



*Scott Watershed Management Organization*

*200 Fourth Avenue West*

*Shakopee, MN 55379-1220*

**Scott  
Watershed Management Organization**

**April 27, 2020**

**4:00 PM**

**Watershed Planning Commission Meeting  
Video Conference**



*Scott Watershed Management Organization*

200 Fourth Avenue West

Shakopee, MN 55379-1220

952-496-8054

Fax 952-496-8496

www.co.scott.mn.us

00000000

**AGENDA**

**Scott WMO – Watershed Planning Commission**

**April 27, 2020**

**4:00 p.m.**

**Watershed Planning Commission Meeting  
Video Conference**

**Welcome New Commissioner Pamela Caselius**

- |  |             |
|--|-------------|
| <b>I. Call to Order</b>  | Action      |
| <b>II. Approval of Agenda</b>  | Action      |
| <b>III. Approval of Meeting Minutes</b>                                | Action      |
| a. February 24, 2020   |             |
| <b>IV. Approval of 2020 meeting dates</b>                              | Action      |
| <b>V. Staff Reports</b>  |             |
| a. Scott SWCD  | Information |
| b. Scott WMO – COVID-19 Operations Plan                                | Information |
| <b>VI. Old Business</b>  |             |
| a. Project Updates   | Information |
| b. McMahon Lake Outlet Legislative Proposal                            | Information |
| c. 2020 Watercraft Inspections   | Information |
| <b>VII. New Business</b>   |             |
| a. 2019 Annual Report and Newsletter                                   | Action      |
| b. Local Water Management Plan Approvals<br>Elko New Market and Savage | Action      |
| c. Savage Local Water Plan   | Information |
| d. Adam Simon Grassed Waterway TACS Application                        | Action      |
| <b>VIII. Adjourn</b>   | Action      |



*Scott Watershed Management Organization*

200 Fourth Avenue West

Shakopee, MN 55379-1220

**MINUTES**

**Scott County WMO – Watershed Planning Commission**

**County Boardroom**

**February 24, 2020**

**Members Present:**

Virgil Pint  
Joe Thill  
Brian Schmidt  
Rita Weaver  
Kevin Shea

**Staff Present:**

Vanessa Strong  
Ryan Holzer  
Beverly Cox-Alexander  
Troy Kuphal

**Others Present:**

Bruce Loney  
Tom Wolf

**Absent:**

Mark Vierling

**CALL TO ORDER**

Vice Chair Weaver called the meeting to order at 4:00 PM.

- Specific details and video of the entire February 24, 2020 Scott County WMO Watershed Planning Commission Meeting is available for viewing on the Scott County Website.
- The video link can be viewed at: <https://www.youtube.com/watch?v=SQYcs8gvqrQ>

**APPROVAL OF AGENDA:**

**Motion by Commissioner Pint; second by Commissioner Shea to approve the February 24<sup>th</sup> 2020 Meeting Agenda as amended below. The motion carried unanimously.**

**Amended Agenda**

**Removal of New Business Item**

**a.) Shakopee Water Management Plan**

**APPROVAL OF MEETING MINUTES NOVEMBER 25, 2019:**

**Motion by Commissioner Schmidt; and Second by Commissioner Shea to approve the November 25, 2019 minutes as written and presented. .**

**Motion Carried:                      Ayes: 4                      Abstain: 1**

**RECOGNITION OF INTERESTED CITIZENS**

- Citizen, Tom Hanzel was present and commented on the drainage of Clarks Lake. Mr. Hanzel inquired if the easement on Clark's Lake has expired and what conclusion has the Watershed Management Organization come to as Clark's Lake is currently drained.
- *Vanessa Strong, Water Resources Supervisor commented; staff will look into this and report back to Mr. Hanzel*
- Bruce Looney introduced himself. Bruce is the WMO liaison representing the Prior Lake Spring Lake Watershed District and is taking over for Charles Howley

**ELECTION OF OFFICERS FOR 2020**

**CHAIR**

**Motion by Commissioner Pint; and Second by Commissioner Shea to elect Rita Weaver as the 2020 Watershed Planning Commission Chair. The motion carried unanimously.**

**VICE CHAIR**

**Motion by Commissioner Weaver; and Second by Commissioner Thill to elect Virgil Pint as the 2020 Watershed Planning Commission Vice Chair. The motion carried unanimously.**

## STAFF REPORTS:

### SCOTT SWCD:

- Troy Kuphal provided highlights of the February 24, 2020 SWCD report that is available in the meeting packet
- Technical Assistance and Cost Share Requests; currently managing approximately 250 service request cases.
- Marketing and Promotion
  - Soil Health / Cover Crop
  - The cover crop workshop date has been changed to March 19<sup>th</sup> due to speaker conflict
  - A “Cover Crop 101” workshop is schedule for March 4<sup>th</sup> from 2 pm to 4 pm
  - The SWCD met with Ken Thomas from Farmer’s Mill regarding program collaboration
- Clean Water Education Program (SCWEP)
  - Awarded a BWSR “Lawns to Legumes” grant for \$20766.00
  - SWCD met with Cedar Lake Improvement District members to assist and partner with them on developing public outreach strategic plan
  - 2020 workshops at the Spring Lake Town Hall
    - Raingarden workshop scheduled for April 8<sup>th</sup>
    - Shoreline workshop scheduled for June 10<sup>th</sup>
- Monitoring
  - Volunteer Rainfall Monitoring
    - This past January precipitation amounts at the average level
- Wetland Conservation Act
  - Helena Wetland Bank
- Tree Program (SWCD)
  - Launched on January 1st
- Equipment Rental Use
  - Set a record year in 2019
- Cooperative Weed Management (CWM) Program
  - Successful in receiving a \$10,000.00 MDA Noxious Weed Grant
- WMO TACS Program Action By SWCD Board
  - Payments
    - Casey Acres, Inc. (Cover Crop)
    - Perez, Manuel (Conservation Cover)
    - Scheffler, Hilary (Cover Crop)
    - Scheffler, Travis (Cover Crop)
  - New Application
    - Pexa, Scott (Water & Sediment Control)

### SCOTT WMO:

Updates from Vanessa Strong

- Melissa Bokman is back from medical leave and is currently teleworking limited hours
- Staff is working very hard on end of year financials
- The WMO completed all (18) grant reports to BWSR on time, with Ryan Holzer taking on much of the role

- Last month, Vanessa Strong attended a legislative breakfast for McMahon Lake
  - Senator Pratt and Representative Albright introduced SF3022 and HF3233 to provide a \$600,000.00 grant for McMahon Lake which will assist in providing a permanent outlet for McMahon Lake as it is currently landlocked
  - There will be a hearing anytime with staff attending as well as at least (1) resident
- The County has been approached by the Prior Lake Spring Lake Watershed District to discuss collaboration opportunities
  - There will be a joint workshop with the Board, SWMO, WPC and the Spring Lake Watershed District sometime in April
- Staff working heavily on plan reviews
- The County has been selected for a Level II PRAP Audit by BWSR. Staff will know more regarding the audit on March 17<sup>th</sup>.
- The County has also been selected for Municipal Storm Sewer MS4 Audit which will be led primarily by Megan Tasca

## **OLD BUSINESS**

### **Project Updates**

Updates from Ryan Holzer

- At the previous meeting a video was viewed of the completed streambank stabilization
  - The project is largely wrapped up with restoration and plantings outstanding.
  - Once water levels recede these items will be completed.
  - EPA funds will be used
  - (2) grants are paying for this project
  - \$2.2 Million Clean Water Fund Grant is coming to an end
- Ryan attended the MECA Conference (Minnesota Erosion Control Association)
  - Nature Conservancy was represented with a presentation on Cover Crops
    - Goal: 50% of all farm fields will be using cover crops
  - Presentation related to Sediment Sources in the LeSueur River
    - The study of analysis of sediment sources was similar to what the WMO found in sand Creek
  - Pond Clean out Project for the City of Champlin
  - Concluded with PJ Fleck as the capstone speaker

## **NEW BUSINESS**

### **A. Credit River Local Water Plan**

- The Scott WMO received a revised Credit River Township Surface Water Management Plan and upon review concluded all requirements have been met. WMO staff recommends approval of the Credit River Local Water Plan.

**Motion by Commissioner Pint; and Second by Commissioner Schmidt to approve the Credit River Township Surface Water Management Plan as presented. The motion carried unanimously.**

**ADJOURN MEETING**

**Motion by Commissioner Shea and Second by Commissioner Thill to adjourn the meeting at 4:31 PM. The motion carried unanimously.**

---

**Rita Weaver**  
Chair, Watershed Planning Commission

**Date**

---

**Beverly Cox-Alexander**  
Secretary

# 2020

## Holidays & Observances

### January

Su	M	Tu	W	Th	F	Sa
			<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>
<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>
<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>
<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>	<b>31</b>	

### February

Su	M	Tu	W	Th	F	Sa
						<b>1</b>
<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>
<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>
<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>

### March

Su	M	Tu	W	Th	F	Sa
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>
<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>
<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>
<b>29</b>	<b>30</b>	<b>31</b>				

**Jan 01** New Year's Day

**Jan 20** Martin Luther King Day

**Jan 25** Chinese New Year

**Feb 12** Lincoln's Birthday

**Feb 14** Valentine's Day

**Feb 17** President's Day

**Feb 26** Ash Wednesday

**Mar 08** Daylight Saving (begin)

**Mar 17** St. Patrick's Day

**Mar 20** Vernal equinox (GMT)

**Apr 01** April Fool's Day

**Apr 09** Passover

**Apr 12** Easter

**Apr 22** Admin Assistants Day

**Apr 24** Ramadan begins

**May 10** Mother's Day

**May 25** Memorial Day

**May 31** Pentecost

**Jun 14** Flag Day

**Jun 20** June Solstice (GMT)

**Jun 21** Father's Day

**Jul 04** Independence Day

**Sep 07** Labor Day

**Sep 19** Rosh Hashanah

**Sep 22** Autumnal equinox (GMT)

**Oct 12** Columbus Day

**Oct 31** Halloween

**Nov 01** Daylight Saving (end)

**Nov 11** Veterans Day

**Nov 26** Thanksgiving

**Dec 10** Hanukkah begins

**Dec 21** December Solstice (GMT)

**Dec 25** Christmas Day

**Dec 26** Kwanzaa begins

**Dec 31** New Year's Eve

### April

Su	M	Tu	W	Th	F	Sa
			<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>
<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>
<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>
<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>		

### May

Su	M	Tu	W	Th	F	Sa
					<b>1</b>	<b>2</b>
<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>
<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>
<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>
<b>31</b>						

### June

Su	M	Tu	W	Th	F	Sa
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>
<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>
<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>
<b>28</b>	<b>29</b>	<b>30</b>				

### July

Su	M	Tu	W	Th	F	Sa
			<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>
<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>
<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>
<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>	<b>31</b>	

### August

Su	M	Tu	W	Th	F	Sa
						<b>1</b>
<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>
<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>
<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>
<b>30</b>	<b>31</b>					

### September

Su	M	Tu	W	Th	F	Sa
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>
<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>
<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>
<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>			

### October

Su	M	Tu	W	Th	F	Sa
			<b>1</b>	<b>2</b>	<b>3</b>	
<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>
<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>
<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>	<b>31</b>

### November

Su	M	Tu	W	Th	F	Sa
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>
<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>
<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>
<b>28</b>	<b>29</b>	<b>30</b>				

### December

Su	M	Tu	W	Th	F	Sa
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>
<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>
<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>
<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>	<b>31</b>		



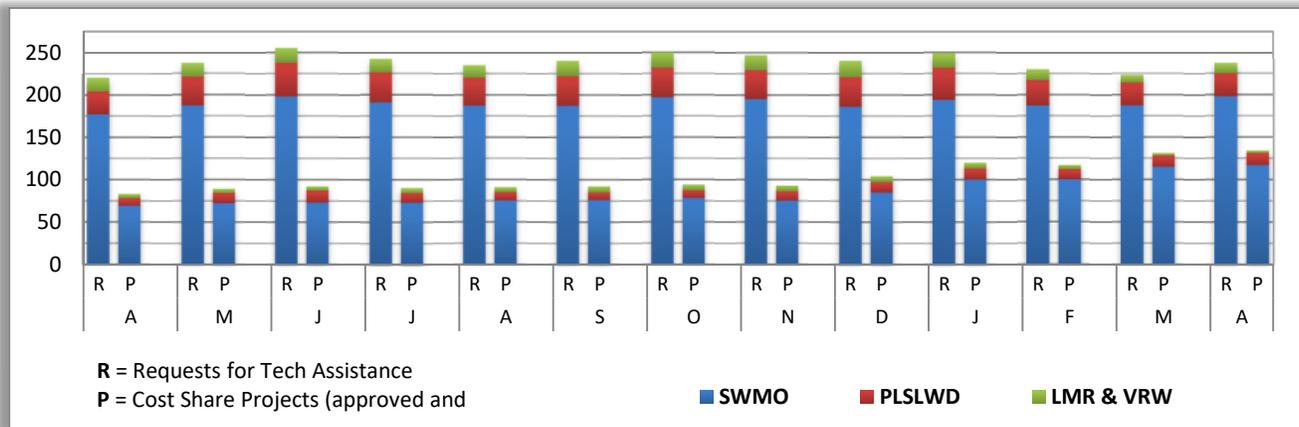
*Scott Watershed Management Organization*

*200 Fourth Avenue West*

*Shakopee, MN 55379-1220*

## **Staff Reports**

**TECHNICAL ASSISTANCE AND COST SHARE REQUESTS**



**MARKETING AND PROMOTION**

**Soil Health/Cover Crop**

- Hosted “Cover Crops 101” with Andy Linder and TJ Kartes. 14 Farmers attended along with SWCD and other watershed staff
- Received 2 new service requests for cover crops
- Cancelled the Mar 19 “Growing Healthy Soils” event w/Dave Brandt; to be rescheduled for next winter
- Published the “Cover Crop Updates”; it had 24 views
- Created social media posts about the growing winter rye cover crops around the county
- Made plans for establishing 3 cover crop comparison strips throughout the county

**CLEAN WATER EDUCATION PROGRAM (SCWEP)**

- Scott SWCD, partnering with SWMO and PLSLWD, were awarded a BWSR “Lawns to Legumes” grant for \$20,770.
- Finalized the 2020 SCWEP work plan draft and sent copies to partners for comments and review.
- Began promotional work for the April raingarden workshop, but ended up cancelling due to the pandemic; considering options for virtual workshops.
- Assisted Scott County with MS4 audit, gathering and submitting SCWEP data for MS1 activities.
- Assisted with preparing a draft 2020 LCCMR grant proposal for a joint Metro Conservation Education project; it is currently being reviewed by metro managers.
- Assisted Cedar Lake Improvement District with strategic plan and partnership.
- Sent Smart Salting postcard to 7,348 targeted residents around Cedar, Prior, Spring, Thole, and O'Dowd Lakes. This was a watershed-based/CWF grant supported project.

**INVENTORY AND ASSESSMENT/PLANNING**

- Cleary Lake Sub-Watershed Assessment – Draft document completed; reviewing report for corrections/changes
- Thole Lake Sub-Watershed Assessment – Running the Prioritize, Target and Measure Application (PTMApp) to identify predicted high loading areas and potential BMP applications

**ZONING SUPPORT - COUNTY**

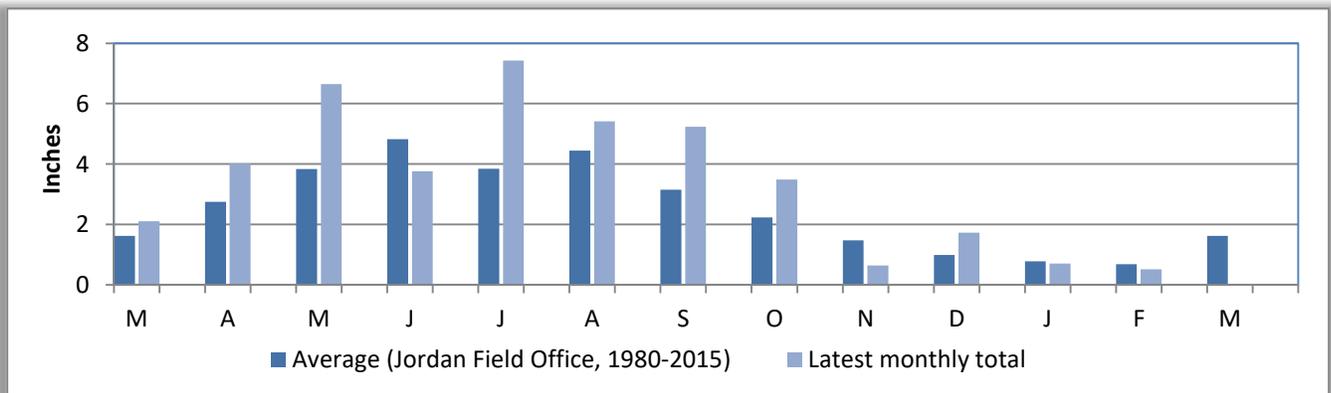
- Provided feedlot regulatory guidance to Scott County staff in regards to Nathan Lamgusa horse operation
- Continued regulatory guidance for Dave Woestehoff Hog Barn CUP transfer, to include MPCA permitting assistance

**LIVESTOCK OPERATION ASSISTANCE**

- Continued CNMP update for Randy Oldenburg to aid in potential ag waste project
- Coordinated with Krueger Dairy and construction contractors for potential ag waste project
- Continued planning process for potential feedlot modifications to include registration updates for Meierbachtol Brothers feedlot operations
- Continued regulatory assistance for Steve O’Loughlin’s potential new barn, proposed feedlot modifications, and newly proposed manure storage structure upgrade
- Continued Manure Management Planning assistance with Bruce Koepp for NPDES reporting
- Provided assistance to Steve Schalwig for potential property acquisition including an existing feedlot
- Assisted Rehbein Ag services with bi-product stockpiling and spreading recommendations for Dave Schmidt

**MONITORING**

- **Water Quality/Flows**
  - Finalized Credit River chloride report and sent to the SWMO water resources staff
- **Groundwater Level Observation Wells (DNR)**
  - No activity
- **Volunteer Rainfall Monitoring**



- Rainfall monitoring has been suspended until further notice due to the COVID-19 pandemic.

