Township	Jeff Reed	У
Greenvale Township	Greg Langer	у
Hampton Township	Dan Peine	У
Sciota Township	Tony VanDeSteeg	у

5.5 2021 Budget and Membership Dues- The Draft 2021 Budget for NCRWMO was included in the meeting materials. There is no increase in the budget or in member dues. There is no audit required in 2021, but funds shift to being used for the website redesign through the SWCD Workplan. There was a question about Landscaping for Clean Water (LCW) projects. The budget and next agenda item on workplan with SWCD allow for three projects to be installed each year. These LCW projects are different than the rural projects. LCW projects are either a raingarden, native planting or shoreline planting installed with design assistance from the SWCD and a small grant awarded upon completion.

Motion by Dan Peine, second by Jeff Reed to approve the budget and membership dues as presented. Roll call vote:

Member	Appointee	Vote
Castle Rock Township	Sandy Weber	у

Douglas Township	Jeff Reed	у
Greenvale Township	Greg Langer	у
Hampton Township	Dan Peine	у
Sciota Township	Tony VanDeSteeg	У

5.6 2021 Workplan with SWCD- The Draft Workplan with the Soil and Water Conservation District for services was included in the meeting materials. The workplan items are the same as last year's work plan with the addition of \$4,225 for the website redesign. The redesign was previously approved by the NCRWMO Board at the June meeting.

Motion by Jeff Reed, second by Greg Langer to approve the workplan with the SWCD for 2021. Roll call vote:

Member	Appointee	Vote
Castle Rock Township	Sandy Weber	у
Douglas Township	Jeff Reed	у
Greenvale Township	Greg Langer	у
Hampton Township	Dan Peine	у
Sciota Township	Tony VanDeSteeg	у

- **5.7 2021 Meeting Schedule-** The proposed meeting schedule:
 - January 20, 2021
 - April 21, 2021
 - July 21, 2021
 - November 17, 2021

Castle Rock volunteered to host January meeting, Greenvale volunteered to host April meeting and others are to-be-determined.

Motion by Jeff Reed, second by Tony Van De Steeg to approve the 2021 meeting schedule as proposed. Roll call vote:

Member	Appointee	Vote
Castle Rock Township	Sandy Weber	У
Douglas Township	Jeff Reed	У
Greenvale Township	Greg Langer	У
Hampton Township	Dan Peine	У
Sciota Township	Tony VanDeSteeg	у

- 6. Member Community Reports None.
- **7. Adjournment Motion** by Dan Peine, second by Jeff Reed to adjourn the meeting. Motion carried. Meeting adjourned at 7:25 p.m.



Invoice

DATE	INVOICE #
10/19/2020	3031

Dakota County Soil & Water Conservation District

4100 220th Street West, Ste 102 Farmingto n, MN 55024

BILL TO			
---------	--	--	--

North Cannon River WMO Frank Wergin, Treasurer 30468 Canada Avenue Northfield, MN 55057

Reference	TERMS

ITEM CODE	DESCRIPTION	HOURS	RATE	AMOUNT
	July - September 2020			
NCR WMO	ADMINISTRATIVE ASSISTANCE: General Administration, Financial Tasks, Board Meeting Coordination, Tour Planning (July 15, October 7 In Process). Campaign Finance Board List Coordination. Certificate of Deposit Coordination. Permitting Inquiry and Research Inquiry on Byllesby Groundwater. Watershed Based Implementation Funding Coordination, Meetings, Discussion. Website Redesign Meetings. Cannon River Watershed 2020 Joint Powers Agreement Sent to All Members. Bank Signatory Updates. General File Organization.	46.5	80.00	3,720.00
NCR WMO	Paper, Printing, and Postage		25.00	25.00
NCR WMO NCR WMO	Website Hosting (Per Quarter) Website Updates, Maintenance.	2	25.00 80.00	25.00 160.00
NCR WMO	ADVOCACY, EDUCATION AND OUTREACH Meet Volunteers at WHEP Site	1.5	80.00	120.00
	COST SHARE PROGRAM:			
NCR WMO NCR WMO NCR WMO	WATER MONITORING: Water Monitoring. Water Monitoring Supplies Water Quality Lab Analysis (04/01/2020-07/01/2020)	30	80.00 16.75 1,398.25	2,400.00 16.75 1,398.25
		-		

Total \$7,865.00



Invoice

DATE	INVOICE #
1/31/2021	3052

Dakota County Soil & Water Conservation District

4100 220th Street West, Ste 102 Farmington, MN 55024

BILL TO				
---------	--	--	--	--

North Cannon River WMO Frank Wergin, Treasurer 30468 Canada Avenue Northfield, MN 55057

Reference	TERMS

ITEM CODE	DESCRIPTION	HOURS	RATE	AMOUNT
	October - December 2020			
NCR WMO NCR WMO	ADMINISTRATIVE ASSISTANCE: General Administration and Correspondence Paper, Printing and Postage	41.5	80.00 25.00	3,320.00 25.00
NCR WMO NCR WMO	Web Site Hosting (Per Quarter) Web Site Updates and Maintenance	1	25.00 80.00	25.00 80.00
NCR WMO NCR WMO NCR WMO NCR WMO	COST SHARE PROGRAM - LANDSCAPING FOR WATER QUALITY: Matthews Residential Raingarden Matthews Residential Raingarden Technical Assistance Donahoe Native Prairie Restoration Donahoe Native Prairie Resotration Technical Assistance		250.00 500.00 1,125.00 375.00	250.00 500.00 1,125.00 375.00
NCR WMO NCR WMO NCR WMO NCR WMO	COST SHARE PROGRAM - AGRICULTURAL: Robert Winter Cover Crops Robert Winter Cover Crops Technical Assistance Pat Schaffer Cover Crops Pat Schaffer Cover Crops Technical Assistance		500.00 167.00 2,500.00 833.00	500.00 167.00 2,500.00 833.00
NCR WMO NCR WMO NCR WMO NCR WMO	WATER MONITORING: Water Monitoring Water Monitoring (Event) Water Monitoring Expenses Water Monitoring Lab Analysis Expense and Accrual (\$94.25)	5 0	80.00 80.00 34.50 377.00	400.00 0.00 34.50 377.00

Thank you.