**CONSTRUCTION EROSION CONTROL – COUNTY/CREDIT RIVER**



**BUFFER LAW**

- Began planning for 2020 compliance inspections

**COOPERATIVE WEED MANAGEMENT (CWM) PROGRAM**

- No activity

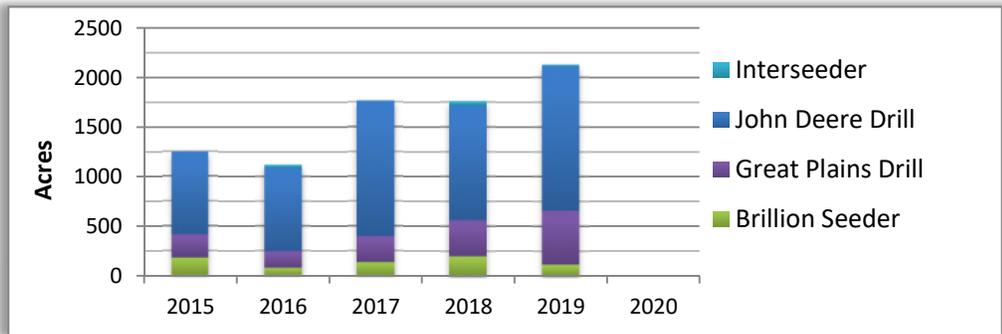
### WETLAND CONSERVATION ACT - STATE

- **TEP Meetings & Application Reviews**
  - Dave Hover- Webb Pallet Service Inc.- Boundary/ Type (Sand Creek Township)
- **Notices of Application**
  - Dave Hover- Webb Pallet Service Inc.- Boundary/ Type (Sand Creek Township)
- **Notices of Decision**
  - Dave Hover- Webb Pallet Service Inc.- Boundary/ Type (Sand Creek Township)
- **Enforcement/compliance**
  - None
- **Helena Wetland Bank**
  - Received notification from Army Corps of Engineers that documentation of initial release of credits is completed, but they will not release credits until they are able to conduct a site visit this Spring.

### TREE PROGRAM

- Received 300 orders for a total of 24,325 trees and 82 seed mixes sold as of 4/6
- Extending sale period through 4/18, pick up day is scheduled for 4/24
- Implementing a no-contact sorting and distribution plan
- Will be notifying all customers of new Tree Pick-up day protocol which will involve a drive up/car loading service, and no extra tree/supply sale

### EQUIPMENT RENTAL PROGRAM



**WMO TACS PROGRAM ACTION BY SWCD BOARD (MARCH '20)**

**Payment Certification**

Cooperator	Project/ID	Action	Grant/ID	Contract #	Amount
Casey Acres, Inc*	Cover Crop/SR-18-183	Flat Rate Payment	SWMO 2020 LGF	19-04-SWMO	\$4,000
Casey, Rob*	Cover Crop/SR-18-174	Flat Rate Payment	SWMO 2019 LGF	18-49-SWMO	\$1,480
Feldman, Bill*	Well Decommission/SR-19-168	Final Payment	SWMO 2019 LGF SWCD 2019 SCS	19-36-SWMO 19-09-SWCD	\$500 \$500
Flynn, Neil*	Conservation Cover/SR-18-027	Final Payment	SWMO 2015 CWF	18-10-SWMO	\$25,112.50
Hughes, Maxine*	Shoreline Protection/SR-18-042	Final Payment	SWMO 2019 LGF	19-23-SWMO	\$209
Hughes, Maxine*	Conservation Cover/SR-19-058	Final Payment	SWMO 2019 LGF	19-24-SWMO	\$250
Pieper, Bridget*	Well Decommission/SR-19-086	Final Payment	SWMO 2019 LGF SWCD 2018 SCS	19-25-SWMO 19-05-SWCD	\$500 \$500
Sticha, Curtis*	Conservation Cover/SR-17-136	Final Payment	SWMO 2015 CWF	17-41-SWMO	\$10,200
Wagner, Randal*	Cover Crop/SR-19-226	Final Payment	SWMO 2016 EPA	19-39-SWMO	\$1,500
Wick, Vernon*	Cover Crop/SR-16-228	Final Payment	SWMO 2015 CWF	17-05-SWMO	\$5,852

**New Application Approvals**

Cooperator	Project/ID	Action	Grant/ID	Contract #	Amount
None					

**Amendments/Funding Changes**

Cooperator	Project/ID	Action	Grant/ID	Contract #	Amount
None					

\*Fact Sheets attached

*Board copy*

Conservation Cost Share Program

# Completed Project Fact Sheet



## Casey Acres Inc. Cover Crop

### Cooperator & Location

Name): **Casey Acres Inc.**  
 Address: **17826 Murphy Lake Blvd**  
 City/Twp: **Credit River**  
 Watershed: **SWMO**  
 Project ID: **SR-18-183**

### Project Details

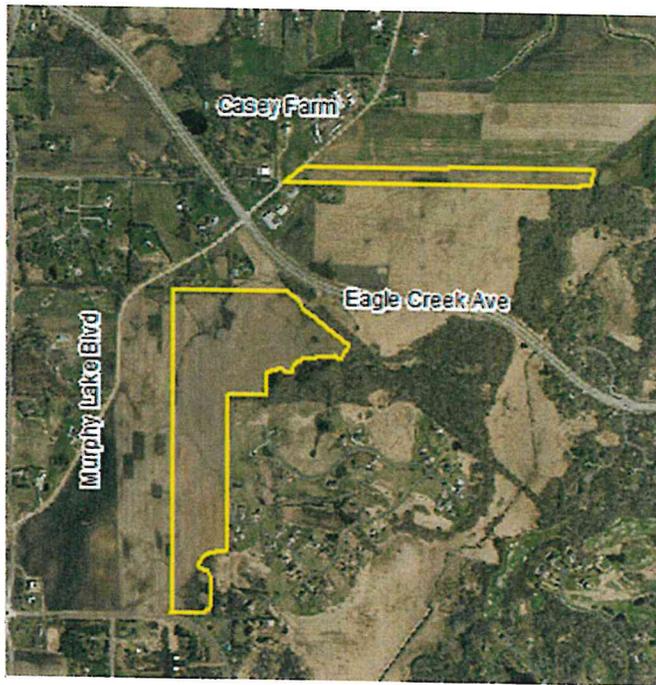
Practice: **Cover Crop**  
 Quantity: **100.00 Acres**  
 Resource Protected:  
**Credit River**

### Environmental Benefits

<u>Parameter</u>	<u>Before</u>	<u>After</u>	<u>Saved</u>
Soil Erosion (tons/yr)	<b>180.6</b>	<b>125.4</b>	<b>55.2</b>
Sediment (tons/yr)	<b>52.3</b>	<b>36.6</b>	<b>15.7</b>
Phosphorus (lbs/yr)	<b>92.7</b>	<b>69.8</b>	<b>22.9</b>
Runoff Volume (acre ft)	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

### Project Description:

The Casey's have 100 acres of corn silage and soybean ground where they saw an opportunity to plant a cover crop after harvest. Cover crops consist of grasses, legumes, forbs or other herbaceous plants seeded individually or in mixes either before or after harvest of the primary crop. The primary benefits of cover crops include reducing erosion and improving the soil's physical and biological properties. Healthy soil yields less runoff and improves nutrient and water utilization by crops. They prefer to plant radishes and turnips as a cover crop to alleviate the compaction from chopping silage as well as to prevent soil erosion.



### Total Cost

**\$12,000.00**

### Sources

Cooperator: **\$0.00**  
 SWMO: **\$12,000**  
 SWCD: **\$0.00**  
 Federal: **\$0.00**

### Unit Costs\*

	<u>Sediment</u> \$/Ton	<u>Phos</u> \$/Pound	<u>Runoff</u> \$/Ac Ft
SWCD:	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
SWMO:	<b>\$254.78</b>	<b>\$174.67</b>	<b>\$0.00</b>
Overall:	<b>\$254.78</b>	<b>\$174.67</b>	<b>\$0.00</b>

\*Over term of cost share contract

### Local Funding Partner



*Robert Casey*

Conservation Cost Share Program

# Completed Project Fact Sheet



## Robert Casey Cover Crop

### Cooperator & Location

Name): **Robert Casey**  
 Address: **17826 Murphy Lake Blvd**  
 City/Twp: **Credit River**  
 Watershed: **SWMO**  
 Project ID: **SR-18-174**

### Project Details

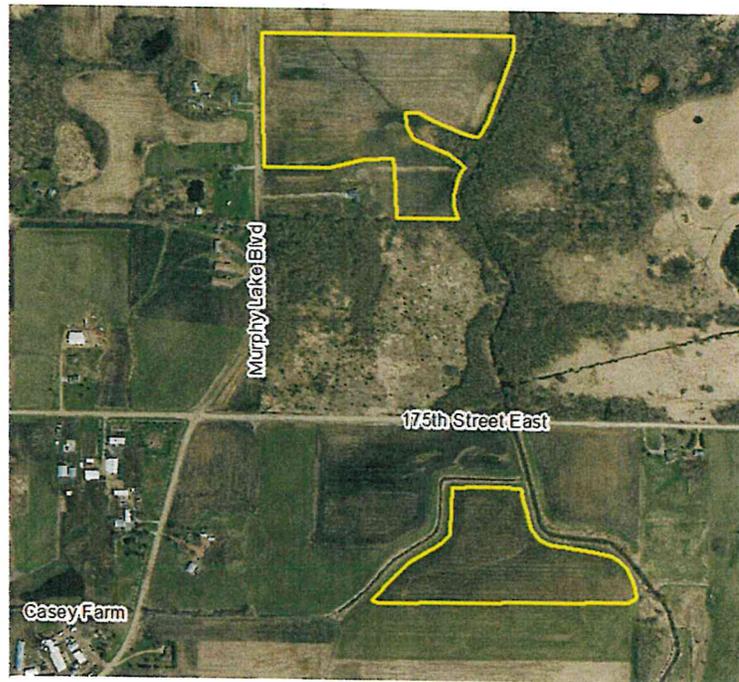
Practice: **Cover Crop**  
 Quantity: **48.80 Acres**  
 Resource Protected:  
**Credit River**

### Environmental Benefits

<u>Parameter</u>	<u>Before</u>	<u>After</u>	<u>Saved</u>
Soil Erosion (tons/yr)	<b>192.0</b>	<b>126.9</b>	<b>65.1</b>
Sediment (tons/yr)	<b>49.9</b>	<b>33.1</b>	<b>16.8</b>
Phosphorus (lbs/yr)	<b>78.5</b>	<b>56.6</b>	<b>21.9</b>
Runoff Volume (acre ft)	<b>39.8</b>	<b>39.8</b>	<b>0.0</b>

#### Project Description:

Rob planted cover crops after harvesting corn silage on 32.5 ac of his neighbor's farm and 16.3 ac of his own farm. Cover crops consist of grasses, legumes, forbs or other herbaceous plants seeded individually or in mixes either before or after harvest of the primary crop. The primary benefits of cover crops include reducing erosion and improving the soil's physical and biological properties. Healthy soil yields less runoff and improves nutrient and water utilization by crops. Rob likes to plant radishes and turnips as his cover crop to alleviate the compaction from chopping silage. Rob is receiving cost share for 37 original acres, but he went above and beyond that by adding additional acres.



### Total Cost

**\$4,440.00**

### Sources

Cooperator: **\$0.00**  
 SWMO: **\$4,440**  
 SWCD: **\$0.00**  
 Federal: **\$0.00**

### Unit Costs\*

	<u>Sediment</u> \$/Ton	<u>Phos</u> \$/Pound	<u>Runoff</u> \$/Ac Ft
SWCD:	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
SWMO:	<b>\$88.36</b>	<b>\$67.55</b>	<b>\$0.00</b>
Overall:	<b>\$88.36</b>	<b>\$67.55</b>	<b>\$0.00</b>

\*Over term of cost share contract



# Completed Project Fact Sheet



## Bill Feldman Well Decommissioning

### Cooperator & Location

Name): **Bill Feldman**  
 Address: **19950 Vernon Ave**  
 City/Twp: **Credit River**  
 Watershed: **SWMO**  
 Project ID: **SR-19-168**

### Project Details

Practice: **Well Decommissioning**

Quantity: **1.00 Each**

Resource Protected:

**Groundwater**

Project Description:

Bill reached out to the SWCD in hopes of sealing an old well on his property in order to install a new one. The project was successful. Groundwater resources are now protected by preventing contaminated water or other potentially harmful fluids from flowing or being dumped into the well.

Project Site Before



Project Site After



### Total Cost

### Sources

	Cooperator:	<b>\$896.00</b>
	SWMO:	<b>\$500.00</b>
	SWCD:	<b>\$500.00</b>
	Federal:	<b>\$0.00</b>
<b>\$1,896.00</b>		

### Local Funding Partner



# Completed Project Fact Sheet

## Neil & Pat Flynn Conservation Cover

### Cooperator & Location

Name): **Neil & Pat Flynn**  
 Address: **21005 Xeon Avenue**  
 City/Twp: **Helena**  
 Watershed: **SWMO**  
 Project ID: **SR-18-027**

Project Site Before



### Project Details

Practice: **Conservation Cover**

Quantity: **20.50 Acres**

Resource Protected:

#### Raven Stream

Project Description:

Neil and Pat do not want to continue to have their land farmed. They realize that all of the runoff drains into Raven Stream. They also want to provide habitat for deer and pollinators. This practice involves establishing native prairie ecosystems that were once characteristic of Minnesota. It improves water quality by eliminating sources of sediment and other pollutants and reducing runoff volumes. The project would include numerous native grasses and flowers, enhance habitat quality for all wildlife species including birds, pollinators, and natural landscape aesthetics for human enjoyment.

Project Site After



### Environmental Benefits

Parameter	Before	After	Saved
Soil Erosion (tons/yr)	110.7	0.0	110.7
Sediment (tons/yr)	30.6	0.0	30.6
Phosphorus (lbs/yr)	45.2	0.0	45.2
Runoff Volume (acre ft)	16.7	7.2	9.5

### Total Cost

**\$57,397.28**

### Sources

Cooperator: **\$3,585.89**  
 SWMO: **\$53,810.89**  
 SWCD:  
 Federal: **\$0.00**

### Unit Costs\*

	Sediment \$/Ton	Phos \$/Pound	Runoff \$/Ac Ft
SWCD:			
SWMO:	<b>\$175.85</b>	<b>\$119.05</b>	<b>\$566.43</b>
Overall:	<b>\$187.57</b>	<b>\$126.98</b>	<b>\$604.18</b>

\*Over term of cost share contract

### Local Funding Partner



# Completed Project Fact Sheet

## Maxine Hughes Shoreline Protection

### Cooperator & Location

Applicant(s): Maxine Hughes  
 Address: 1259 Maxine Court, Shakopee  
 Location: Township: 115N Range: 22W Sect: 30  
 City/Town: City of Shakopee  
 Watershed: 33114 Project ID: CP-18-042

### Project Details

Practice

#### Shoreline Protection

Quantity: 160.0 Lin Ft Certified Complete: 10/17/2019

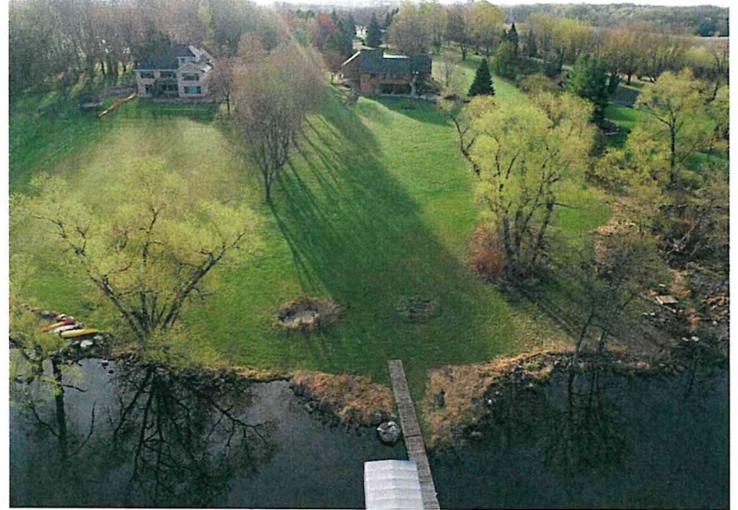
Resource Protected

#### O'Dowd Lake

Project Description

A 10 ft x 160 ft buffer was seeded with native forbes and grasses to filter pollutants, and help stabilize the shoreline.

Before Photo



After Photo



### Cost Analysis

Project Costs		Funding by Source		Grant Source	
Installation:	\$1,086.75	Federal	\$0.00	EPA-319	<input type="checkbox"/>
Incentives:	\$0.00	State		CWF	<input type="checkbox"/>
<b>Total:</b>	<b>\$1,086.75</b>	SWCD	\$0.00	DRAP	<input type="checkbox"/>
Targeted Project		SWMO	\$209.00	Approval Date	
<input type="checkbox"/>		Cooperator	\$877.75	5/21/2019	

## Maxine Hughes Native Grasses

### Cooperator & Location

Applicant(s): Maxine Hughes  
 Address: 1259 Maxine Court, Shakopee  
 Location: Township: 115N Range: 22W Sect: 30  
 City/Town: City of Shakopee  
 Watershed: 33114 Project ID: CP-19-058

### Project Details

Practice

#### Native Grasses

Quantity: 0.5 Acres Certified Complete: 10/17/19

Resource Protected

#### O'Dowd Lake

Project Description

Maxine restored 0.5 acres of turf lawn to native grasses and flowers. The restoration is on her property that slopes directly to Lake O'Dowd. This practice involves establishing native prairie ecosystems that were once characteristic of Minnesota. It improves water quality by eliminating sources of sediment and other pollutants and reducing runoff volumes.

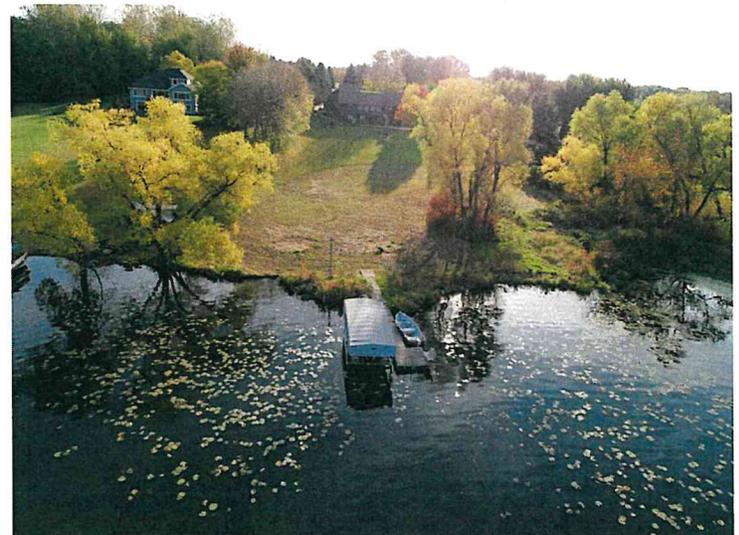
Environmental Benefits

Parameter	Before	After	Saved
Soil Erosion (tons/yr)	0.0	0.0	0.0
Sediment Load (tons/yr)	0.0	0.0	0.0
Phosphorus Load (lbs/yr)	0.0	0.0	0.0
Runoff Reduction (acre ft)	0.9	0.8	0.1

Before Photo



After Photo



### Cost Analysis

Project Costs		Funding by Source		Grant Source		Unit Costs*			
Installation:	\$2,018.25	Federal	\$0.00	EPA-319	<input type="checkbox"/>	Sediment (\$/Ton)	Phos (\$/Pound)	Runoff (\$/Ac Ft)	
Incentives:	\$250.00	State	\$0.00	CWF	<input type="checkbox"/>	SWCD		n/a	
<b>Total:</b>	<b>\$2,268.25</b>	SWCD	\$0.00	DRAP	<input type="checkbox"/>	SWMO		\$250	
<b>Targeted Project</b>	<input type="checkbox"/>	SWMO	\$250.00	<b>Approval Date</b>		Overall		\$2,268	
		Cooperator	\$2,018.25	5/21/2019		*Over term of cost share contract			

# Completed Project Fact Sheet



## Bridget Pieper Well Decommissioning

### Cooperator & Location

Name): **Bridget Pieper**  
 Address: **6565 Kent Ave, New Prague, Minnesota 56071**  
 City/Twp: **Helena**  
 Watershed: **SWMO**  
 Project ID: **SR-19-086**

### Project Details

Practice: **Well Decommissioning**

Quantity: **1.00 Each**

Resource Protected:

**Groundwater**

Project Description:

Bridget contacted the SWCD hoping to seal an old well on a property she is renting out. This practice protects groundwater resources by preventing contaminated water or other potentially harmful fluids from flowing or being dumped into the well.

Project Site Before



Project Site After



### Total Cost

### Sources

	Cooperator:	<b>\$534.00</b>
	SWMO:	<b>\$500.00</b>
	SWCD:	<b>\$500.00</b>
	Federal:	<b>\$0.00</b>
<b>\$1,534.00</b>		

### Local Funding Partner



# Conservation Cooperator Completed Project Fact Sheet



## Curtis Sticha Native Grasses

### Cooperator & Location

Applicant(s): Curtis Sticha  
 Address: 25765 Freeborn Ave, New Prague  
 Location: Township: 113N Range: 22W Sect: 20  
 City/Town: Cedar Lake Twp  
 Watershed: 33022 Project ID: CP-17-136

### Project Details

#### Practice

#### Native Grasses

Quantity: **10.2 Acres** Certified Complete: 11/30/2018

#### Resource Protected

#### Tributary to Porter Creek

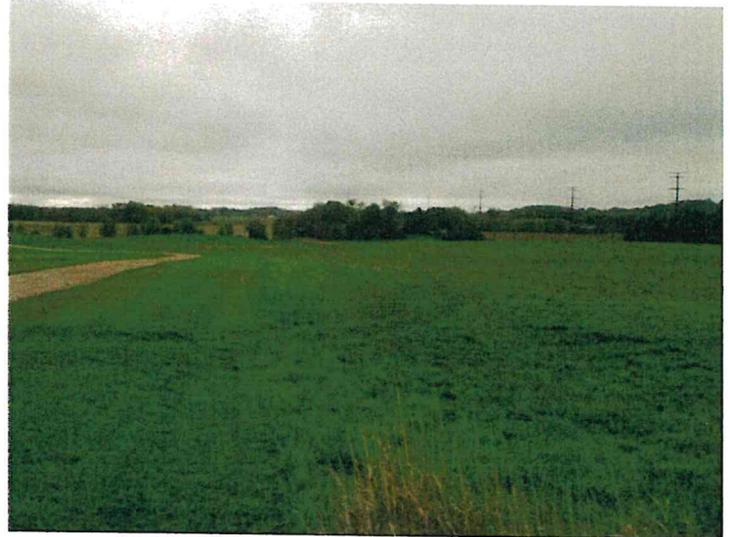
#### Project Description

Curt Sticha converted 10.2 acres of cropland to native grasses and forbs. The predominant soil type in the field is a Lester loam averaging 6% slopes. Conversion to native grasses will decrease runoff rates greater than 50% and add to the local habitat for wildlife and pollinators.

#### Environmental Benefits

Parameter	Before	After	Saved
Soil Erosion (tons/yr)	26.5	0.0	<b>26.5</b>
Sediment Load (tons/yr)	9.4	0.0	<b>9.4</b>
Phosphorus Load (lbs/yr)	15.3	0.1	<b>15.2</b>
Runoff Reduction (acre ft)	8.3	3.6	<b>4.7</b>

Before Photo



After Photo



### Cost Analysis

Project Costs		Funding by Source		Grant Source		Unit Costs*			
Installation:	\$4,440.15	Federal	\$0.00	EPA-319	<input type="checkbox"/>		Sediment (\$/Ton)	Phos (\$/Pound)	Runoff (\$/Ac Ft)
Incentives:	\$20,400.00	State		CWF	<input checked="" type="checkbox"/>	SWCD	\$0	\$0	n/a
<b>Total:</b>	<b>\$24,840.15</b>	SWCD	\$0.00	DRAP	<input type="checkbox"/>	SWMO	\$241	\$149	\$481
<b>Targeted Project</b>		SWMO	\$22,620.07	<b>Approval Date</b>		Overall	\$264	\$163	\$529
<input type="checkbox"/>		Cooperator	\$2,220.08	10/17/2017					

\*Over term of cost share contract

# Proposed Project Fact Sheet



## Randal Wagner Cover Crop

### Cooperator & Location

Name): **Randal Wagner**  
 Address: **26681 Texas Ave**  
 City/Twp: **New Market**  
 Watershed: **SWMO**  
 Project ID: **SR-19-226**

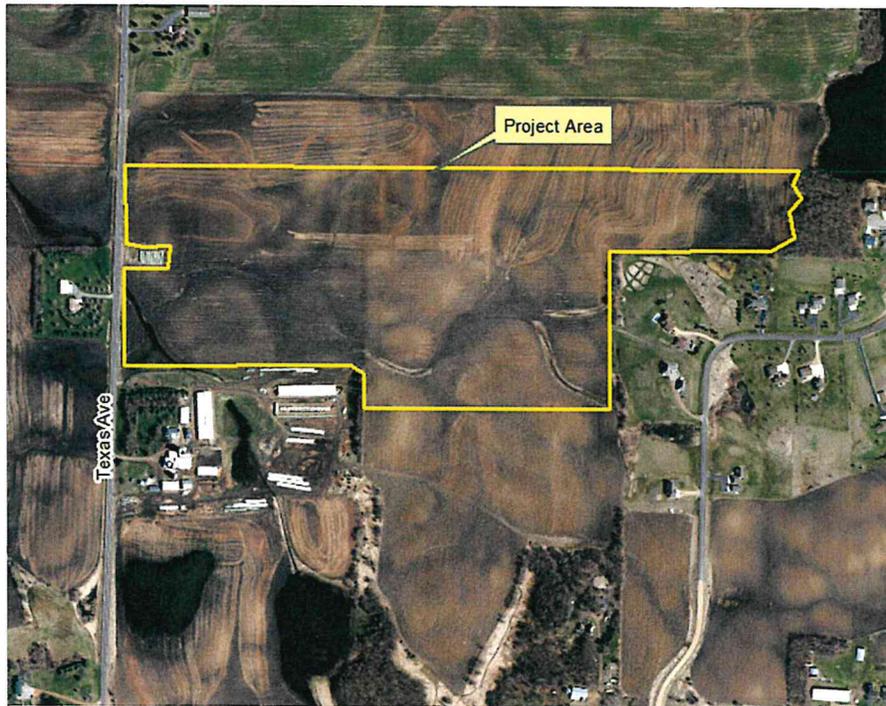
### Project Details

Practice: **Cover Crop**  
 Quantity: **75.00 Acres**  
 Resource Protected:  
**Unnamed Tributary to St. Catherine Lake**

### Environmental Benefits

<u>Parameter</u>	<u>Before</u>	<u>After</u>	<u>Saved</u>
Soil Erosion (tons/yr)	<b>666.6</b>	<b>600.6</b>	<b>66.0</b>
Sediment (tons/yr)	<b>139.3</b>	<b>125.0</b>	<b>14.3</b>
Phosphorus (lbs/yr)	<b>189.2</b>	<b>173.3</b>	<b>15.9</b>
Runoff Volume (acre ft)	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

Project Description:  
 Randy decided to plant a cereal rye cover crop after his corn silage harvest to prevent erosion, maintain nutrients from dairy manure, and generate extra feed for his cattle. Cover crops consist of grasses, legumes, forbs or other herbaceous plants seeded individually or in mixes either before or after harvest of the primary crop. The primary benefits of cover crops include reducing erosion and improving the soil's physical and biological properties. Healthy soil yields less runoff and improves nutrient and water utilization by crops.



### Total Cost

**\$1,500.00**

### Sources

Cooperator:  
 SWMO: **\$1,500**  
 SWCD: **\$0.00**  
 Federal: **\$0.00**

### Unit Costs\*

	<u>Sediment</u> \$/Ton	<u>Phos</u> \$/Pound	<u>Runoff</u> \$/Ac Ft
SWCD:	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
SWMO:	<b>\$104.9</b>	<b>\$94.33</b>	<b>\$0.00</b>
Overall:	<b>\$104.9</b>	<b>\$94.33</b>	<b>\$0.00</b>

\*Over term of cost share contract

### Local Funding Partner



# Completed Project Fact Sheet



## Vernon Wick Cover Crop

### Cooperator & Location

Name): **Vernon Wick**  
 Address: **20530 Xanadu Ave**  
 City/Twp: **Sand Creek**  
 Watershed: **SWMO**  
 Project ID: **SR-16-228**

### Project Details

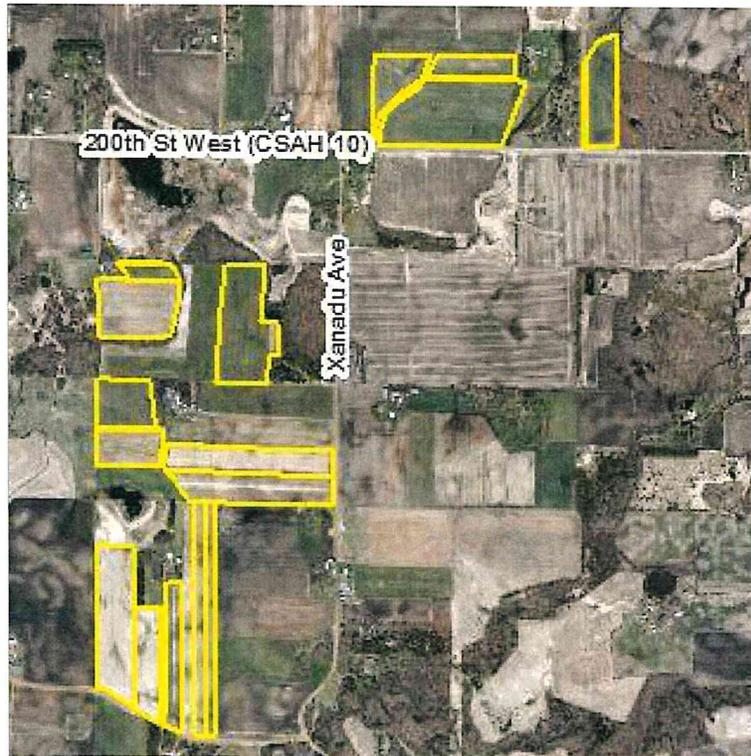
Practice: **Cover Crop**  
 Quantity: **100.00 Acres**  
 Resource Protected:  
**Sand Creek Watershed**

### Environmental Benefits

<u>Parameter</u>	<u>Before</u>	<u>After</u>	<u>Saved</u>
Soil Erosion (tons/yr)	<b>144.9</b>	<b>48.1</b>	<b>96.8</b>
Sediment (tons/yr)	<b>57.3</b>	<b>15.5</b>	<b>41.8</b>
Phosphorus (lbs/yr)	<b>92.4</b>	<b>33.9</b>	<b>58.5</b>
Runoff Volume (acre ft)	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>

#### Project Description:

Vernon installed 100 acres of cover crops to provide forage for his cattle and to protect his fields from erosion. Cover crops consist of grasses, legumes, forbs or other herbaceous plants seeded individually or in mixes either before or after harvest of the primary crop. The primary benefits of cover crops include reducing erosion and improving the soil's physical and biological properties. Healthy soil yields less runoff and improves nutrient and water utilization by crops.



### Total Cost

**\$9,852.00**

### Sources

Cooperator: **\$0.00**  
 SWMO: **\$9,852.00**  
 SWCD: **\$0.00**  
 Federal: **\$0.00**

### Unit Costs\*

	<u>Sediment</u> \$/Ton	<u>Phos</u> \$/Pound	<u>Runoff</u> \$/Ac Ft
SWCD:	<b>\$0.00</b>	<b>\$0.00</b>	<b>N/A</b>
SWMO:	<b>\$78.56</b>	<b>\$56.14</b>	<b>N/A</b>
Overall:	<b>\$78.56</b>	<b>\$56.14</b>	<b>N/A</b>

\*Over term of cost share contract

### Local Funding Partner





# Operational Service Plans

Department:	Natural Resources and SWMO	Date:	3/25/2020
<b>Proposed Service Delivery Model (includes PPE / Sanitizing Supplies)</b>			
Describe how your department functions will operate under the “new normal” (i.e. eliminating face to face meetings; prioritizing who we see and how we’ll service them; considering Governor’s waivers; what PPE is needed; what types of sanitizing is being done and supplies needed).			

## Function A: Addressing General Public Questions

### Protocols

- After the Government Center GC doors are open to the public, keep the door to Community Development (CD) counter locked with department contact information posted on the door. Post signs on the CD door encouraging customers to complete activities electronically.
- Continue to provide service via phone, email and video conferencing.
- If necessary, in-person meetings at the counter will occur by appointment. Minimize face to face contact
- Wipe down counter, doors, keyboards, pens, and any other tools used after interaction.
- Staff will promote sending documents to the public electronically. Printed materials handled by staff or the public will be recycled immediately
- **Stay at Home Order (i.e., GC Doors Locked):** Staff will provide service remotely via Cityview, e-mail, phone, and website.

## Function B: Watershed Planning Commission (WPC) and SWMO Board

### Protocols

- WPC Packets & Meeting Agendas will continue to be posted on the County website and emailed to Commissioners.
- Public notices and website will encourage the public to contact the Department via email/phone with questions/comments prior to the WPC meeting.
- WPC Meetings will be conducted and recorded using Zoom or similar video/audio conference platform. The public will be encouraged to participate in the public comment portion of the meeting using Pigeonhole Live. Staff will also read any comments to the WPC.
- If a WPC member or presenter must attend a meeting in person one staff member will also attend in person to ensure protocols are followed including:
  - Chairs to be setup 6’ apart to observe social distancing
  - Chlorox wipes will be stationed at the podium and the podium will be wiped down between speakers; the door handles will be wiped down and the surfaces of the Board table area wiped down before and after the meeting
- Items requiring Board approval will follow County Board protocols. All items recommended by the WPC will be scheduled on the Board Consent Agenda whenever possible. Staff will optimize Chair/Vice-Chair to communicate upcoming agenda items that may be complex or controversial. Board members will be encouraged to contact staff with any questions/comments prior to removing the item from the consent agenda. Staff will be advised that their presence is not needed at Board meetings provided the item is on the consent agenda.

- Supervisor will work with Board to delegate all feasible authority to the Water Resources Supervisor and SWCD Director. We currently have internally developed procedures that require the approval of multiple Boards and Commissions across agencies. It would be reasonable to delegate authority to reduce the number of required interactions.
- Keep website updated providing direction for customers to contact staff and how to receive services. Staff will evaluate the website and look for additional opportunities to provide information online.

### **Function C: Zoning/Plan Review Assistance and Grading Permits**

#### **Protocols**

NR/SWMO, EH, Zoning, Parks, and Building all work closely together throughout the development review and permitting process. To ensure consistency is maintained staff will follow the Zoning department protocols including:

- Staff will encourage all Land Use Permit Applications and information are submitted via email. If necessary, use the big blue drop box in the hall or mailed. If in-person contact is necessary Function A Protocols, and social distancing will apply.
- Staff will encourage all payments be made through the mail or drop box. Staff will pursue implementing electronic submission and payment of grading permits.
- Permit information will be sent to other departments/agencies through email. All comment memos will be sent back via email.
- DRT meetings will continue as Skype meetings

### **Function D: Land and Water Treatment**

#### **Protocols**

- Staff will continue to perform most duties through teleworking.
- When hard copy historic records are needed, and staff must go into the office, staff will flex their time and schedule to maximize social distancing of other staff in the Division.
- AIS activities can continue as normal as long as social distancing protocols are followed. Activities that cannot follow social distancing protocols will have to be suspended until protocols are lifted
- While limited in terms of time and instances, there are some essential duties that do require landowner engagement. Accordingly, staff will adhere to the following protocols:
  - Conduct as much business/communication electronically as possible
  - Site visits should be conducted without the landowner present
  - For document reviews with landowner (e.g. contracts, plans, drawings, etc.):
  - Scan and send plan and related materials via email
  - Review/discuss information over the phone
  - Exchange electronic/scanned copies
- Pre-construction meetings should be conducted through video conferencing
- If in-person/field/site meeting is unavoidable and essential to conducting business:
  - Postpone them as long as is feasible
  - Be up-front and explain the precautions the agency is taking to protect their and our health and safety (put them at ease)
  - Follow social distancing protocol of 10' when conducting field and site visits
  - Practice other routine personal safety precautions (no physical contact, no sharing of materials, handwashing, not touching face, etc.)