Total \$10,511.50



Invoice

DATE	INVOICE #
12/31/2020	3053

Dakota County Soil & Water Conservation District

4100 220th Street West, Ste 102 Farmingto n, MN 55024

BILL TO		
---------	--	--

North Cannon River WMO WBF Grant Frank Wergin, Treasurer 30468 Canada Avenue Northfield, MN 55057

Reference	TERMS

ITEM CODE	DESCRIPTION	HOURS	RATE	AMOUNT
	FY19 Watershed Based Funding Grant Tasks October 4, 2020 to December 31, 2020			
NCR WM	Administration (0.50 Hours)		37.19	37.19
NCR WM	Project Development		0.00	0.00
	Agricultural Practices			
NCR WM	Structural Practices		0.00	0.00
	Technical Engineering			
NCR WM	Subwatershed Analysis (3.00 Hours)		234.19	234.19
NCR WM	Drainage Water Management (5.00 Hours		371.85	371.85
NCR WM	Drainage Water Management Expenses		0.00	0.00
	(8.50 Hours at Billable Rate)			

Thank you.

Total \$643.23

North Cannon River Watershed Management Organization

January 1, 2020 to December 31, 2020 Revenue and Expense Summary

					Final	Annual	
General Fund	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Entries	Total	2020 Budget
Revenues							
Member Allocations	\$34,861.34	\$0.00	\$0.00	\$0.00	\$138.66	\$35,000.00	\$35,000.00
Interest - Savings Account	\$22.38	\$20.07	\$20.30	\$19.37	\$0.00	\$82.12	\$50.00
Interest - CD	\$0.00	\$15.70	\$0.00	\$185.13	\$0.00	\$200.83	\$250.00
Total Revenues:	\$34,883.72	\$35.77	\$20.30	\$204.50	\$138.66	\$35,282.95	\$35,300.00
Expenses							
Administrative Services	\$4,804.88	\$2,690.00	\$3,930.00	\$3,552.00	\$3,450.00	\$18,426.88	\$13,800.00
Financial Audit	\$0.00	\$0.00	\$0.00	\$3,200.00	\$0.00	\$3,200.00	\$4,000.00
Organizational Dues	\$500.00	\$0.00	\$0.00	\$0.00	\$0.00	\$500.00	\$500.00
Advocacy, Education, Outreach	\$0.00	\$600.00	\$120.00	\$0.00	\$0.00	\$720.00	\$2,000.00
Education and Outreach GF	\$0.00	\$0.00	\$0.00	\$1,800.00	\$0.00	\$1,800.00	\$2,700.00
CS-Agricultural Projects	\$0.00	\$0.00	\$0.00	\$0.00	\$4,000.00	\$4,000.00	\$4,000.00
CS-Landscaping for Wtr Quality	\$0.00	\$0.00	\$0.00	\$0.00	\$2,250.00	\$2,250.00	\$2,250.00
Water Quality Monitoring	\$320.00	\$894.99	\$3,815.00	\$0.00	\$811.50	\$5,841.49	\$8,500.00
4th Generation WM Plan	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,500.00
Total Expenses:	\$5,624.88	\$4,184.99	\$7,865.00	\$8,552.00	\$10,511.50	\$36,738.37	\$39,250.00
Net Surplus / (-) Deficit	\$29,258.84	-\$4,149.22	-\$7,844.70	-\$8,347.50	<u>-\$10,372.84</u>	-\$1,455.42	<u>-\$3,950.00</u>

North Cannon River Watershed Management Organization

January 1, 2020 to December 31, 2020 Watershed Based Funding Grant

	2018	2019						Cumulative	
WBF Grant	Activity	Activity	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Annual Total	Total	Budget
Grant Funds Received	\$68,260.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$68,260.00	\$136,520.00
<u>Expenses</u>									
Grant Administration	\$88.31	\$246.95	\$412.25	\$0.00	\$0.00	\$37.19	\$449.44	\$784.70	\$6,826.00
Project Development	\$0.00	\$475.26	\$1,082.04	\$0.00	\$0.00	\$0.00	\$1,082.04	\$1,557.30	\$4,085.00
Agricultural Practices									_
Not-Structural Practices	\$0.00	\$38,325.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$38,325.00	\$32,490.00
Structural Practices	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$37,364.00
Technical Engineering	\$0.00	\$2,396.80	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,396.80	\$7,761.00
Subwatershed Analysis	\$465.90	\$3,432.74	\$0.00	\$2,297.29	\$0.00	\$234.19	\$2,531.48	\$6,430.12	\$33,250.00
Drainage Water Management	\$294.35	\$313.25	\$0.00	\$74.37	\$0.00	\$371.85	\$446.22	\$1,053.82	\$14,744.00
Drainage Water Management Exp	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	\$0.00	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>
Total Expenses:	\$848.56	\$45,190.00	\$1,494.29	\$2,371.66	\$0.00	\$643.23	\$4,509.18	\$50,547.74	\$136,520.00

Grant Balance: \$67,411.44 \$22,221.44 \$20,727.15 \$18,355.49 \$18,355.49 \$17,712.26 \$17,712.26

North Cannon River Watershed Management Organization

January 1, 2020 to December 31, 2020 Balance Sheet

Cash in Checking	\$68.26
Cash in Savings	\$76,679.75
Certificate of Deposit 11236	\$12,470.11
Total Cash:	\$89,218.12
Assessment Described	Ć420.66
Accounts Receivable	\$138.66
Total Assets:	\$89,356.78
Liabilities and Equity	
Accounts Payable	\$18,376.50
Accounts Payable WBF Grant	\$643.23
	\$19,019.73
Grant Funds Deferred	617 712 26
Grant Funds Deferred	\$17,712.26
Equity	
General Fund Balance January 1	\$43,580.21
Fund Balance Reserved for WP	\$12,000.00
Net Surplus / (-) Deficit	-\$2,955.42
Total Equity:	\$52,624.79
Total Liabilities and Equity:	<u>\$89,356.78</u>

North Cannon River Watershed Management Organization 2020 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) is a government unit formed through a joint powers agreement signed by eight townships and three cities in southern Dakota County. Its jurisdiction covers approximately 150 square miles.

The sub-watersheds within its boundaries are Chub Creek, Trout Brook, Pine Creek, Mud Creek, and the Cannon River from Northfield to Lake Byllesby. The NCRWMO is predominantly rural in nature with agriculture as its primary landuse.

The NCRWMO was created in 1983 as a result of the State of Minnesota's Surface Water Management Act. Minnesota Statute 103B.201 states that the purposes of a Watershed Management Organization shall be to:

- Protect, preserve, and use natural surface and groundwater storage and retention systems.
- 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.
- 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.

ACTIVITY REPORT

2020 Activities2
2021 Work Plan3
Wetland Program4
Grants5
FINANCIAL REPORT
Budget6
Member Dues Summary6
Statement7
Year End7
2021 Budget7
CONTACT US
Board of Managers8

Map of Watershed.....8

ATTACHMENTS

2020 Mid-Year Water Quality Monitoring Report







Few weeks of growth on Winter Cereal Rye cover crop at Callister's after seed corn

2020 ACTIVITIES

The NCRWMO Watershed Management Plan identifies the following projects and tasks:

Monitor water quality and water quantity in Chub Creek.