- Inform Supervisor whenever staff meets with someone, track and report if necessary.
- Use of personal vehicles will be encouraged/supported while teleworking. When County/agency vehicles are used staff will disinfect vehicle after each use.
- Flooding/Drainage Emergency Response will be conducted electronically as much as possible. When field and in person interactions are necessary to protect human health and safety social distancing protocols will be followed to the extent possible. PPE will be worn by staff if necessary to protect the health and safety of staff and the public

### **Function E: Monitoring/Data Collection**

#### **Protocols**

- Data collection and monitoring of BMPs and water resources will be conducted via teleworking and electronic communications to the extent possible. Field work will continue as normal with the following additions:
  - Field work will be conducted with the minimum number of essential participants. Not to exceed 5 people at any time.
  - Follow social distancing protocol of 10' at all times
  - Practice other routine personal safety precautions (no physical contact, no sharing of materials, handwashing, not touching face, etc.)
  - All attendees will arrive and depart in separate vehicles.
- Boat inspection coordination and planning will continue via teleworking and electronic communication. Boat inspections will not begin implementation until approval is received by the DNR and social distancing protocols can be followed as determined by staff
- 2 Staff will be able to conduct lake water quality monitoring as normal with the following additions:
  - Staff will follow social distancing protocols; travel in separate vehicles, and wipe down County vehicles and equipment after each use

### **Function F: Education/Outreach**

#### **Protocols**

- Teleworking and electronic communications should be maximized to the extent possible
- Activities that cannot follow social distancing protocols will have to be suspended until protocols are lifted
- Staff will implement new and innovative methods for educating and engaging residents to meet essential duties

### **Function G: Inventory and Assessment**

#### **Protocols**

- Inventory and assessments will be performed via teleworking and electronic communication

### **Function H: Regulation, Inspections, Maintenance, and Wetland Conservation Act**

These are essential duties that frequently require field/site visits, and may require multiple attendees

#### **Protocols:**

- Conduct as much business/communication electronically as possible
- Site visits will be conducted with the minimum number of essential participants. Not to exceed 5 people at any time.
- Follow social distancing protocol of 10' at all times

- Practice other routine personal safety precautions (no physical contact, no sharing of materials, handwashing, not touching face, etc.)
- All attendees will arrive and depart in separate vehicles.
- Use of personal vehicles will be encouraged/supported while teleworking. When County/agency vehicles are used staff will disinfect vehicle after each use.

### **Function I: Planning and Coordination**

#### **Protocols:**

- Staff will participate in partnership and coordination meetings remotely. When a State or Federal oversight agency requires an in-person meeting staff will follow social distancing protocols. In person meetings must be essential to duties and approved by the Water Resources Supervisor
- Staff will perform day to day functions via telework.
- All vendors, contractors, and partners will be asked to email invoices to limit the need for checking mailboxes, etc.
- SWMO will require applicants submitting large file size water management plans and other documents for official review over 5MB to upload their document to a file share site for download. If the document is not able to be downloaded from the site, the date the document is able to be downloaded will be the date received

### **Functions B-I Amendments**

- Human relationships, multiple funding sources, seasons, and weather all play a critical role in the timing and implementation of essential duties. Therefore, the Operations Report should be viewed as living document and amendments should be anticipated in order to continue Delivering What Matters. Amendments to the Operations Report will be recommended by the Water Resources Supervisor in coordination with the Environmental Services Manager and approved by the Division Director.

### **Functions B-I Reporting, Grants, and Audits**

- Reporting, Grants, and Audits are all key components of these Functions. They are dependent on requirements and procedures administered by State and Federal agencies including BWSR, MPCA, DNR, USACOE, Met Council, EPA, USDA, and others. Staff must follow those protocols as well. **Few waivers have been granted by the Governor at this time.** When State and Federal protocols differ from County protocols, staff will adhere to the most restrictive protocol. When that is not possible the Water Resources Supervisor will reach out to the Division Director to resolve the conflict.

### **Functions A-I Subcontractors, Consultants, and Partners**

- Subcontractors, Consultants, and Partners implementing NR/SWMO Functions will follow the Operations Report. Staff will provide a copy of the Operations Report electronically and review with those implementing NR/SWMO Functions prior to work being performed.

## **Level of Staff Changes and Resource Needs**

Describe staff changes based on your department's functioning under the "new normal" (i.e. plan for coverage; plan for rotation of staff; monitoring staffing models; resources needed – technology, supplies).

### **All Functions:**

- Staff currently performs most of their essential duties in the field, through in-person meetings, and electronically. Staff can continue to perform essential duties via teleworking, remote meeting platforms, and modified field procedures. Two staff have laptops. One laptop does not have a functioning microphone. One staff has an older desktop that will need to be replaced. The audio signal for phone and video communications is frequently intermittent. Dropped calls are common. Improving the function of equipment and platforms/signals is important.
- Supervisor will continue regular/daily communication with staff and senior leadership via phone/email/in person discussions to assess status of overall work, assign, projects, troubleshoot issues, and manage essential functions
- Continue twice weekly meetings with staff, weekly meetings with SWCD, and weekly meetings with EH via phone/email/conference call to manage workload and flow
- Staff trainings and annual certifications are essential to performing our functions. Support from the State, and County are needed to ensure these are either waived, extended, or provided in alternative formats

### **Function A: Addressing General Public Questions**

- Staff currently performs most of this work electronically and can continue to do this via teleworking.
- In person meetings will be scheduled by appointment and staff will alternate those as needed.

### **Function B: Watershed Planning Commission (WPC) and SWMO Board**

- Staff will need technical/IT assistance learning how to record remote meetings. Staff will need to reconfirm with WPC members they have the technology and ability to use platforms like Zoom. Will likely need tech support to help get WPC members set up

### **Function C: Zoning/Plan Review Assistance and Grading Permits**

- Staff can continue to perform these duties via telework indefinitely.
- Grading Permits must be upgraded immediately to submit electronically with electronic payment. Currently applications can only be submitted in person or by mail. Payment can only be made in person or sending a check in the mail

### **Function D: Land and Water Treatment**

- Staff can continue to perform many of these duties via telework indefinitely
- Staff needs access to PPE for Flooding and Emergency Response. There is currently zero PPE
- Staff needs access to wipes and other disinfecting equipment. There is currently zero available

### **Function E: Monitoring/Data Collection**

- Staff can continue to perform many of these duties via telework indefinitely.
- Boat inspections will depend on DNR and ability to meet social distancing protocols
- Staff needs access to wipes and other disinfecting equipment. There is currently zero available

**Function F: Education/Outreach**

- Teleworking and electronic communications should be maximized to the extent possible
- As staff will need to implement new and innovative methods for educating and engaging residents to meet essential duties additional software, applications, and tools may need to be obtained to meet those functions

**Function G: Inventory and Assessment**

- Staff can continue to perform these duties via telework indefinitely.

**Function H: Regulation, Inspections, Maintenance, and Wetland Conservation Act**

- Staff can continue to perform many of these duties via telework indefinitely.
- Staff needs access to wipes and other disinfecting equipment. There is currently zero available

**Function I: Planning and Coordination**

- Staff can continue to perform many of these duties via telework and electronic communications.

**Division Director Comments**

Water Resources/WMO consist of three (3) staff. Staff provide non-critical services. Given the nature of their work, most staff need to work in the field for inspections or project management, but can perform their duties solo or in a socially distant manner.

**Strategic Branch Comments**

There is little face to face interaction for this division and proper protocols are in place if an in-person meeting is required. WMO and Planning Commission meetings have adequate resources in place for face to face meetings.

Consideration of next steps:

- Function B-I includes some print (in red) referencing that few waivers have been made by the Governor related to reporting requirements, grants, and audits. Division Director indicated he would be following up as more information about this becomes available.

**County Administrator Comments**

If utilizing county vehicles – one person per vehicle and wipe down steering wheel etc prior to using and when dropping off.

Good call on the commission meeting to try remote.

County Administrator Signature \_\_\_\_\_ Lezlie Vermillion



*Scott Watershed Management Organization*

*200 Fourth Avenue West*

*Shakopee, MN 55379-1220*

## **Old Business**



*Scott Watershed Management Organization*

*200 Fourth Avenue West*

*Shakopee, MN 55379-1220*

## **New Business**

# DRAFT 2019 Annual Report & News Letter



# 2019 Annual Activity Report

## April 2020



Scott Watershed Management Organization

200 Fourth Avenue West

Shakopee, MN 55379

Phone: 952-496-8177

[www.scottcountymn.gov/wmo](http://www.scottcountymn.gov/wmo)



# Contents

Our Organization.....	4
Our People.....	5
Introduction to 2019 .....	6
Our Work	
Land & Water Treatment.....	7
Education & Outreach.....	15
Monitoring/Data Collection .....	19
Planning.....	25
Coordination.....	26
Regulation.....	26
Finance Summary .....	27
How We Are Doing.....	28
Our Plans	
2020 Workplan.....	30
2020 Budget.....	31

This report is organized to first present progress toward each of the WMO program elements (for example: Education, Land & Water Treatment, etc). This is followed by summaries of 2019 end of year financials and the 2020 Work Plan and budget.

# Our Organization

## Our Watershed Management Vision

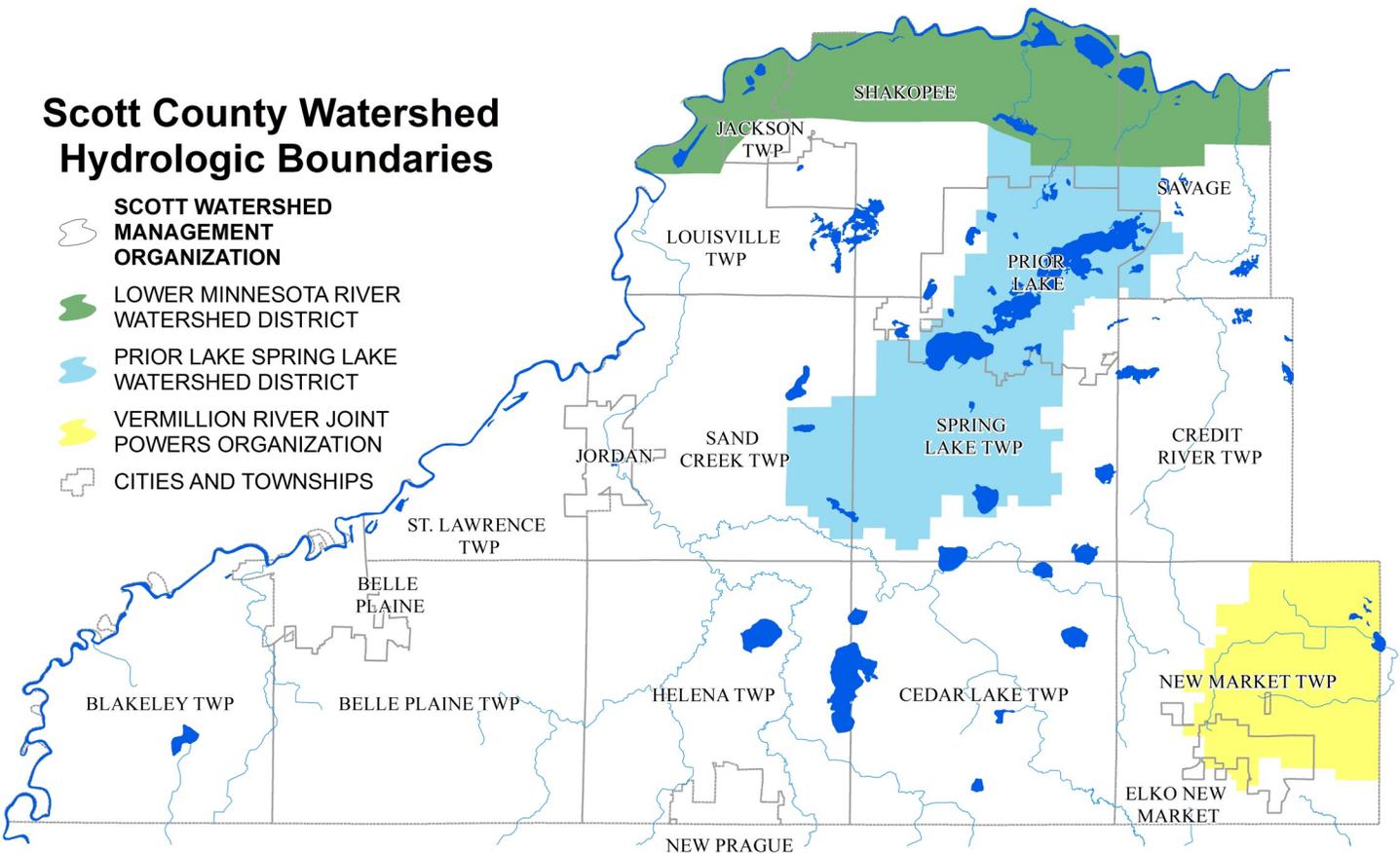


*"To compile a system of well buffered water courses, wetlands and lakes surrounded by an upland where engaged citizens, businesses and partners work with the SWMO to reduce volumes, control peak flows and their timing, and minimize pollutant generation and export; and where aquatic resources meet local water resource priorities."*

The Scott County Board of Commissioners is the governing body and serves in the capacity of the Scott WMO pursuant to County Board Resolution No. 2000-059, adopted July 11, 2000.

The Watershed Planning Commission (WPC) was established as a permanent advisory committee. The WPC works with staff to make recommendations to the WMO Board on matters relating to the Water Resources Plan.

### Scott County Watershed Hydrologic Boundaries



# Our People



## Scott County Board

**Barb Weckman Brekke, Commissioner, Chair**  
**Dave Beer, Commissioner, Vice Chair**  
**Jon Ulrich, Commissioner**  
**Tom Wolf, Commissioner**  
**Michael Beard, Commissioner**

County Board Meetings

Held on first and third Tuesday of each month as part of the Scott County Board meeting at the Scott County Government Center at 200 Fourth Avenue West, Shakopee.

## 2019 Watershed Planning Commission

**Jim Schwingler, At-large, Chair**  
**Brian Schmidt, Southwest WMO**  
**Mark Vierling, Shakopee Basin Watershed**  
**Virgil Pint, Sand Creek Watershed**  
**Rita Weaver, Credit River Watershed**  
**Kevin Shea, Sand Creek Watershed**

WPC Meetings

Held on the fourth Monday of each month at the Scott County Government Center at 200 Fourth Avenue West, Shakopee.

## Staff

**Paul Nelson, Environmental Services Program Manager**  
**Melissa Bokman, Sr. Water Resources Planner**  
**Ryan Holzer, Water Resources Scientist**  
**Vanessa Strong, Water Resources Supervisor**  
**Scott Soil and Water Conservation District also provides staff support**

For more information, please contact:

Vanessa Strong, Water Resources Supervisor  
Scott County  
200 Fourth Avenue West  
Shakopee, MN 55379  
Telephone: 952-496-8345  
vstrong@co.scott.mn.us

# Introduction to 2019



## Positive Outcomes After Implementation of Targeted Watershed Grant

In 2015, the Scott Watershed Management Organization (WMO) was awarded a \$2.2 million-dollar Targeted Watershed Grant (TWG) from the Board of Water and Soil Resources (BWSR). The grant focused on improvements made within the Sand Creek watershed. Some of the tasks involved in the grant were the installation of Best Management Practices (BMPs) through either technical or financial assistance. Also, landowner surveys and farmer led groups helped shape the various programs which were available to landowners during the grant period and continue to be adapted into future programming. The grant was largely wrapped up in 2019 with just reporting and the Final Report that still remained in 2020.

The grant provided many financial opportunities that allowed programs to grow. There was a tremendous amount of advancements made regarding soil health initiatives, mostly through the implementation of cover crops. Annual cover crop workshops were held to provide education to landowners. Also, a cover crop inter-seeder was purchased and shipped from Pennsylvania and made available for landowners to use for planting cover crops.

The grant provided both financial and technical support to the cost share program. In total, 38 Best Management Practices (BMPs) were installed. Also, five Capital Improvement Projects (CIP) were implemented. These projects consisted of acute near channel sediment sources along Sand Creek and Porter Creek that were stabilized through either streambank stabilization or ravine stabilization practices. Finally, 16 riparian buffers that had been previously identified in a geomorphic study were planted along Sand Creek and Raven Stream. Numerous landowners also implemented riparian buffer corridor improvements as well with only technical assistance.

The focus of these efforts was to improve water quality for Sand Creek, Cedar Lake and McMahan Lake and to the accompanying waterbodies within the watershed. Significant improvements of sediment and phosphorus reductions were made by both the grant itself and what the grant then enabled through other funding sources. Over 2,500 tons of sediment were reduced annually and over 2,700 pounds of phosphorus were reduced annually within the Sand Creek watershed by the grant alone. Both of those values represent a higher number than the originally anticipated reduction numbers that were submitted as part of the application. A trend analysis was completed by Met Council with data from 1990 to 2018 that showed a decrease in both Total Suspended Solids (TSS) and Total Phosphorus (TP) for Sand Creek, a sign that some parameters of water quality are improving and that efforts from grants such as this are having a positive affect.

The landowners played a key role in the success of the grant. Most programs involved their voluntary efforts at implementing conservation. If not for the strong conservation ethic within the watershed and willingness of landowners to make the improvements, the success the grant had would not have been achieved. As a 'thank you' to those landowners an event was held in their honor to express gratitude and appreciation for all the work they have done and will continue doing in the future.

# Our Work

## Land & Water Treatment

### Capital Improvement Projects



Our efforts continued with the completion of another phase of Capital Improvement Projects partnering with the Board of Water and Soil Resources (BWSR) and Minnesota Pollution Control Agency (MPCA) on the Targeted Watershed Grant and Environmental Protection Agency Section 319 Grant, respectively. This project consisted of 410 linear feet of streambank being stabilized. The eroding bluff is roughly 25 feet in height from the stream toe to the top of the bank. The estimated sediment savings from stabilizing this site are 960 tons of sediment through the life of the project.

Stabilization consisted of using large wood (a minimum 15" diameter and 25' in length) placed along the toe of the stream to create a bench for sediment on the upper bluff to accumulate on as it sloughs, and to also move flows away from the bluff toe. Large boulders, weighing over a ton, were attached to the bottom layer of logs to counter act the buoyancy of wood.

The project's bid was about \$180,000 -which was under the engineer's estimate by roughly \$140,000. Substantial completion of the project was achieved in January of 2020.