Status: Water quality and quantity monitoring in Chub Creek was completed in 2020 through a Joint Powers Agreement with the SWCD. Ppartners, including Dakota County Parks, provided additional funding for water quality monitoring at sites through the entire NCRWMO watershed. A summary is available on the NCRWMO website.

Conduct nitrate monitoring at springs in Trout Brook Watershed.

Status: Partnerships with Dakota County SWCD and Parks, as well as the University of Minnesota and Minnesota Geological Survey have allowed for the continued and expanded monitoring of springs. Springs monitored are Fox, LeDuc, Beaver and Swede. Results are analyzed in the Annual Water Quality Monitoring Report.

Cooperate with agencies to update nitrogen fertilizer rates; disseminate nitrogen fertilizer management recommendations.

Status: Through partnerships with Dakota County SWCD and the Minnesota Department of Agriculture (MDA), efforts have been made with a Local Advisory Team. However, the MDA Groundwater Rule now focuses on the Hastings DWSMA and does not overlap with Cannon Watershed. SWCD Staff will made efforts to spread BMP information to all producers in the County.

• Collaborate with communities to help identify buffer priorities.

Status: Efforts were completed by Dakota County SWCD and Dakota County due to the State Buffer Law.

 Provide grant match for water quality BMPs, BMPs that reduce rate and volume of runoff, nutrient management practices, wetland restoration projects, and shoreline BMPs.

Status: The NCRWMO annually provides approximately \$4,000 to the Dakota County SWCD to be used for projects or as grant match to leverage grant funding.

Promote and encourage volunteer water monitoring.

Status: The NCRWMO continues to sponsor the Wetland Health Evaluation Program (WHEP). Furthermore, through partnerships with Dakota County SWCD and the Minnesota Pollution Control Agency, monitoring of streams is promoted and multiple streams within the watershed have been monitored by volunteers.

 Provide education and partner with others; find funding to educate and engage agricultural producers.

Status: The Watershed Based Funding grant through the Board of Water and Soil Resources (BWSR) has helped the NCRWMO accomplish this task. Through a partnership with Dakota County SWCD outreach was provided on a number of BMPs.

2020 PROJECTS

STRUCTURAL

Ken Taylor

Grassed Waterway Cannon River

Mike Conzemius

Basins Trout Brook

Rodney Weber

Basins Trout Brook

Ed Graff

Basins Mud Creek

Peter Schweich

Basins Trout Brook

Harold Peine

Basins Trout Brook

Rollo Hohrman

Basin Chub Creek

COVER CROPS

William Callister

3 yr Pine Creek

M & J Grain

3 yr Cannon River

Randy Peine

3 yr Trout Brook 3 yr Trout Brook

Peter Schweich

Trout Brook

Roger Peine

yr Trout Brook

Jeff Peine 3 yr

Trout Brook

Pat Schaffer

1 yr Trout Brook

Tom Sorem

3 yr

Tom Endres

3 yr

Robert Winter

Pine Creek
Mud Creek

Mud Creek

NATIVE PRAIRIE

Mike Donahoe

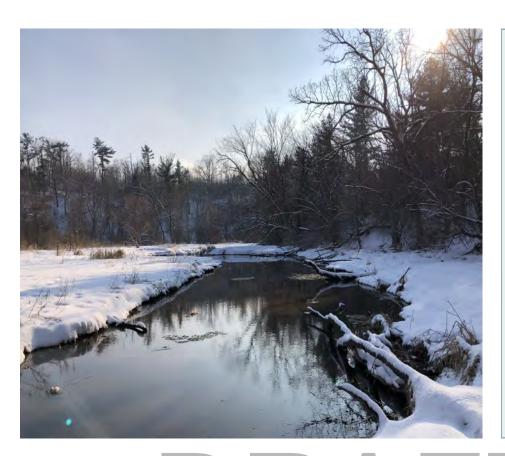
Chub Creek

Sheila Kennelly

Dutch Creek

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

2



Beaver Spring in

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

The Department of
Natural Resources
maintains an online
spring inventory that
allows users to submit
locations of springs they
have located

CANNON RIVER WATERSHED JOINT POWERS BOARD (CRWJPB)

The NCRWMO is a member of the CRWJPB along with thirteen other Local Government Units within the Cannon River Watershed for implementing the Cannon River Comprehensive Watershed Management Plan.

The **mission** of the CRWJPB is to:

"Work collaboratively to improve and protect the natural resources within the

Cannon River Watershed

to ensure prosperity of our urban and agricultural communities."

2021 WORK PLAN

The NCRWMO Watershed Management Plan identifies the following projects and tasks scheduled for 2020:

- Monitor water quality and water quantity throughout the watershed.
- Cooperate with agencies to update nitrogen fertilizer rates; disseminate nitrogen fertilizer management recommendations.
- Provide grant match for water quality BMPs, BMPs that reduce rate and volume of runoff, nutrient management practices, wetland restoration projects, and shoreline BMPs.
- Track groundwater quantity and quality through reports by others.
- Promote and encourage volunteer water monitoring.
- Provide education and partner with others; find funding to educate and engage agricultural producers.
- \blacklozenge Update NCRWMO website in coordination with other Dakota County WMOs

The following tasks are not identified in the NCRWMO Watershed Management Plan but are needed in order to address State strategies:

- Participate in the Cannon River One Watershed, One Plan (1W1P) planning process and the Cannon River Watershed Joint Powers Board.
- Participate in the Watershed Based Funding grant process through the Board of Water and Soil Recourses (BWSR).

WETLAND HEALTH EVALUATION PROGRAM

The NCRWMO sponsored a Wetland Health Evaluation Program (WHEP) team and two wetlands were monitored for the fourth consecutive year. Conditions at one location warranted a switch to a new wetland. The new location is a restoration near Highway 3 and County Road 86 in Castle Rock. The WHEP program was modified to ensure safety precautions due to the pandemic.

WHEP helps the NCRWMO reach their Watershed Plan goals for Education and Outreach. A team of approximately 5 volunteers learned 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 they provide.

We thank all of our WHEP volunteers and extend a special thanks to the team lead, Tom Loretto. When Tom was asked about the program he said "We had a small but enthusiastic crew of volunteers on our WHEP wetlands. Our forays in waders, in the muck, through canary grass and cattails, proved most enjoyable to our team as it marked a departure from their normal routine."