**Photos: Top left and right—The project site before construction started. From stream toe to the top of the bluff was roughly 25 feet. Bottom—Log jam structures on the opposite bank of Sand Creek and the excavated channel on the inside bend of Sand Creek.**



# Our Work

## Land & Water Treatment

### Capital Improvement Projects



Substantial completion of the latest phase of CIPs was completed in 2020, however, there still remains some work on the project. In 2020, the project will have all remaining touch up work completed which includes restoration of the site. The native tree and shrub plantings will also be installed. Finally, any permanent seeding that remains will be completed.

Design of the next phase of Capital Improvement Projects was completed in 2019. However, sadly the landowner passed away early in 2019. The remaining family members are interested in the project but have indicated timing was not right for them to complete the project in 2019.

The last remaining site is an eroding streambank located in the City of Jordan near one of their water towers. This particular site has a combination of exposed soils and bedrock along the stream toe. The bedrock is stabilizing a portion of the site but the exposed soils section is still eroding and allowing for continual sloughing of the upper bluff.



**Top Right Photo:** FES lift that will have native trees and shrubs planted within in 2020.

**Middle Right Photo:** Area of grading that will need touch up work completed in 2020.

**Bottom Left Photo:** Eroding streambank site in the City of Jordan near one of their water towers.

# Our Work

## Land & Water Treatment

### Capital Improvement Projects



## Aquatic Plant Management Treatment

The Scott WMO's *Strategy: Aquatic Invasive Species (AIS): Curly-Leaf Pondweed Recreational Development Lakes* is designed to enable lake associations and lake improvement organizations to control the non-native, invasive, submerged plant curly-leaf pondweed, and promote sustainable lake planning. Lakes where this strategy is promoted include Cedar, McMahon, O'Dowd, and Thole.

### Cedar Lake

Curly-leaf pondweed treatment is authorized in the DNR approved 2018-2021 Lake Vegetation Management Plan (LVMP) for Cedar Lake. In 2019 the Scott WMO, in partnership with the DNR and the Cedar Lake Improvement District (CLID), treated 800 acres to control curly-leaf pondweed. Total project cost was \$55,730. The Scott WMO budgeted \$25,000 in 2019 as indicated in the Plan Strategy and decided in early 2019 to use a different pesticide for Cedar that was less expensive. The CLID paid the remaining balance of \$30,730. For 2019 this marked the eighth year that some portion of the lake was treated, and improvements are starting to show. See table below for survey results through 2019. Overall the number of submerged species/taxa was about the same as other more recent years. However, the presence of native taxa was down as compared to 2016.

### CEDAR LAKE AQUATIC PLANT SURVEY DATA

YEAR	Treatment Date	CLP* Acres Treated	PI Survey Date	Max Depth of Growth in feet [95%]†	% Points w/ Native Submersed Taxa	Mean Native Submersed Taxa/ Point	# Submersed Taxa	AVG Secchi Depth [m]
2007	-	NA	MAY	11	1	<0.01	2	-
	-	NA	AUG	7	3	<0.01	4	-
2009	-	-	JUN	11	3	<0.1	3	1.3
2012	MAY	102	SEPT	11	12	0.3	7	0.9
2013	JUN	200	JUL	11	24	0.4	7	1.1
2014	MAY	400	JUL	9	25	0.4	7	1.1
2015	MAY	600	AUG	8	21	0.4	7	1
	2015		JUN	11	46	0.7	8	
2016	APR	600	AUG	9	26	0.6	7	1
	2016		JUN	10	43	0.8	7	
2017	MAY	351	JUL	-	-	-	-	-
2018	MAY	396	JUL	7	20	0.3	8	1
2019	MAY	800	JUL	6	17	0.3	8	0.8

\*CLP is short for curly-leaf pondweed

†95th percentile calculated based on all vegetated sampling points

Taxa refers to groups of submersed aquatic plant species or genera

AVG- average secchi depth (water clarity measurement) from May-September

# Our Work

## Land & Water Treatment

### Capital Improvement Projects

## Aquatic Plant Management Treatment

### McMahon Lake

McMahon Lake is classified as a natural environment lake. In 2014, the DNR granted a variance to control curly-leaf pondweed using herbicide in 15% of the littoral area of the lake, or 16.5 acres in the west bay near the public access. In 2018, the DNR renewed the variance for 2019 through 2022 to continue curly-leaf pondweed control. In 2019, a survey was not completed post-treatment for McMahon. This was due to the public access being flooded and no public dock to launch from. The safety of staff was a priority in that decision. Ten submersed native species and two invasive species were observed in 2018. The invasive taxa included Eurasian watermilfoil and curly-leaf pondweed. The native taxa were dominated by coontail, water stargrass, and leafy pondweed. The goals of the treatments on McMahon are: 1) reduce the presence of curly-leaf pondweed at the access to prevent the likelihood of spread; and 2) monitor any change in Eurasian watermilfoil in the small curly-leaf pondweed removal area. The 2019 secchi data below was sourced from Met Council's Citizen-Assisted Lake Monitoring Program (CAMP).

**Point Intercept Metrics.** Summary of point intercepts metrics for McMahon Lake, Scott County, Minnesota (DOW# 70005000). Shaded values were calculated from littoral depth range.

	2017	2018
Treated (Y/N)	Y	Y
Surveyor	Scott WMO	Scott WMO/DNR
Total # Points Sampled	186	194
Max Depth of Growth (95%)	11	7
% Points w/ Submersed Native Taxa	54	20
Mean Submersed Native Taxa/ Point	1.1	0.3
# Submersed Native Taxa	7	8
# Submersed Non-Native Taxa	2	1

**Secchi Averages.** Average Secchi disk observations in meters for McMahon Lake (DOW# 70005000). Data gathered from the Minnesota Pollution Control Agency. (\*only one reading taken that month)

YEAR	MAY	JUNE	JULY	AUG	SEPT	Secchi Depth Average [May-Sept]
2013	3.0	3.0	1.5	1.0	0.5	1.8
2014	3.0	1.7	1.0	1.1	1.5	1.6
2015	3.2	2.15	1.55	0.7	1	1.7
2016	4.5	2.9	2	0.8	0.6	2.2
2017	5*	3	1.9*	0.6*	1.3	2.2
2018	3.9*	2.5	1.35	0.9	.435	1.8
2019	-	3.55	3.7*	0.67	0.87	2.2



# Our Work

## Land & Water Treatment

### Technical Assistance & Cost Share Program (TACS)



In 2019, the Scott WMO Cost Share program was in its thirteenth year. Over the last year many successful projects were approved or constructed in the three counties within the Sand Creek Watershed. The Scott WMO worked with three different SWCDs to manage these projects. Overall, the number of practices were down from the previous year, due in large part to the two large grants that we've been working on over the last few years were coming to an end. We also continue to expect fewer practices with our new tiered approach requiring more staff time per application. Funds are matched with other programs when feasible to maximize cost share dollars. In 2019, the practices in the adjoining table were authorized to improve water quality within the Scott WMO.

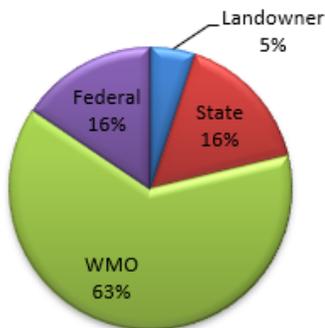
A total of 26 projects highlighted by 6 native grasses, 5 well decommissions, 4 cover crop applications, and 3 tree/shrub establishments were approved. There has been a heavy emphasis on both native grasses and cover crops, so it continues to be encouraging to

Landowners, themselves, contributed \$35,854.57. Between all these programs, a total of \$707,068.77 were approved within the WMO as part of the TACS Program for water resource improvements in 2019.

### Scott WMO 2019 Cost Share/Incentive Program Summary

Practice	Projects
<b>Cover Crop</b>	<b>4</b>
<b>Filter Strips</b>	<b>1</b>
<b>Tree/Shrub Establishment</b>	<b>3</b>
<b>Grassed or Lined Waterway</b>	<b>1</b>
<b>Native Grasses</b>	<b>6</b>
<b>Rain Gardens</b>	<b>2</b>
<b>Streambank &amp; Lakeshore Stabilization</b>	<b>2</b>
<b>Water &amp; Sediment Control Basin</b>	<b>1</b>
<b>Well Decommissioning</b>	<b>5</b>
<b>Wetland Restoration</b>	<b>1</b>
<b>TOTALS</b>	<b>26</b>

**2019 TACS Program Funding  
(Staff and Practices - \$707,068.77)**



see those two as some of the highest practices that continue to be approved. The Scott WMO dedicated \$446,052.37, which includes cost-share amounts and technical assistance, to these projects. Additional funds were leveraged from the USEPA in the amount of \$110,723.83 and from the State Cost Share in the amount of \$114,438.00, which includes the Targeted Watershed Grant.

# Our Work

## Land & Water Treatment

### WMO/SWCD Technical Assistance & Cost Share Program (TACS)

The highlighted TACS projects this year showcases a property that had a conservation practice implemented on it and a landowner with a long history of previous conservation projects.

This property is located in Belle Plaine Township. The project consisted of a grassed waterway where erosion was occurring along a field edge and the road ditch for County Road 4. The landowner has an extensive history of conservation work within the WMO. In the past, he has installed filter strips, a wetland restoration, 7 grassed waterways, 2 terraces and 6 WASCObS. The landowner is also currently working, in conjunction with his neighbor, on a potential 24 acre wetland restoration. In addition, the landowner was also involved in one of previous CIPs the WMO recently constructed.

In total, this project will reduce soil loss by 136 tons, phosphorus by 33 pounds, and sediment by 33 tons through the life of the contract. The Scott WMO, used Clean Water Legacy Funds through the Board of Water and Soil Resources, which contributed \$3,689.96 towards the project. The landowner contributed \$1,241.99 towards the project as well, representing 25% of the overall costs. Another unique aspect of the project is that the landowner himself served as the contractor for the grassed waterway installation.



**Below Photo: A drone photograph of the project site after construction has been completed.**



**Top Right Photo: The erosion that was occurring along the field edge and road ditch before the project started.**

**Middle Right Photo : A drone photograph showing the project under construction.**

# Our Work

## Land & Water Treatment

### McMahon Lake Outlet & Emergency Dewatering



McMahon Lake is a landlocked basin with no outlet. Water levels in the lake have been rising since 2010. Ever since mid-2013 water levels have stayed above the ordinary high-water level (OHW). With increasing rainfalls and lack of a drought in recent years, the lake level has risen significantly. Landowners on the lake has expressed concern over the last few years about the rising water level. Resulting high waters have caused shoreline erosion, covered much of the public boat launch, dislodged floating bogs into the lake, and shoreline restoration projects done by landowners are currently under water. There are also two septic systems at risk of flooding with no potential second site on the property to install a new one. If lake levels continue to rise, it could potentially flood areas on both Mushtown Road and County Road 8. The water level in the lake fall of 2019 reached 2.6' above the OHW.

The public boat launch has been flooded all season (2019), causing potential safety issues with people trying to launch and blocking the roadway; maintaining water levels would keep the public launch usable. The WMO hired a consultant to do a feasibility study on the possibility of a permanent outlet on the lake. Staff met with landowners around the lake twice, meetings in June and one in August of 2019, to discuss a long-term solution to the rising water levels which would consist of a permanent outlet. Since installing an outlet could take a few years depending on funding, landowners were involved in the decision to request permission to do a temporary draw down to try to leave some capacity for 2020 spring precipitation. Through late summer into early fall, staff worked on a flow analysis and various permissions for a temporary dewatering. Eleven landowners signed a support letter indicating they would be in support of drawing down water levels which was submitted to the DNR when the permit was applied for the drawdown. Because McMahon has the invasive Eurasian watermilfoil, we were required to rent a special filter, to ensure we do not transport it to downstream waters. A permit was obtained from the DNR and the dewatering was conducted October 14—November 14th.

The temporary dewatering reduced the lake water level by 14.4 inches.

A special thank you to our County Public Works staff for helping us make this happen. It was their expertise and staff that helped us get the pump, hosing and monitored it every day to make sure it was fueled to keep the pump running constantly for 30 days. The total cost to the WMO for the dewatering which includes the pump and filter rental, gasoline, and installing a pipe under Mushtown Road to allow the hose to stay within the county ROW was approximately \$40,000.

The WMO is currently pursuing funding sources for a permanent outlet.



Pump used to remove water from McMahon



Additional special filter for Eurasian watermilfoil

# Our Work

## Land & Water Treatment

### Markley Lake Outlet & Emergency Dewatering



Markley Lake is a landlocked basin located partially in the City of Prior Lake and partially in Credit River Township. The City, County, and Township were jointly sued by Township property owners in the mid-1990s after private properties were inundated by high water levels on Markley Lake. The parties reached a settlement agreement, the terms of which outlined an interim plan that relied on pumping Markley Lake to reduce water levels. The interim pumping plan was followed during a high-water event in 1999. Above-average precipitation in 2019 caused Markley Lake to rise to record-high levels, despite the City's efforts to install compensatory flood storage to control runoff from development in the watershed. In July 2019, the City of Prior Lake and Credit River Township requested cost share from the Scott WMO for a temporary project to draw down Markley. The City and Township estimated the project at \$30,000 - \$50,000 and requested an equal split among the City, Township and WMO. The Scott WMO budgeted \$16,700 towards the cost.

The approved Scott WMO Comprehensive Water Resources Management Plan includes a strategy called "Unimproved Drainage Systems" that applies to this situation which reads as follows:  
*There is also a considerable amount of "unimproved" or natural drainage ways, lakes, ponds and wetlands with natural overflows. The SWMO will not take an active maintenance role with these systems. In emergencies, or where negative water quality or flooding issues are threatened, the SWMO may consider a more active role in mitigating the impact or threat.*

The City began pumping Markley Lake on August 20th, at that time lake level was 4.3 feet above the Ordinary High Water level. Pumping stopped at end of October due to weather and freezing conditions. Discharges were only made when flow in the Credit River was relatively low to avoid the potential for contributing to downstream problems.

Due to fall rains, the lake level in November overall was down 2.19 feet or 26" from August 20th. The City of Prior Lake managed the drawdown and inspected structures downstream during the dewatering and no negative impacts were observed.

The WMO is working with the City of Prior Lake and Credit River Township to investigate the options for a permanent outlet.

# Our Work

## Education & Outreach



The Scott Clean Water Education Program (SCWEP) was developed out of a need from local government organizations in Scott County to meet the educational requirements of the Municipal Separate Storm Sewer System (MS4) Stormwater Pollution Prevention Plans (SWPPP). Program partners are: Credit River Township, Jackson Township, Scott County, Scott Soil & Water Conservation District, Scott Watershed Management Organization, Spring Lake Township, Louisville Township, Vermillion River Watershed Joint Powers Organization, Prior Lake-Spring Lake Watershed District, and the Lower Minnesota River Watershed District.

### Workshops

#### *Cover Crop, Native Grass, Raingarden and Shoreline Workshops*

In 2019, SCWEP offered cover crop, native prairie, raingarden and shoreline workshops. SCWEP continued to partner with Rice, Carver, and Le Sueur SWCDs to host a full day Cover Crop Workshop in Le Center. The workshop featured a farmer-led panel covering multiple topics including no-till, strip-till, and cover crops. Sarah Carlson of Practical Farmers of Iowa and Dean Sponheim, a producer in Osage, IA spoke on how to make cover crops pay. These workshops continue to be well attended and future workshops will continue to be planned. This year's attendance was as follows: 44 participants at the Raingarden workshop, 59 participants at the Native Prairie Workshop, 44 participants at the Shoreline Workshop, and 70 participants at the multi-county Cover Crop workshop.

#### *Smart Salting Winter Maintenance Best Management Practices Workshops*

In 2019, the Scott WMO offered six Smart Salting Winter Maintenance workshops for winter maintenance staff to learn how to reduce chloride applications and impacts to our surface waters while still maintaining a level of service and safety to residents. One hundred twelve (112) participants were trained by Fortin Consulting staff and took the certification test. This project was funded by the Clean Water Fund through the Watershed Based Funding Pilot Program.



### Tours

#### *Scott WMO/SWCD Conservation Tour*

This year the Scott WMO/SWCD tour focused on a CIP project, dairy farm tour, and cover crop test plot. Twenty-three people attended the tour including: Scott County Commissioners; members of the Scott County Watershed Planning Commission; SWCD Supervisors; Prior Lake-Spring Lake Watershed District Managers; and WMO, PLSLWD and SWCD staff. Stops included the WMO Sand Creek Capital Improvement Project (CIP) site, Mark Klehr's dairy farm, and the Scott SWCD cover crop test plot. This annual event allows county officials to view conservation projects throughout Scott County first-hand and see how dollars are being spent. It is also a chance to give them a better understanding of the importance of conservation, showing them that, over time, real changes are being made in the county.



WMO/SWCD Tour: Klehr dairy farm stop



Cover crop workshop: March 2019

# Our Work

## Education & Outreach



The SCWEP used both active and passive marketing and outreach techniques in 2019 to connect with various audiences. The active marketing included workshops, field demonstrations, tours, direct mailings, utility bill inserts, and one-on-one landowner meetings. Passive marketing consisted of news articles and event displays that focused on the effects of how our decisions impact water quality and was intended to reach larger audiences as our “base” messaging. Forty-one (41) relevant news articles were published in 2019 and included:

Issue	Article	Partner
Feb/March	Compass Learning Center Success Story	WMO
	River City Centre Success Story	WMO
	Water Softener Salt article	WMO
	Reluctant Regulator—SCENE Environmental Services column	WMO
	Food Plot Seed Update	SWCD
	March Cover Crop Workshop	SWCD
	Native Prairie Planting Workshop	SWCD
	Scott County Parks Success Story	SWCD
April/May	Free Nitrate Testing for Well Water	WMO
	Henderson Apartment Success	WMO
	Live Native Garden Kits Available for Spring	SWCD
	Raingarden Workshop Coming Up!	SWCD
	Spring Lawn Care for Clean Water	SWCD
	Bring Your Community Together for Clean Water	SWCD
June/July	Scott SWCD Staff Hosts One-on-One Meeting With Farmers	SWCD
	Cover Crops Help Local Farmer Care For His Soil	SWCD
	Stabilize Your Shoreline Workshop Coming Up!	SWCD
	Drinking Water Series Part II, Arsenic	SCES
	AIS—What to Look For	WMO

# Our Work

## Education & Outreach



2019 SCENE Articles continued:

Issue	Article	Partner
June/July	Watercraft Inspections This Summer	WMO
Aug/Sept	Cover Crop Test Plot Moves Onto Year Two	SWCD
	Local Couple Restores Prairie To Improve Diversity	SWCD
	Conserving Water Does Make a Difference	SWCD
	Blue Green Algae	WMO
	Don't Flush Medicines	SCES
	Wipes in Septic Systems	SCES
	Bluff Stabilization	WMO
Oct/Nov	Nutrient Management Techniques Benefitting the Environment	SWCD
	Father-son Duo Creates Homemade Interseeder	SWCD
	Waste-Wise Canterbury Park	SCES
	Buckthorn Bust at Prior Lake Spring Lake Watershed District	PLSLWD
	Test Well Water for Arsenic	SCES
	Scott County Drinking Water Part III, Manganese	SCES
	Septic System Winter Update	SCES
	Non-point Source Pollution	WMO
Dec/Jan	Local Farmers Participate in Cover Crop Aerial Seeding	SWCD
	Scott SWCD and WMO Host Annual Fall Conservation Tour	SWCD
	Students Learn Environmental Lessons at OED	SWCD
	Five Ways to Use Less Salt This Winter	SWCD
	Improving Water Quality— SCENE Environmental Services column	WMO
	Microplastics Found Everywhere; Be Aware, Choose To Reduce Use	SCES

# Our Work

## Education & Outreach



### Events

#### *The 34th Outdoor Education Days*

2019 hosted the 34<sup>th</sup> annual Outdoor Education Days. (OED) This year 1,127 third through sixth graders from 14 schools—including schools from Belle Plaine, New Prague, Shakopee, Savage, and Jordan—were part of the fall outing. The weather cooperated extremely well with the event, and no rain days were needed this year.

The six OED stations focused on forestry, wildlife, soil health, the water cycle, pond macro-invertebrates, and conservation. The stations were taught by staff from the Scott SWCD, Prior Lake-Spring Lake Watershed District, and Three Rivers Park District. At the end of each day, CLIMB Theatre put on a production about recycling and composting. Outdoor Education Day remains the main activity that SCWEP utilizes to directly reach Scott County youth.



#### *Storm Drain Stenciling*

In the fall of 2019, Boy Scout Troop 323 used the SCWEP's storm drain stenciling kit to spray paint 18 storm drains around Cedar Lake. The effort served as both a youth educational tool for water quality and storm water runoff outreach, as well as outreach and awareness for residents around the lake.

The project involved the nine members of the troop, and their two chaperones. It took place over two weekends in October. The messages are expected to reach residents of Cedar Lake as well as those who frequent the lake for recreation.



# Our Work

## Monitoring/Data Collection



The Scott WMO monitoring program collects data on lakes and streams. It also periodically collects data on groundwater and reports on data collected by others.

## Lake Water Quality

Since 2006 the WMO has been recruiting volunteers and participating in the Metropolitan Council’s Citizen Assisted Lake Monitoring Program (CAMP). In 2019, four lakes were enrolled in the CAMP program and sampled by volunteers. These lakes include Cedar (DNR ID# 70-0091), McMahan (DNR ID# 70-0050), O’Dowd (DNR ID# 70-0095), and Thole (DNR ID# 70-012001). Final data for all lakes have been received for 2019 and are discussed below. Thole Lake does not have enough consecutive data history to chart a trend, but lake grades have been included for the years that data is available.



The following table provides a summary of lake monitoring through 2019. The summary is presented as a “lake grade” that provides a comparison to other lakes in the Twin Cities area and is based on the following Trophic State Parameters: total phosphorus, chlorophyll-a, and secchi transparency. The specific data is available on request or through the Met Council’s [Environmental Information Management Systems \(EIMS\) database](#).

Lake Water Quality Grades Based on Summertime Averages of Trophic State Parameters													
	Year												
Lake	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Cedar	D	D	—	D	D	D	D	C	D	D	D	F	F
Mc-Mahon	C	D	C	C	C	C	C	C	C	C	C	C	C
O’Dowd	C	C	C	C	C	C	B	B	C	C	C	C	C
Thole	—	—	—	—	C	—	—	—	C	D	C	C	C

Cedar Lake appears to be unchanged, and this is not surprising. The magnitude of problems in the lake (see the [TMDL study for Cedar Lake](#) on the county website) are significant and it will take more management before changes become noticeable. O’Dowd and McMahan lakes, however, are generally improving which can be seen from the graphs on the following page.

These improvements reflect a reduction in the nutrient phosphorus. Phosphorus promotes the growth of microscopic plants called algae. Excessive amounts of algae can turn water green and scummy, limiting clarity and creating a yuck factor for swimming. It can also impact a lake’s ecological health. For O’Dowd lake all three trophic state indicators: water clarity, phosphorus concentrations, and chlorophyll-a are generally improving. Both lakes now meet state water quality standards. The Minnesota Pollution Control Agency removed Lake O’Dowd from the impaired waters list in 2016 and they removed Lake McMahan in 2018.

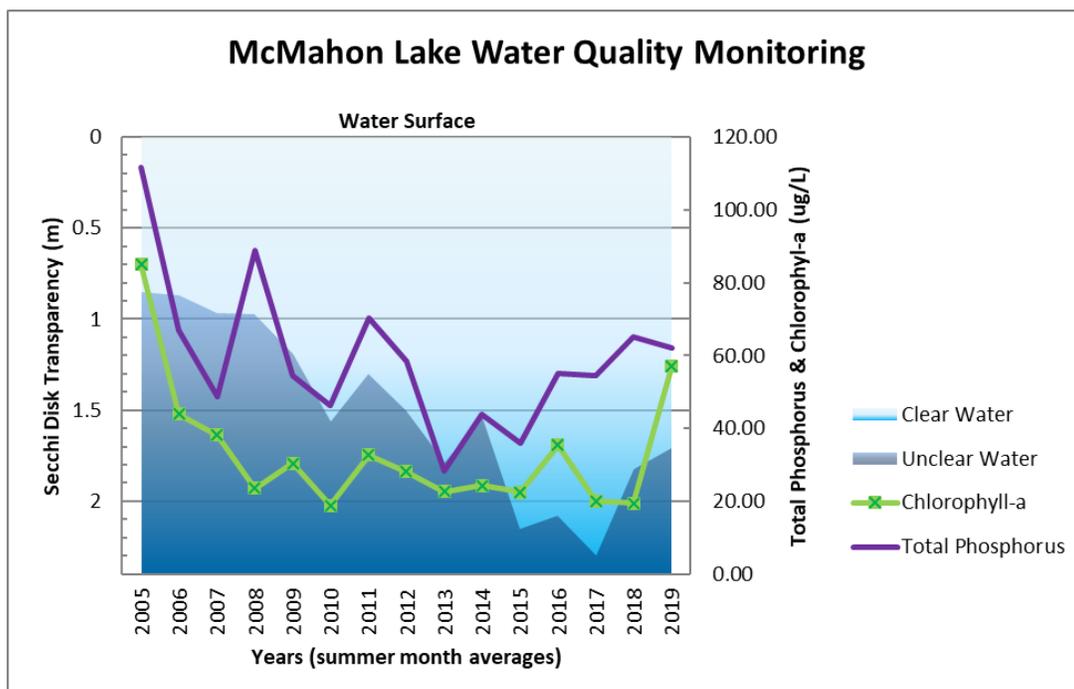
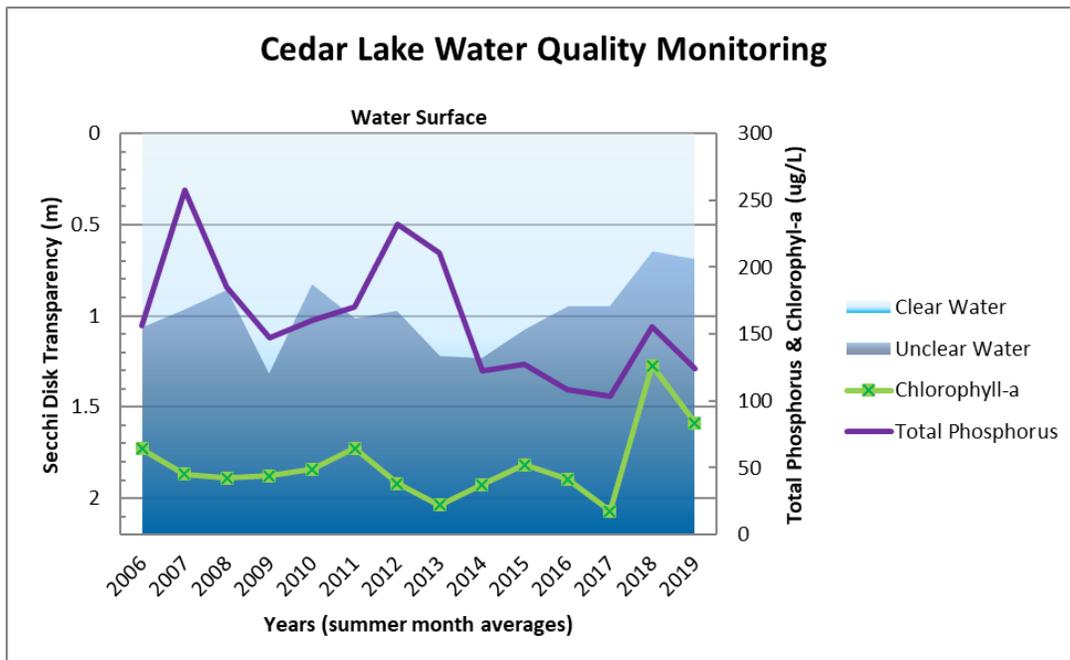
# Our Work

## Monitoring/Data Collection

### Lake Water Quality (continued)



State Standards for Shallow Lakes in the North Central Hardwood Forest Ecoregion	
Parameter	Standard (units)
Total Phosphorus	60 µg/L
Chlorophyll-a	20 µg/L
Secchi Disk Transparency	Greater than 1m



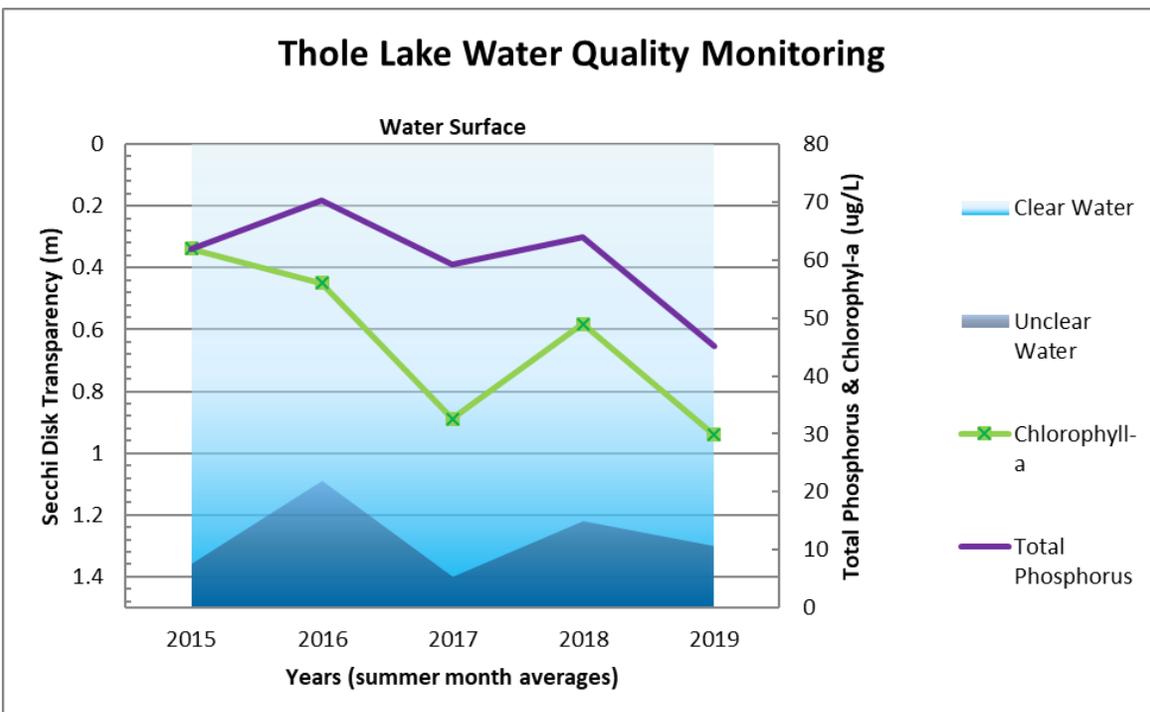
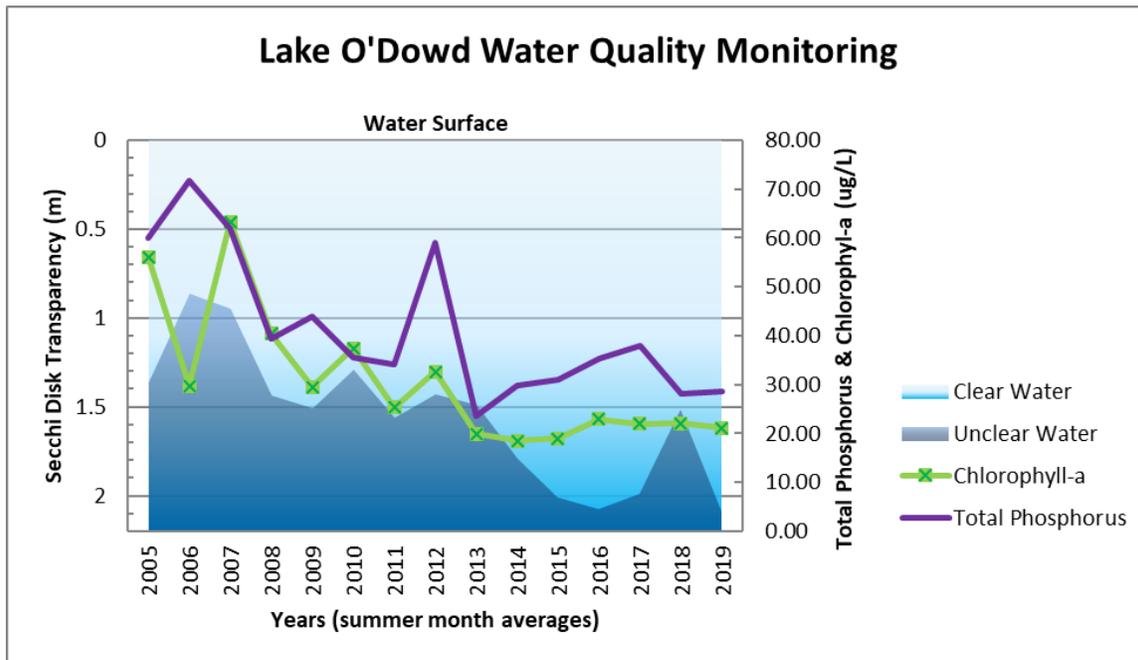
# Our Work

## Monitoring/Data Collection

### Lake Water Quality (continued)



State Standards for Shallow Lakes in the North Central Hardwood Forest Ecoregion	
Parameter	Standard (units)
Total Phosphorus	60 µg/L
Chlorophyll-a	20 µg/L
Secchi Disk Transparency	Greater than 1m



# Our Work

## Monitoring/Data Collection

### Stream Water Quality



#### Credit River Chloride Monitoring

In 2018, the MPCA added the Credit River to the 303d list of impaired waters for excessive chloride concentrations. Chloride concentrations in the Credit River have been known to exceed state concentration limits of 230mg/L near the Minnesota River confluence, but little is known about the exact source of chlorides creating the high spikes. Scott SWCD conducted a monitoring study during the 2019 spring thaw to help zero in on potential chloride contributing areas. During this study water quality samples and real-time Sonde readings were collected throughout the Credit River watershed over an eight-week period starting late February. This provided background information as to the amount of chlorides traveling through the watershed and will aid in identifying where future chloride-reduction efforts can be focused and have the greatest impact.

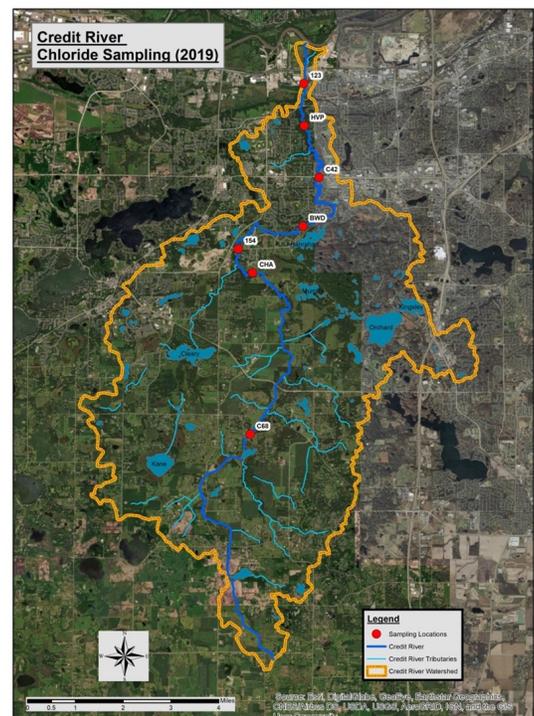
A total of seven locations throughout the Credit River watershed were monitored for chloride along with other water quality parameters. The sites were systematically selected to capture and help isolate probable chloride inputs into the river (**Figure 1**). At the lowest end of the watershed (site 123) is a Metropolitan Council Watershed Outlet Monitoring Program (WOMP) site. This site has historically high levels of chloride concentrations during periods of snowmelt. Traveling upstream, the next site is located at Hidden Valley Park (HVP) and is surrounded by an urbanized section of the river. The next site is just upstream of the County Road 42 crossing. Similar to the HVP site C42 is located in an urbanized area, although the surrounding land use is more residential particularly in the further reaches of its drainage area. Continuing upstream the crossing at Bridgewater Drive (BWD) captures potential influences of a significant wetland complex just upstream. To help identify potential contributions from the Cleary Lake subwatershed the next two locations-154<sup>th</sup> St. W (154) and Hampshire Ave. S (CHA)-capture readings above and below that tributary area's input into the Credit River. Finally, at the top of the watershed, the County Road 68 (C68) site provided readings that helped to characterize the quality of water originating from the upper portion of the watershed. This area is significantly less urbanized than lower reaches, and is dominated by low density residential and open space including agricultural and natural lands. Results from site C68 may closely indicate baseline or background chloride values for Credit River.