Wetland Code	Description	Vegetation Score	Invertebrate Score		
NC-1	A 0.5 acre restoration completed in 1996	Moderate (23)	Excellent (24)		
NC-2	Not monitored in 2020 due to water level conditions		_		
NC-3	A 36 acre restoration completed in 2019	Poor (15)	Moderate (16)		





WATERSHED BASED FUNDING

Clean Water Land and Legacy funding through the Board of Water and Soil Resources (BWSR) is shifting from competitive to Watershed Based Funding (WBF). Watershed Based means that Watershed Plans are referenced in order to prioritize and target funding for measurable results. In 2018, NCRWMO executed a grant for activities in the watershed. This funding is to be spent by the end of 2021. In 2020, the Watershed Based Funding program changed slightly from the pilot year. Partners came together and are funding activities in the watershed, but this grant is funneled through Dakota SWCD. Dakota SWCD manages both grants either directly or through a JPA with NCRWMO.

Below is a list of some activities in these grants, a description and an update on progress:

Structural Erosion Control Practices

Description: Funds will be prioritized for projects in areas where a Subwatershed Analysis (SWA) is complete and according to their costbenefit ratio.

Progress: Trout Brook was the first SWA focus area. Since then additional SWAs have been completed. In Pine Creek, North Lake Byllesby, Cannon Direct and in progress for North Branch Chub Creek. Subsequent grant activities will focus on completing SWAs for two more subwatersheds.

Non-Structural Erosion Control Practices

Description: Funds will be used primarily for cover crops, and may include perennial cover or perennial crops. Priority is based on location (i.e. groundwater susceptibility) and project details (i.e. other pollutant concerns addressed).

Progress: Funding is spent from the first WBF grant and the second grant will allocate more to these activities. Common cover crops include oats, radishes, and winter cereal rye.

Irrigation Water Management

Description: Provide tools and assistance for producers to schedule irrigation which can reduce groundwater demand and reduce the potential of nitrate leaching.

Progress: Partnering with MDA allowed for installation of a weather station near Hastings with data online. The next grant will allow for development of an online tool, that can automatically integrate weather data.

Drainage Water Management Outreach

Description: Provide education and outreach on suitable drainage water management (DWM) practices in the NCRWMO area.

Progress: Staff coordinated with Natural Resources Conservation Service (NRCS) as they are doing similar outreach work. Staff developed materials in anticipation of an outreach event. Due to the pandemic, events were not held.

♦ Wetland Restorations

Description: Target areas in the Chub Creek sub-watershed for wetland restorations.

Progress: This is an activity in the new grant and outreach will begin in 2021.



2020 BUDGET

EXPENSES

REVENUE



2020 MEMBER DUES

Community	% of Watershed	Tax Capacity in Watershed	% Tax Capacity	50/50 Share	Member Dues
Castle Rock Township	10.31	1.09	11.21	10.76	\$3,778.60
Douglas Township	17.78	1.19	12.24	15.01	\$5,088.66
Eurkea Township	7.43	0.61	6.28	6.85	\$2,366.76
Greenvale Township	19.97	1.55	15.95	17.96	\$6,289.52
Hampton Township	15.68	1.17	12.04	13.86	\$4,891.28
Randolph Township	6.98	1.66	17.08	12.03	\$4,262.54
Sciota Township	9.99	0.88	9.05	9.52	\$3,229.58
Waterford Township	9.90	0.99	10.19	10.04	\$3,557.80
Miesville	1.17	0.20	2.06	1.61	\$570.71
New Trier	0.12	0.06	0.62	0.37	\$138.66
Randolph	0.67	0.32	3.29	1.98	\$825.89
Total Dues					\$35,000.00



2019 REVENUES AND EXPENDITURES

Revenues	
Member City Assessments	\$32,000.00
Interest Income	\$349.37
Total Revenues:	\$32,349.37
Expenses	
Administrative Services	\$11,070.80
Water Quality Monitoring	\$8,845.40
Advocacy, Education, Outreach	\$2,980.00
Conservation Program	\$3,5 0.00
Misc Administrative	\$ 5.00
Total Expenses:	\$26,411.20
Watershed Based Funding Grant	
Total Grant Funds Received	\$68,260.00
Grant Expenses	
Grant Administration	\$246.95
Project Development	\$475.26
Agricultural Practices	\$40,721.80
Subwatershed Analysis	\$3,432.74
Drainage Water Management	\$313.25
Total Expenses:	\$45,190.00
Change in Net Position	\$5,938.17
Fund Balance—January 1	\$48,142.04
Total Fund Balance—December 31, 2019	\$121,751.05

2019 YEAR END FINANCIALS

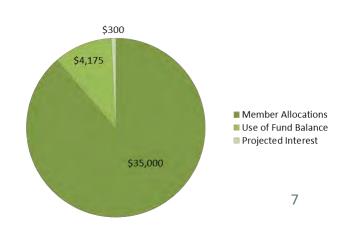
Assets	
Cash in Checking	\$53.51
Cash in Savings	\$109,428.26
Certificate of Deposit 11236	\$12,269.28
Total Cash:	\$121,751.05
Accounts Receivable	\$118.13
Total Assets:	\$121,869.18
Liabilities	\$4,734.96
Accounts Payable WBF Grant	\$40,832.57
Total Liabilities:	\$45,567.53
Equity	
General Fund Balance January 1	\$48,142.04
Net Surplus / (-) Deficit	\$5,938.17
Total Equity:	\$54,080.21
Total Liabilities and Equity:	\$121,869.18
Watershed Based Funding (WBF)	
Grant Funds Deferred	\$22,221.44
Reserved—WBF Grant	
Total All Cash:	\$121,751.05

2021 BUDGET

EXPENSES

■ Administrative \$1,500 Services ■ Water Quality Monitoring \$4,000 Advocacy, Education \$13,525 and Outreach \$4,500 ■ Website Redesign \$6,950 Cost Share Program \$8,500 Watershed Plan Reserves Organizational Dues