Two "event" samples were collected during thawing events. The "event" samples required two consecutive days above freezing (32°F) and attempted to capture the most potential for higher chloride concentrations outside of the weekly routine samples. Sampling started the last week of February and continued to the middle of April 2019. This allowed for the river to be monitored while it was still frozen in a few locations until it was completely thawed and the winter snowpack had melted.

**Results.** In general, chloride levels increased traveling further downstream. The exception to this was at CHA, where its chloride concentrations were higher than the next site downstream (C42) in all but two samples. Its levels were even higher than the site two stations downstream (BWD) seven times. This was a flatter section of the river that stayed frozen the longest and was flooded into the flood plain during most of the samples. The combination of these two factors may be the cause of the higher levels.

#### Discussion

From this study a few items can be concluded. First, it is confirmed that there is a chloride issue within Credit River especially during the initial snowmelt period. By capturing a portion of the initial melt, the study also identified locations of the higher chloride inputs into the river. Finally, the study provided an insight to the relationship between chloride concentrations and conductivity readings.



**Figure 1:** Map of sample collection points along Credit River

# Our Work

## Monitoring/Data Collection

### Groundwater



#### ***Additional Arsenic Sampling***

After the findings of the 2018 voluntary groundwater sampling of private wells in Scott County where arsenic was detected in 73% of the wells sampled, with 16% of those samples having arsenic levels greater than 10 parts per billion, the WMO, in partnership with the Environmental Health department, sent out a postcard to WMO residents. The postcard indicated that recent well water testing by Scott County found that some wells had concerning levels of arsenic. We recommended residents with private wells test for the presence of arsenic if they have not done so already. We made test kits available to residents at the Scott County Government Center.

The maximum level of arsenic the U.S. Environmental Protection Agency (EPA) allows in community water systems is 10 parts per billion (ppb). However, consuming water with arsenic at levels lower than the EPA standard over many years can still increase your risk of cancer. As a result, the EPA has set a goal of zero (0) parts per billion of arsenic in drinking water.

The total number of samples submitted by landowners for arsenic testing after the postcard and Scene article about arsenic went out were 428. Thirty-three (33%) of the 428 samples submitted were over the 10 ppb standard for arsenic. Sixty-seven (67%) of samples submitted showed arsenic levels below the federal standard (above zero but below 10 ppb). New wells drilled in Minnesota are required to have a water sample analyzed. Minnesota Department of Health (MDH) sends out letters for new wells drilled that get tested. MDH sends a letter to the homeowner if the sample tests over the federal standard. In addition, they send a letter if the results are over 2 ppb. In 2019 of the 428 tests, 278 (65%) were over 2 ppb.

Arsenic deposition in Minnesota is due to the most recent glacial event (Des Moines lobe). In areas with the greatest amount of glacial deposits (higher depths to bedrock) private wells are more likely to be installed in glacial deposits as opposed to bedrock. The measured elevated arsenic levels are being displayed on the depth to bedrock map (Figure 1, page 24) in order to reinforce the likelihood of experiencing elevated arsenic levels in wells most likely installed in glacial deposits.

# Our Work

## Monitoring/Data Collection

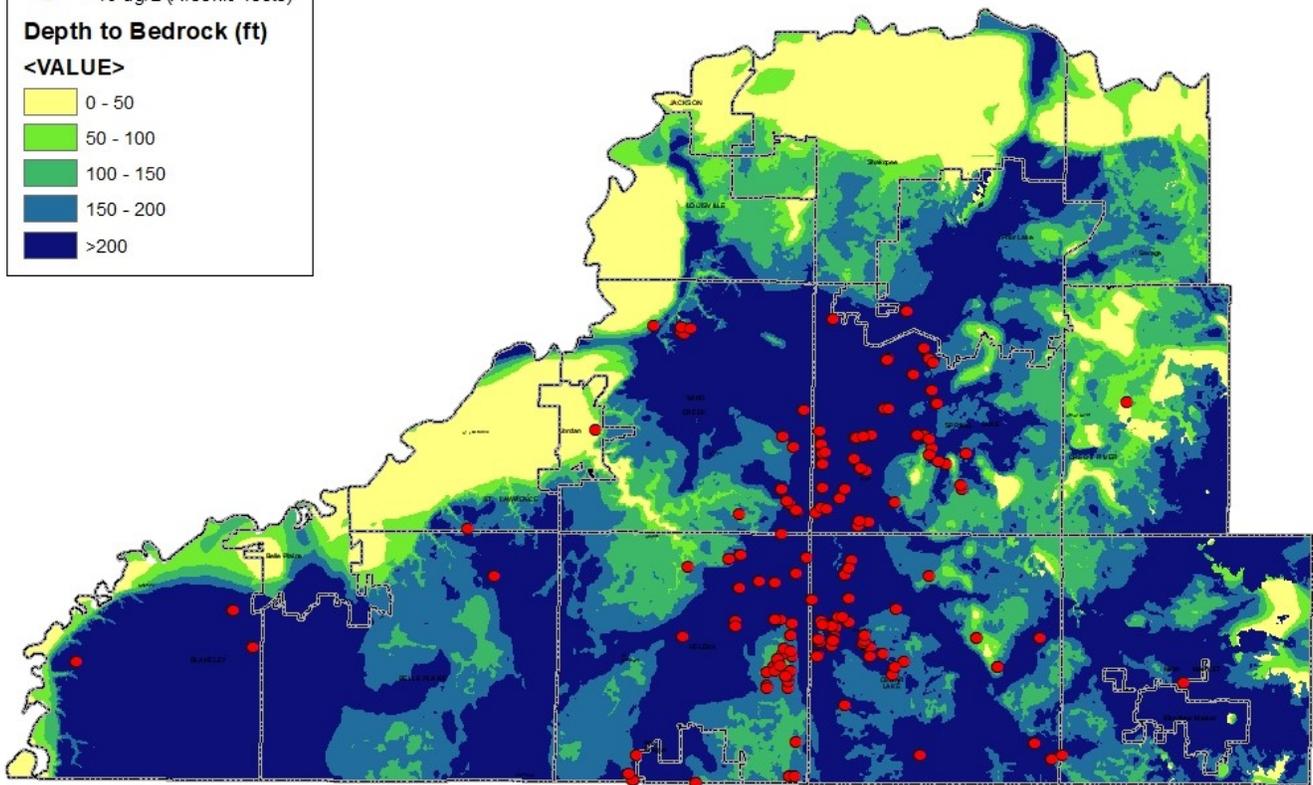
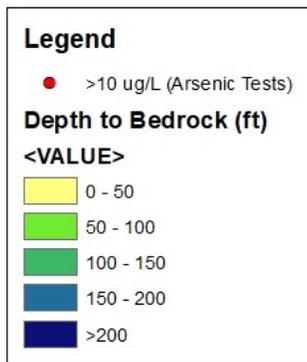
### Groundwater (continued)

#### Additional Arsenic Sampling (continued)



Figure 1. Arsenic Results Above 10 Parts Per Million

## Elevated Arsenic Results



●

# Our Work



## Planning

### Local Water Planning

In 2019, the City of Shakopee, Elko New Market and Credit River Township submitted local water plans for review to the Scott WMO. The Scott WMO reviewed the Plans and submitted comments back to the city and township. The City of Jordan Local Water Plan was approved by the Scott WMO, and County Board with consideration of the City of Shakopee and Credit River plans expected in early 2020.

### Plan Amendments

On August 6th the County Board approved the first amendment to the WMO Water Resource Management Plan, adding the Helena Near Channel project to the Capital Improvement Projects, Table 5-4.

### Corrective Action Plan

The WMO submitted a Corrective Action Plan to BWSR regarding two past projects that were removed by the landowners prior to the contracts expiring. The WMO put in extensive work to address the concerns of BWSR and also worked collaboratively with them towards a solution. The WMO chose the route of replacement projects of equal value, both financially and environmentally, to replace the removed projects. The replacement projects were installed in 2019 but final project certification to completely satisfy the Plan will be achieved in 2020.

# Our Work



## Coordination

In April, the WMO held a Technical Advisory Committee meeting to discuss the 2019 WMO Workplan, receive input on arsenic findings in private wells, a group discussion on the Chloride Management special projects funding, and input on the McMahon Lake alum treatment. Staff coordination time was also dedicated to specific grants and the McMahon Lake temporary dewatering project.

## Regulation

### Ordinances

Updates to Chapter 6, Stormwater Management, Erosion Control, and Wetlands, in the Scott County Zoning Ordinance are currently underway. The ordinance updates were necessary due to the most recent Scott County Water Plan approval and updates to the Minnesota Pollution Control Agency NPDES Permit. Proposed ordinance updates have been presented to the townships at a series of meetings this winter and will be brought to the Planning Commission and County Board later this spring for final approval and adoption. The proposed changes to Chapter 6 are part of a larger update of the entire Zoning Ordinance. The proposed changes are generally minor with updates to referenced plan dates and updates to some design standards to match current best management practices. The largest ordinance change is the change in the water quality requirements to remove the need to provide water quality via a wet pond and instead allow development to utilize the current MPCA NPDES Permit requirements, with alternative requirements, if NPDES treatment is not feasible onsite. The ordinance update also includes a section on Drainage Alterations that is new to the ordinance but has been a standard in the WMO and County water plans for some time.

### Biennial Solicitations

The SWMO did not have any consultant solicitations in 2019.

# 2019 Organization Finance Summary



The Scott WMO financial summary is provided in the adjacent table for the fiscal year ending December 31, 2019. The complete 2019 Annual Financial Report and Audit is included with the Scott County Audit typically completed in June following an audit by the State. The 2019 budget was amended during August 2019 by the Board. This amendment was completed to rollover funds from items budgeted but not completed in 2019 and to incorporate efforts towards feasibility studies and temporary lake outlets for Markley and McMahan.

Actual revenue in 2019 was \$1,601,798 which was roughly \$390,000 less than the amended budget. This was largely due to reimbursements under the 319 grant being less than budgeted, and Watershed Base Funding being less than budgeted.

Overall expenses were also less than budgeted by roughly \$419,000. The Land and Water Treatment, Education, and Inventory and Assessment programs were the largest contributors to expenses being under budget.

ACCOUNT	2019 ACTUAL (un-audited)
<b>REVENUE</b>	
Local Water Planning Grant	\$8,094
Interest Income	\$10,681
Property Taxes	\$1,198,116
BWSR Watershed Based Funding	\$84,577
BWSR Sand Cr Targeted Grant	\$191,550
MPCA 2016 319 Grant	\$101,066
Project Reimbursement	\$3,213
Other Misc. Revenue	\$4,501
<b>TOTAL REVENUE</b>	<b>\$1,601,798</b>
<b>EXPENSES</b>	
Administration	\$135,584
Land & Water Treatment	\$621,580
Monitoring & Data Collection	\$13,822
Education/Public Outreach	\$118,699
Regulation	\$3,039
Inventory & Assessment	\$89,681
Planning	\$7,899
Coordination	\$52,499
Debt Service (Quarry Creek Loan)	\$99,825
MPCA 319 Grant	\$196,945
BWSR Watershed Based Funding	\$84,577
Sand Creek Targeted Grant	\$318,804
FEMA Non-Reimbursed Technical Assistance	\$185
<b>TOTAL EXPENSES</b>	<b>\$1,743,139</b>
Fund Balance Starting	\$460,785
Fund Balance Used	-\$141,341
*TACS Program Funds	-\$5,000
Fund Balance Ending	\$314,444

\*Unencumbered funds held at the Scott SWCD and encumbered for practices in 2019.

# How Are We Doing?

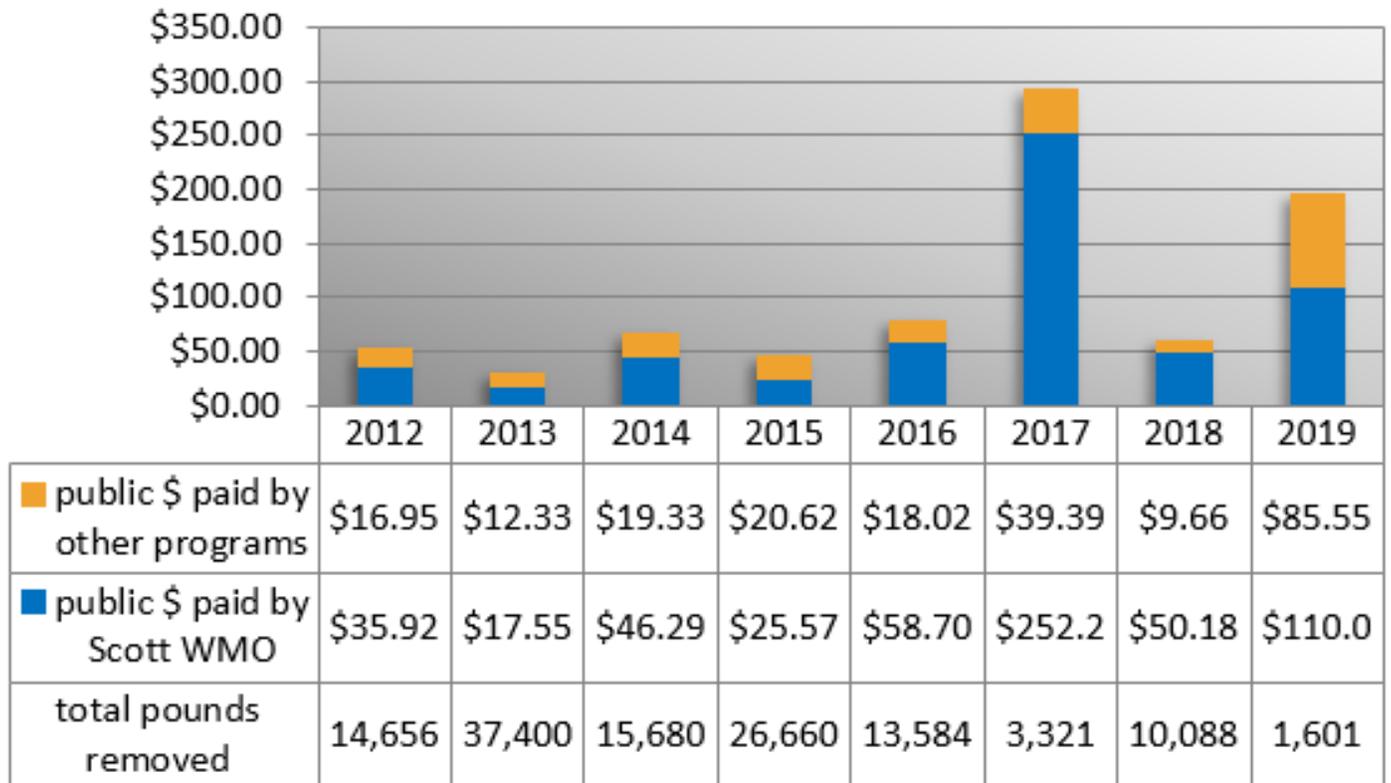


The Scott WMO assesses how it is doing with respect to its programs and goals annually. The following two graphs present an assessment of the cost effectiveness of the TACS program, and the levy impact over time.

This graph shows the average cost per pound of total phosphorus estimated to be removed by TACS surface water quality projects approved each year. Costs include construction and staffing. For the TACS program, costs are presented as dollars paid by the Scott WMO, and also total cost to account for funds leveraged from other programs. Similar calculations from a study of the Denver, Co. area give a range of \$241 to \$2,780 per pound of phosphorus removed. The TACS program, (Scott WMO and total) compare with the low end of the range of costs from the Denver study. This may reflect that the Denver study included urban practices (which tend to be more expensive) while the TACS program has both urban and agricultural practices.

In 2019, benefits were still being separated out for practices that focus on phosphorus and practices that focus on runoff. This approach helps to show the true cost of phosphorus reductions for the practices where those reductions are the focal point. More recently, a higher emphasis on runoff reducing practices has been the focus over phosphorus reduction driven practices. This is a factor in why the cost benefit numbers are higher than in previous years as evidenced by the reduced total pounds of phosphorus removed. Also, two large grants were coming to a close in 2020 so the number of project approvals were down as those grant funds were largely encumbered for projects. Those prior approved projects still needed to be installed so the technical assistance remained the same but project approval numbers were down. The phosphorus reduction numbers are based off when projects are approved, which this correlates to why the costs are high and the reductions numbers are lower.

**Average Cost/Pound of Phosphorus Controlled Annually Through Technical Assistance and Cost-Share projects**



Note: Amounts presented represent the approved budgets, not actual expenses.