REVENUE



ADMINISTRATION

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

4100 220th St West, Suite 102, Farmington, MN 55024

(651) 480-7777

www.dakotacountyswcd.org

2021 MEETING SCHEDULE

January 20th

April 21st

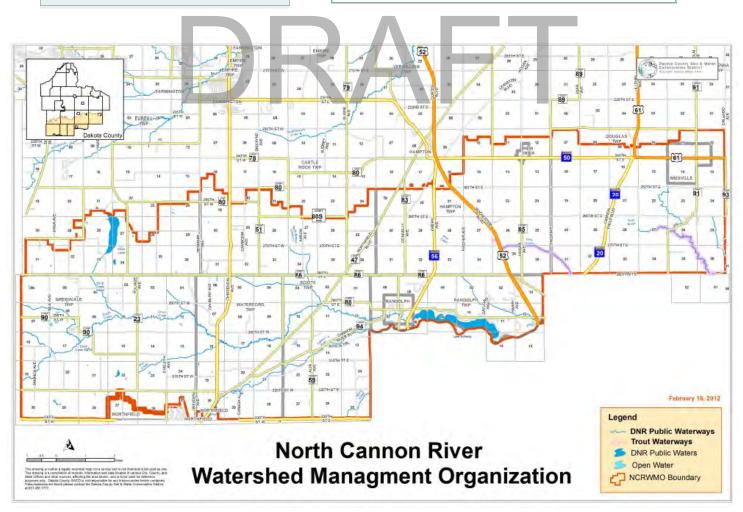
July 21st

November 17th

Locations to be Determined

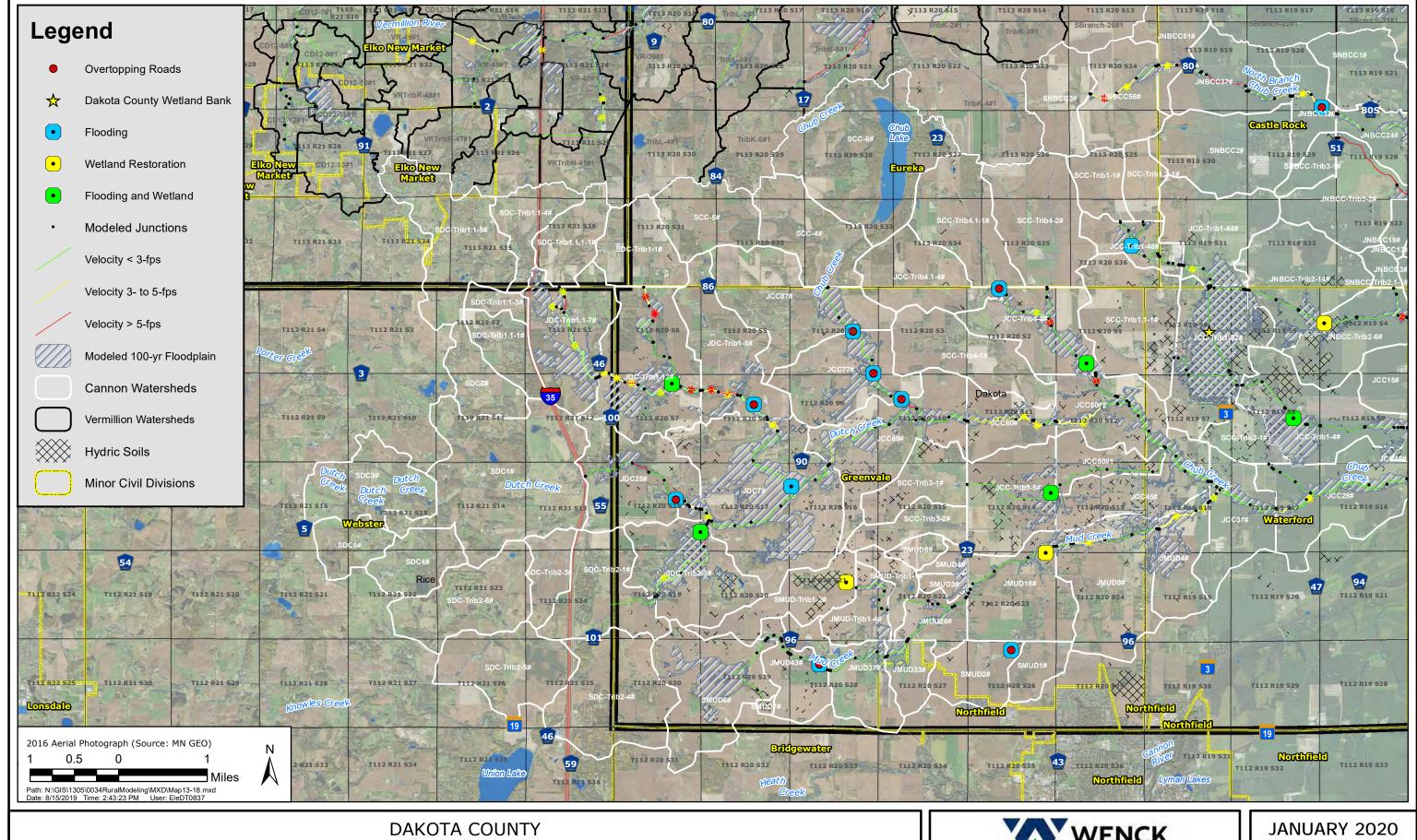
BOARD OF MANAGERS

Member	Appointee
Castle Rock Township	Primary: Sandy Weber (Chair)
	Alternate: Vacant
Douglas Township	Primary: Jeff Reed
	Alternate: Vacant
Eureka Township	Primary: Donovan Palmquist
	Alternate: Vacant
Greenvale Township	Primary: Greg Langer
	Alternate: Wayne Peterson
Hampton Township	Primary: Dan Peine
	Alternate: Doug Wille
City of Miesville	Primary: Vacant
	Alternate: Vacant
City of New Trier	Primary: Vacant
	Alternate: Vacant
City of Randolph	Primary: Harlan Lichty
	Alternate: Vacant
Randolph Township	Primary: Mark Elliott
	Alternate: Don Dinesen
Sciota Township	Primary: Tony VanDeSteeg
	Alternate: Vacant
Waterford Township	Primary: Frank Wergin (Treasurer)
	Alternate: Vacant



Map from Storm Water Management Model (SWMM) Report

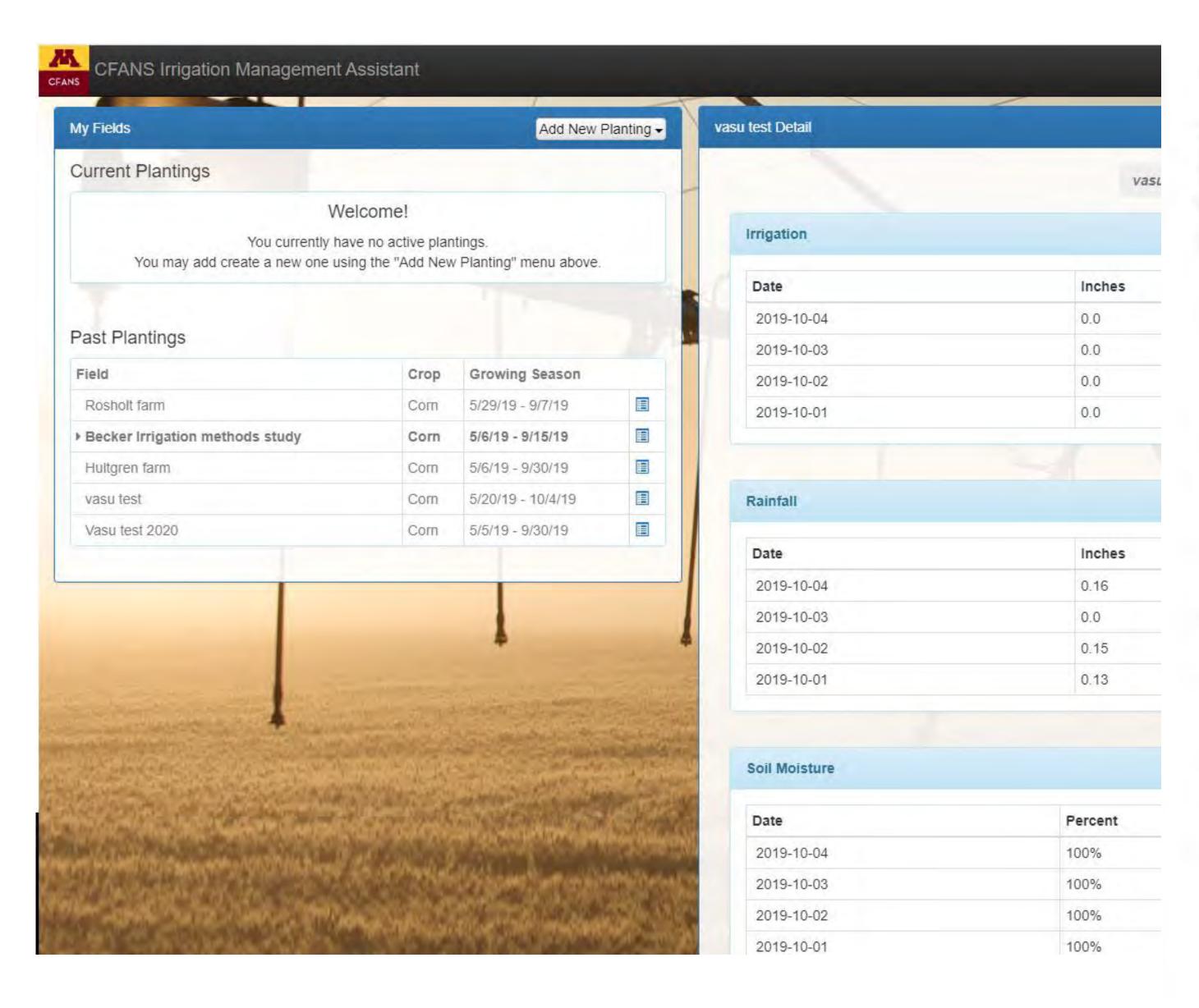
North Cannon Potential Projects (West)

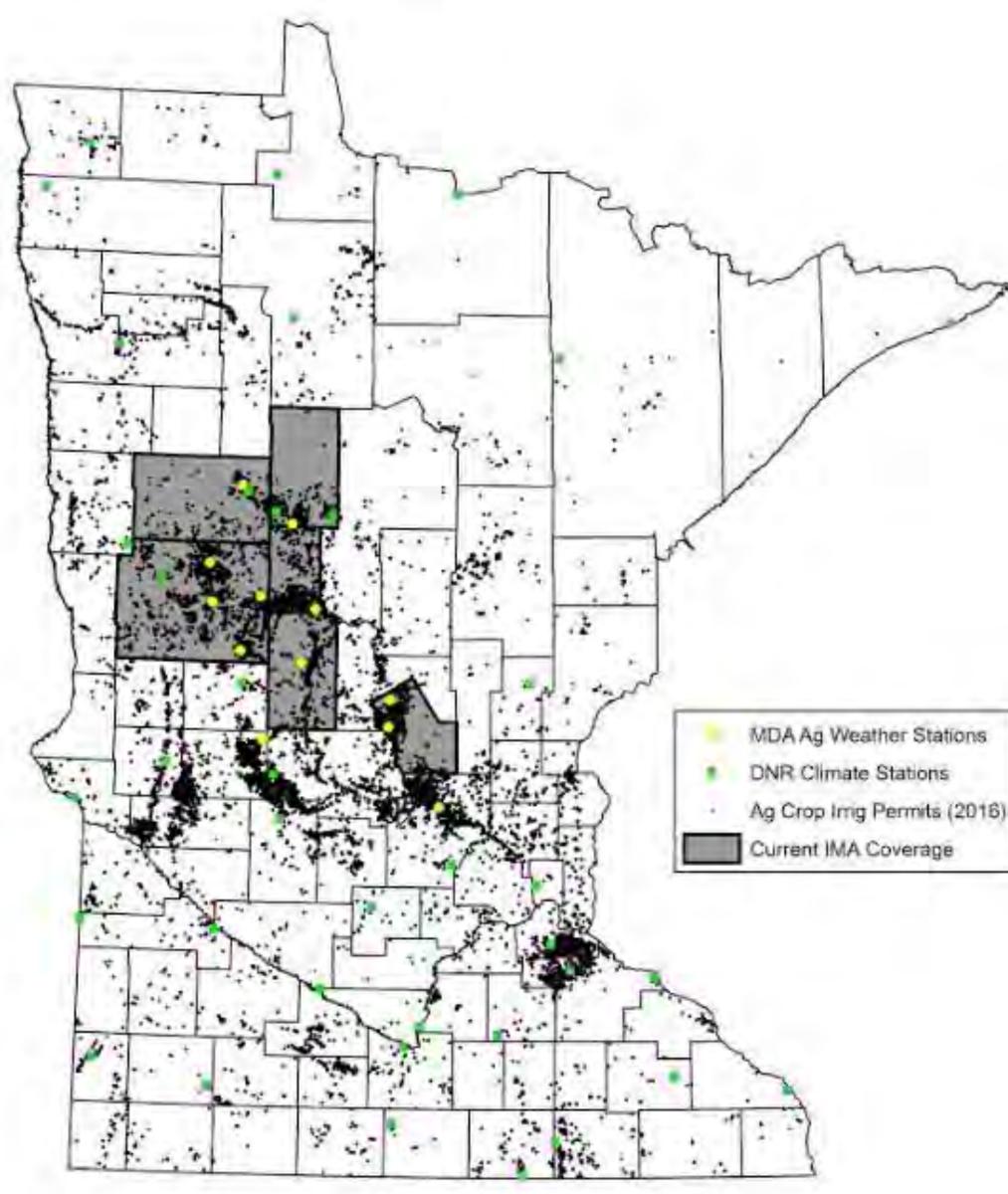


WENCK Responsive partner. Exceptional outcomes.

16 of 24 Page

Irrigation Management Assistant (IMA) Tool

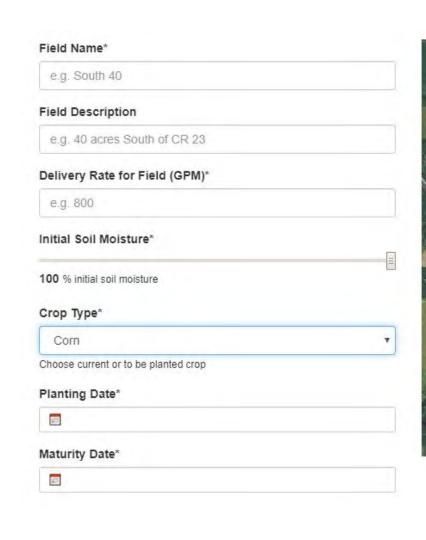




Irrigation Management Assistant (IMA) Tool

Inputs

- Location of your field
- Delivery rate (GPM)
- Initial soil moisture
- Crop type
 - Planting date
 - Maturity date





Outputs

- Irrigation time and amount
- Graphical view of soil moisture throughout the growing seas
- Detailed report at the end of the season

Field Name: Vasu test 2020 Growing Year: 2019 Report Date: 3/3/2020 User: Vasudha Sharma

Field Summary

Initial Soil Moisture	Delivery Rate (gpm)	Area (ac.)	Capacity 0-12 (in)	12-24 (in)	24-36 (in)	36-48 (in)	Cumulative Rainfall (in)	Cumulative Irrigation (in)
16.0%	500.0	87.7	4.1	3.1	1.1	1.0	26.4	0.0
	Soil Moisture	Soil Rate Moisture (gpm)	Soil Rate (ac.) Moisture (gpm)	Soil Rate (ac.) 0-12 (in) Moisture (gpm)	Soil Rate (ac.) 0-12 (in) (in) Moisture (gpm)	Soil Rate (ac.) 0-12 (in) (in) (in) Moisture (gpm)	Soil Rate (ac.) 0-12 (in) (in) (in) (in) Moisture (gpm)	Soil Rate (ac.) 0-12 (in) (in) (in) Rainfall (in) Moisture (gpm)

ield Irrigation Schedule

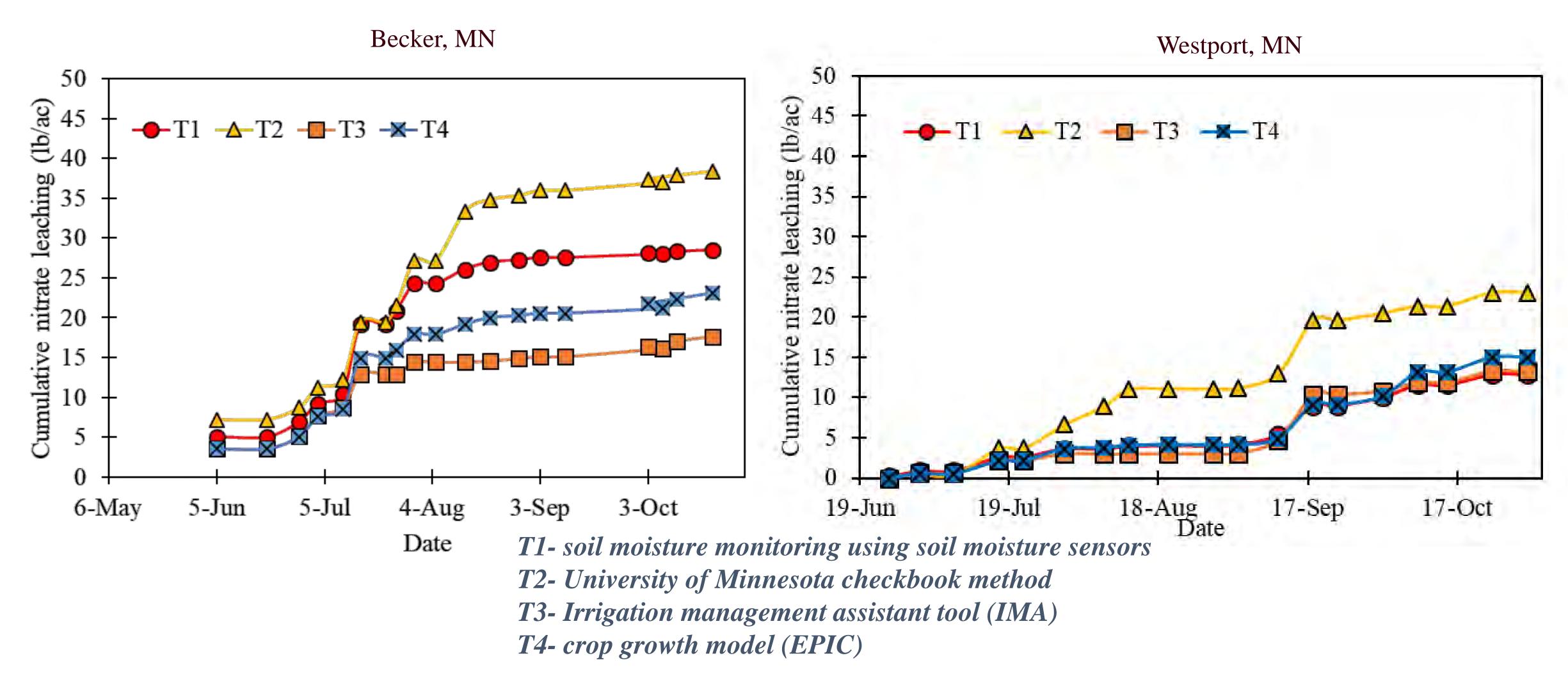
Date	Rainfall (inches)	Irrigation (inches)	Field Capacity (inches)	Current Balance Capped (inches)	Minimum Allowable Soil Moisture (inches)	Irrigation Needed in 3 Days?	Irrigation Amount Needed (inches)
5/5	0.33	0	4.13	0.97	1.24		15.
5/6	0.02	0	4.13	0.96	1.24		100
5/7	0.01	0	4.13	0.95	1.24	x	0
5/8	2.16	0	4.13	3.1	1.24		0
5/9	0.2	0	4.13	3.29	1.24		0
5/10	0	0	4.13	3.24	1.24		0
5/11	0	0	4.13	3.19	1.24		0

Checkbook Irrigation Scheduling

- Works on the same principle as the Irrigation Management Assistant (IMA) tool
- Manual inputs of soil information and maximum air temperature - daily update is required

4	Α	В	С	D	Н	1	J	K	L	M	N	0	Р	Q	R	S	Т	U
1 I	Irrigation Scheduling by the Checkbook Method								Instruction	<u>s</u>	Internal	Links	Externa	l Links		Authors		
2 N	/linnesota ET	ET Tables, Conventional Units.						Crops		R Soils NDAWN		Disclaimer						
3						Crop:	Corn		ET Tab	<u>les</u>	Web So	il Surve	у R	evisions				
4 F	Field:	Smith's NE	29, Ma	dison Twp,			Е	mergence:	5/1/2009		<u>Charts</u>				Ver. 2.5			
5					1								Cumi	ulative V	alues			
	Date	Daily	Week	ET for all	Effective	Effective	Soil-	Soil-	Soil-Water	Water	Root	Available	Total	Total	Total	Total	Notes	Manage
		Maximum	Past	Crops	Rain	Irrigation	Water	Water	Deficit	Losses	Zone	Water	ET	Rain	Irrigation	Water		ment
		Temper-	Emer-	Except	(R)	(l)	Deficit	Deficit	Percent	(Deep	Depth	Holding				Losses		Allowed
		ature	gence	Cut Alfalfa			(SWD)	Percent	(Adjusted)	Percolation	(RZ)	Capacity						Depletion
		(T _{max})	(WPE)	(ET)				(SWDP)	(SWDP _{adi})	or Runoff);		for the						(MAD)
									,,	(WL)		Root Zone						
5												(AWHC _{RZ})						
7	-	°F	_	in.	in.	in.	in.	%	%	in.	in.	in.	in.	in.	in.	in.		%
3	4/30/2009	49	0	0.00	0.06		0.00	0%	0%	0.00	4.0	0.28	0.00	0.06	0.00	0.00		50%
9	5/1/2009	54	1	0.01	0.01		0.00	0%		0.00	4.0	0.28	0.01	0.07	0.00	0.00		50%
0	5/2/2009	64	1	0.02	0.11		0.00	0%		0.09	4.8	0.35	0.03	0.18	0.00	0.09		50%
1	5/3/2009	50	1	0.00	0.00		0.00	0%		0.00	5.5	0.42	0.03	0.18	0.00	0.09		50%
2	5/4/2009	41	1	0.00	0.00		0.00	0%		0.00	6.3	0.49	0.03	0.18	0.00	0.09		50%
3	5/5/2009	63	1	0.02	0.00		0.02	4%		0.00	7.0	0.55	0.05	0.18	0.00	0.09		50%
4	5/6/2009	73	1	0.03	0.00		0.05	8%		0.00	7.8	0.62	0.08	0.18	0.00	0.09		50%
5	5/7/2009	78	1	0.03	0.04		0.04	6%		0.00	8.6	0.71	0.11	0.22	0.00	0.09		50%
6	5/8/2009	72	2	0.04	0.10		0.00	0%		0.02	9.3	0.81	0.15	0.32	0.00	0 11		50%

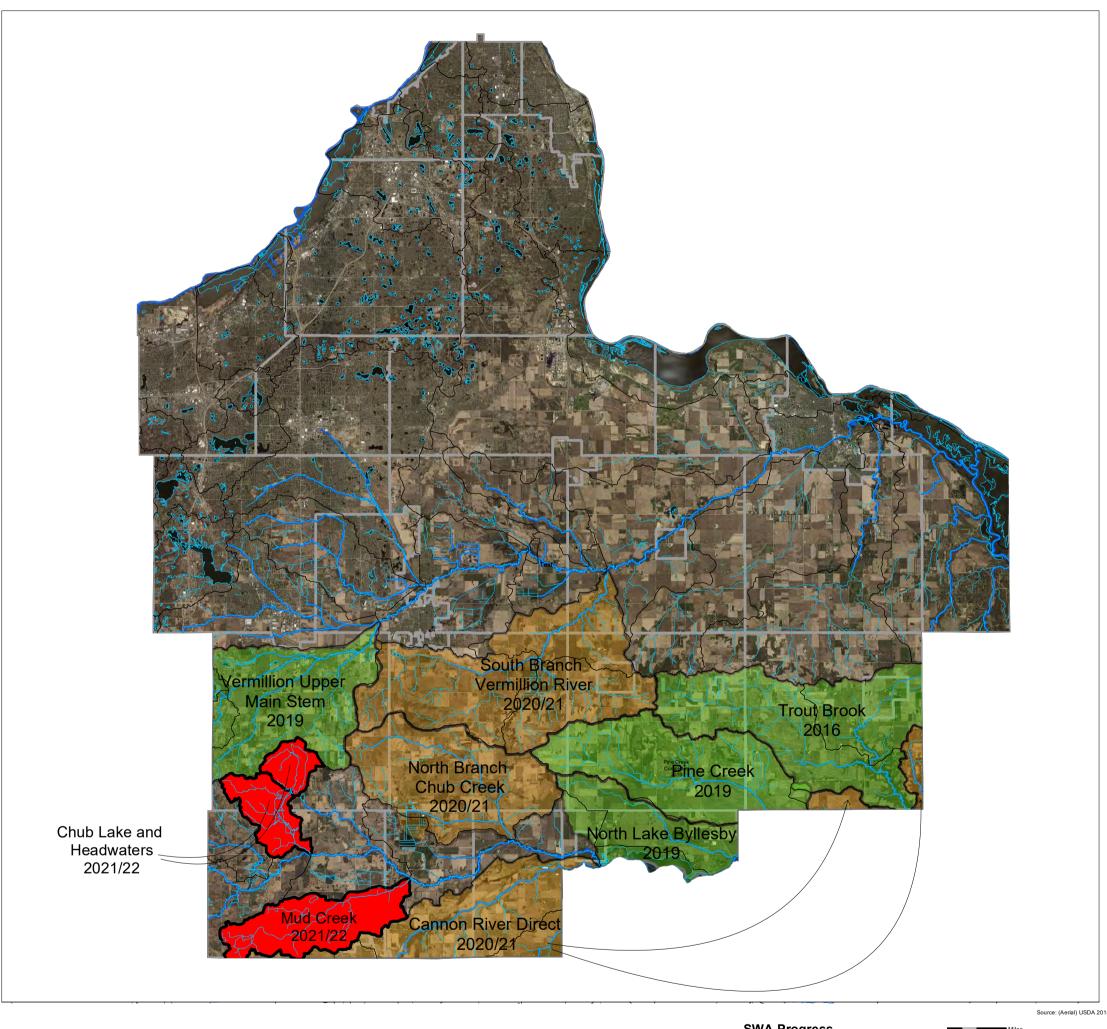
Cumulative NO₃-N leaching (lb/ac) below the root zone in four irrigation treatments



 57% and 60% less nitrate-N leaching in IMA as compared to checkbook method in Becker and Westport, MN, respectively



6.3 C. Subwatershed Analysis



Dakota County
Subwatershed Analysis Progress

SWA Progress
Complete
In progress
Scheduled
HUC8 Watersheds