# How Are We Doing?



## 2019 Work Plan—Completed vs. Ongoing

### Inventories and Assessment

- Finish Cleary Lake Subwatershed Assessment (was not completed in 2019, it is in the workplan and budget to complete in 2020)
- Complete Subwatershed Assessments for Thole Lake, and upstream areas of Sand Creek (was not completed in 2019 due to staff being deployed overseas, it will be completed early 2020)
- Support Cities of Savage and Shakopee studies passing through BWSR Watershed Based Funding (grant agreements between the County and cities have been completed, cities are working on a scope of work with a consultant in 2020)
- ✓ Support City of Jordan with flood damage mitigation study
- ✓ Pilot study to identify abandoned wells in the City of Prior Lake DRWSMA

### Education

- ✓ General education and Support to Scott Clean Water Education Program
- ✓ Write and distribute “success” stories
- ✓ Host Shoreline Restoration, Cover Crop, and Prairie Planting Workshops
- ✓ Maintain Sand Creek Story Maps
- ✓ Complete chlorides de-icing trainings and assessment

### Land & Water Treatment

- ✓ Continuation of the Technical Assistance Cost Share Program leveraging funding from the USEPA 319 grants and the Sand Creek Targeted Watershed grant with emphasis on cover crops
- ✓ Continue implementation of Cedar and McMahon Lakes TMDLs with special focus on Curly-leaf Pondweed control in partnership with local organizations
- ✓ Partner with Three Rivers Park District for Curly-leaf Pondweed control on Cleary Lake
  - Finish design, bid, and start construction on Phase 3 and 4 targeted near channel stabilizations on Sand Creek (We finished design, bid, and construction of the Phase 4 project. We only finished design of the Phase 3 project. The landowner passed away and the remaining family members were not in a place to move forward with bid and construction last fall)
- ✓ Plant last targeted riparian buffer along Sand Creek under the Targeted Watershed grant

### Monitoring

- ✓ CAMP Volunteer Lake Monitoring
- ✓ Synoptic monitoring of the Credit River

### Regulation

- ✓ Review updated Local Water Plans

### Planning

- ✓ Published Plan adopted late 2018 and track implementation

### Coordination

- ✓ Scott County Parks and Public Works Coordination
- ✓ Other Scott County Watershed Organizations
- ✓ MPCA 9-Element Plan for future Sand Creek 319 grant

### Maintenance

- Develop Asset Management program/system for use with Scott WMO facilities (Status Review Tracker—started it in 2019, should be completed in 2020)
- ✓ Inspect completed projects
  - Maintain as scheduled and needed (inspected for maintenance on three projects but did not complete it because of precipitation and high water in 2019. We are planning on completing the maintenance for each site in

# Our Plans

## 2020 Workplan



### Inventories and Assessment

- Partner with the City of Prior Lake to complete the Pica Creek headwaters analysis
- Finish Cleary Lake Subwatershed Assessment, begin next SWA
- Complete Subwatershed Assessments for Thole Lake, and upstream areas of Sand Creek
- Support Cities of Savage and Shakopee studies passing through BWSR Watershed Based Funding

### Education

- General education and Support to Scott Clean Water Education Program
- Write and distribute "success" stories
- Host Shoreline Restoration, Cover Crop, and Prairie Planting Workshops
- Maintain Sand Creek Story Maps
- Integrate social-based community marketing into chloride program

### Land & Water Treatment

- Continuation of the Technical Assistance Cost Share Program with emphasis on cover crops
- Continue implementation of Cedar and McMahon Lakes TMDLs
- Focus on Curly-leaf Pondweed control in partnership with local organizations
- Finish Phase 4 targeted near channel stabilizations on Sand Creek
- Continue working on partnership and funding opportunities for McMahon and Markley lakes outlet issues
- Partner with Three River's Park District on Blakeley Park erosion/stabilization CIP

### Monitoring

- CAMP Volunteer Lake Monitoring
- Continue annual AIS monitoring. Promote County coordination of local programs
- Begin developing IBI and bacteria source monitoring programs for impaired streams

### Regulation

- Review updated Local Water Plans

### Planning

- Continue building collective capacity and implementing the 7 Guiding Principles
- Track implementation of 2019 Watershed Management Plan

### Coordination

- Scott County Parks and Public Works Coordination
- Other Scott County Watershed Organizations
- MPCA 9-Element Plan for future Sand Creek 319 grant
- Watershed Based Funding Coordination
- 1W1P Coordination

### Maintenance

- Develop BMP Inspection App
- Develop Asset Management program/system for use with Scott WMO facilities
- Inspect completed projects
- Maintain as scheduled and needed

# Our Plans

## 2020 Budget



### 2020 Revenue

**\$1,683,909**

Anticipate using \$36,159 from the Fund Balance at end of year.

ACCOUNT	2020 Budget
<b>REVENUE</b>	
Local Water Planning Grant	8,094
Interest Income	10,000
Property Taxes	1,253,315
MPCA 2016 319 Grant	83,000
BWSR Sand Cr Targeted Grant	220,000
BWST Watershed Based Funding	70,500
AIS Funding	12,000
O'Dowd Chain of Lakes Assoc.	2,000
City of Prior Lake Pica Creek Analysis	25,000
<b>TOTAL REVENUE</b>	<b>\$1,683,909</b>
<b>EXPENSES</b>	
Administration	131,600
Land & Water Treatment	1,090,078
Monitoring & Data Collection	16,700
Education/Public Outreach	158,432
Regulation	3,623
Inventory & Assessment	207,872
Planning	7,763
Coordination	60,000
Maintenance	44,000
<b>TOTAL EXPENSES</b>	<b>\$1,720,068</b>
Fund Balance Usage	\$36,159

### 2020 Expenses

**\$1,720,068**



*Scott Watershed Management Organization*

200 Fourth Avenue West

Shakopee, MN 55379-1220

952-496-8054 Fax 952-496-8496

[www.scottcountymn.gov/wmo](http://www.scottcountymn.gov/wmo)

March 25, 2020

Renee Christianson  
Economic Development Coordinator  
City of Elko New Market  
601 Main Street  
Elko New Market, MN 55054

Dear Mrs. Christianson:

This letter presents the findings of the Scott Watershed Management Organization review of the City of Elko New Market 2040 Comprehensive Surface Water Management Plan, December 2019 (Plan). The documents were reviewed for equivalency with the Scott Watershed Management Organization Comprehensive Water Resources Management Plan in accordance with State Statute 103B and Minnesota Rules 8410.

Overall, we commend the City for writing a well thought out Plan placing a high priority on improving impaired waters and its intention to work collaboratively with the Scott WMO and other agencies. The Scott WMO has received comments from the Metropolitan Council on the City of Elko New Market's Comprehensive Surface Water Management Plan. Metropolitan Council's third comment regarding the Conclusion on page 34 indicates "the plan should include a specific, detailed explanation of how the City will address continued development in the future growth boundary." Staff at the Scott WMO feels the city has addressed this comment in it's Surface Water Quantity Policies included in the plan on rate and volume control.

Staff feels the City's 2040 Comprehensive Surface Water Management Plan meets the requirements of Minnesota Statute 103B.235 and Minnesota Rule 8410.0160 and will present your Plan at the April 27<sup>th</sup> Scott WMO Watershed Planning Commission meeting for a recommendation to forward your Plan to the Scott County Board for final approval.

If you have any questions, feel free to call me at 952-496-8887.

Sincerely,

Melissa Bokman Ermer

Cc: Vanessa Strong, Water Resources Supervisor, Scott Watershed Management Organization  
Richard Revering, P.E., Bolton & Menk, Inc.  
Joe Mulcahy, Metropolitan Council



*Scott Watershed Management Organization*

200 Fourth Avenue West

Shakopee, MN 55379-1220

952-496-8054 Fax 952-496-8496

[www.scottcountymn.gov/wmo](http://www.scottcountymn.gov/wmo)

April 2, 2020

Jesse Carlson  
City of Savage  
6000 McColl Drive  
Savage, MN 55378

Dear Mr. Carlson:

This letter presents the findings of the review of the draft City of Savage's Water Resource Management Plan, dated January 2020. The documents were reviewed for equivalency with the Scott Watershed Management Organization Comprehensive Water Resources Management Plan and in accordance with State Statute 103B and Minnesota Rules 8410. According to Minnesota Statute 103B.235, Subd. 3, the Scott Watershed Management Organization (SWMO) is required to consider comments submitted by the Metropolitan Council.

Overall, we commend the City for writing a thorough and well thought out Plan placing a high priority on working collaboratively with the three watershed organizations and for a commitment to improving water quality.

Although staff feels the Plan is close to an approval, we have some comments and follow-up questions we would like a response to before we are ready to recommend its approval. Below please find our comments and questions for your consideration and response.

1. Staff agrees with Met Council comment 1. The Plan does not have information on current land use. If that information is in your 2040 Comprehensive Plan, please reference that in your water plan or add it to the draft Water Resource Management Plan (WRMP). In addition, Section 3, page 13, 3.13 Land Use & Public Utilities Services. Figure 3.11 should represent land use for the City based on the 2040 Plan, not 2020 Plan.
2. Section 3, page 6, 3.3.1 Wetlands. "The City completed a Comprehensive Wetland Management Plan (CWMP) in 1999, which is available at [www.cityofsavage.com/water-resources](http://www.cityofsavage.com/water-resources)." This link does not work, and staff cannot find the CWMP on the city's website. Since the city has a Comprehensive Wetland Management Plan, the WMO would need to review as part of this approval process because it details how the city's wetland program operates. It should also be an appendix to your WRMP. If the CWMP has not been updated since 1999, is it the city's intent to update it? If so, that should be expressed in the Implementation section of the WRMP.
3. Our current Plan and WMO Standards reference the MPCA NPDES Construction Stormwater requirements for post-construction stormwater treatment systems. The city should consider referring to the post-construction MPCA NPDES permit requirements instead of NURP treatment. (WMO Standard D – Stormwater Management, 2.(g).) The City

could certainly require a NURP pond as well as the infiltration requirement as that would be more strict than what our ordinance is going to and the city can be more strict if they want to.

4. Section 5, Establishment of Goals and Policies. It's unclear in this section as to which goals (listed on page one of Section 5) each Strategy and Policy is meant to work towards achieving. Each Strategy and Policy is the expression of the intent of the city to work towards achieving the goal(s). It would be helpful to add another column in each Strategy table to include which Goal it is meant to work toward achieving. This will then also provide direction with what the goals will accomplish and provide direction to your City council.
5. The U.S. Environmental Protection Agency recently approved the Lower Minnesota River Watershed Total Maximum Daily Load (TMDL) Part I-III (March 13, 2020) which includes impairments for the Credit River (Part I).  
<https://www.pca.state.mn.us/water/watersheds/lower-minnesota-river> Please describe how the city will consider and incorporate results (waste load allocations & best management practices) as part of future plan amendments in its Implementation section. The WMO will host a future Technical Advisory Committee to discuss this approval and the WMO's Plan and local plan amendments.
6. Section 7, page one. Under 5. Add BWSR to the list of agencies as grant sources. The Watershed Based Funding dollars come from the Clean Water Fund through an agreement lead by BWSR.

Thank you for the opportunity to review your Water Resource Management Plan. If you have any questions regarding our comments, feel free to give me a call at 952-496-8887 or email [mbokman@co.scott.mn.us](mailto:mbokman@co.scott.mn.us).

Sincerely,



Melissa Bokman Ermer  
Sr. Water Resources Planner

Cc: Vanessa Strong, Water Resources Supervisor, Scott WMO Administrator  
Joe Mulcahy, Environmental Analyst, Metropolitan Council



*Scott Watershed Management Organization*

*200 Fourth Avenue West*

*Shakopee, MN 55379-1220*

*952-496-8054 Fax 952-496-8496*

*www.co.scott.mn.us*

## **Memorandum**

April 27, 2020

To: Watershed Planning Commission

From: Ryan Holzer, Water Resources Scientist

Subject: Adam Simon Grassed Waterway Application

Included with this memo is a WMO cost share application from Adam Simon for a grassed waterway. The property is in Scott County in the NW  $\frac{1}{4}$  of the SE  $\frac{1}{4}$ , T113N, R22W, Section 28, Cedar Lake Township.

The application is for \$7,032.00 from the WMO and the applicant would pay an estimated amount of \$1,758.00, for a total project cost of \$8,790.00. The WMO funds would come from our EPA grant, which has enough funding for the project. As it currently stands, the EPA grant is set to expire in August of 2020. This project would be constructed and certified complete before the expiration of the grant.

This project is a 300 linear foot grassed waterway in combination with a diversion. Erosion is occurring in the agricultural field that leads to another grassed waterway. By installing the grassed waterway, there will be a reduction in sediment and phosphorus in the field and help protect the existing grassed waterway as well.

This application requires a Screening Committee recommendation because the project's environmental benefits are over \$100/ton of sediment, triggering the need for a SWCD Screening Committee and WPC recommendations. The Scott SWCD Screening Committee reviewed the application at their April 21<sup>st</sup> Board Meeting and recommended approval.

## Adam Simon Grassed Waterway

### Cooperator & Location

Name): **Adam Simon**  
 Address: **3001 267th St. E**  
 City/Twp: **Cedar Lake**  
 Watershed: **SWMO**  
 Project ID: **SR-19-136**

### Project Details

Practice: **Grassed Waterway**

Quantity: **300.00 Lin Ft**

Resource Protected:

#### Type III Wetland

Project Description:

A Diversion and Grassed Waterway (GWW) will be installed to divert water from the township road ditch. This water is causing two ephemeral gullies that are outletting into an existing grassed waterway. Fixing these two gullies will reduce soil loss within the crop field and improve an existing GWW that is experiencing erosion due to these gullies.

Aerial View of Project Site



Current Project Site



### Environmental Benefits

Parameter	Before	After	Saved
Soil Erosion (tons/yr)	17.6	0.0	17.6
Sediment (tons/yr)	3.9	0.0	3.9
Phosphorus (lbs/yr)	3.9	0.0	3.9
Runoff Volume (acre ft)			0.0

### Total Cost

### Sources

### Unit Costs\*

	Cooperator:	SWMO:	SWCD:	Federal:	Sediment \$/Ton	Phos \$/Pound	Runoff \$/Ac Ft
<b>\$8,790.00</b>	<b>\$1,758.00</b>	<b>\$7,032.00</b>	SWCD:				
			SWMO:		<b>\$180.31</b>	<b>\$180.31</b>	
			Overall:	<b>\$0.00</b>	<b>\$225.38</b>	<b>\$225.38</b>	

\*Over term of cost share contract

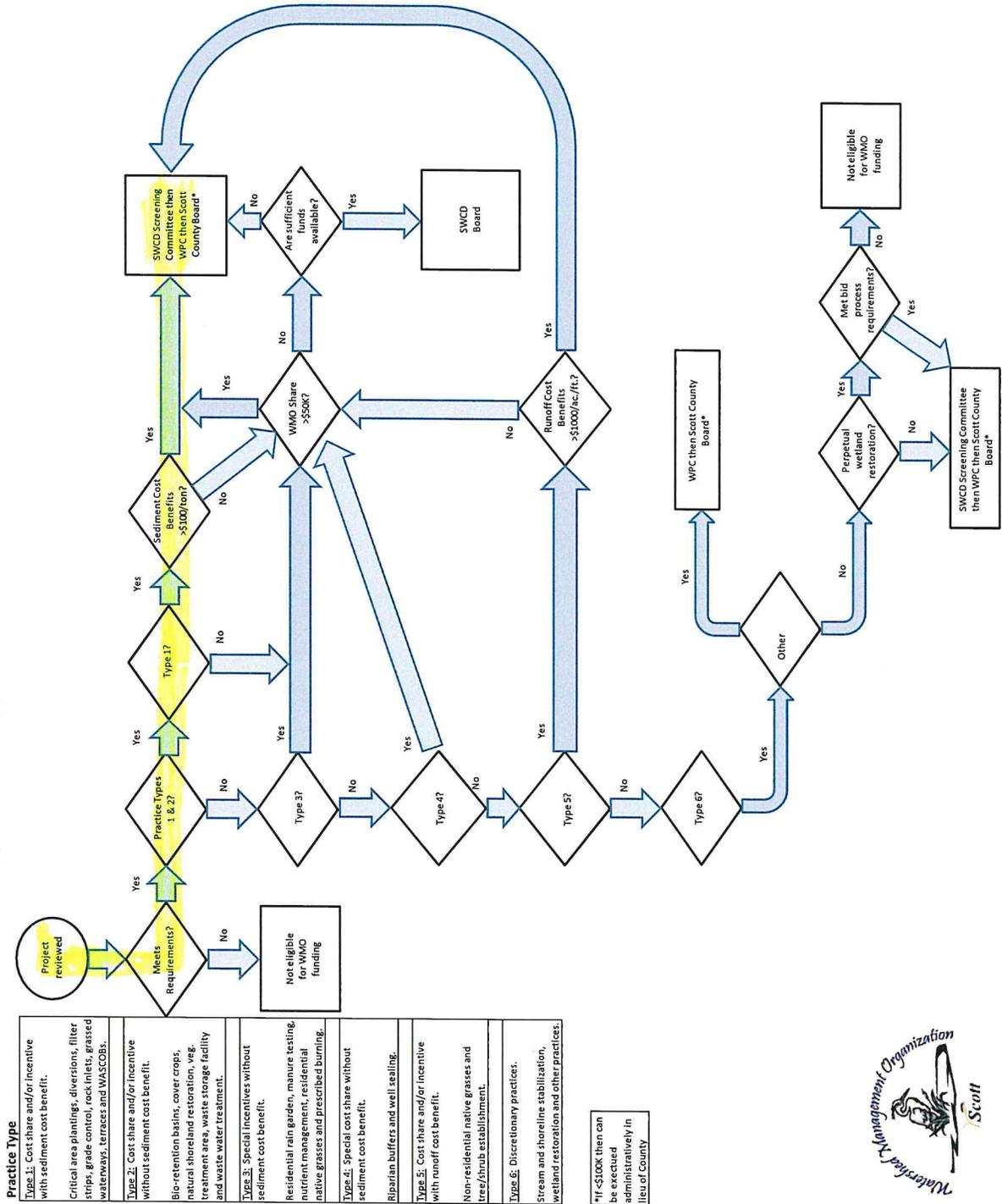
### Local Funding Partner





# APPENDIX A (cont.)

## Figure 1 - Scott WMO Application Approval Decision Flow Chart



Practice Type
<b>Type 1:</b> Cost share and/or incentive with sediment cost benefit. Critical area plantings, diversions, filter strips, grade control, rock inlets, grassed waterways, terraces and WASCOSBs.
<b>Type 2:</b> Cost share and/or incentive without sediment cost benefit. Bio-retention basins, cover crops, natural shoreland restoration, veg. treatment area, waste storage facility and waste water treatment.
<b>Type 3:</b> Special incentives without sediment cost benefit. Residential rain garden, manure testing, nutrient management, residential native grasses and prescribed burning.
<b>Type 4:</b> Special cost share without sediment cost benefit. Riparian buffers and well sealing.
<b>Type 5:</b> Cost share and/or incentive with runoff cost benefit. Non-residential native grasses and trees/shrub establishment.
<b>Type 6:</b> Discretionary practices. Stream and shoreline stabilization, wetland restoration and other practices.

\*If <\$100K then can be executed administratively in lieu of County



# Gully Stabilization

SOIL = sand (1), silt (2) clay(3), peat(4)

SD SOIL density lbs/ft<sup>3</sup> tons/ft<sup>3</sup>

1 110 0.85  
2 85 1.00  
3 0 3 X  
4 0 4 X

VOLV volume voided (ft<sup>3</sup>)

414

YR number of years

1

SLB = SD\*VOLV/YR  
Soil Loss Before (Tons/yr)

17.60

SLR Soil Loss Reduction  
Tons/yr

SEDR = SLB\*SDR\*FS  
Sed. Reduction (Tons/yr)

3.91

PR = SEDR \*(1.0 Lb/Ton)\*CF  
P reduction (Lbs/yr)

3.91

Gully conditions channelized (1) non-channelized (2) landlocked (3)

2

D distance to surface water (feet)

1440

SDR 0.22

Measured from Mid-point of eroding Gully

1 0.50  
2 0.22  
3 X

Filter Strip present before installation Y/N

N

Filter Strip Factor (FS)

1

= input

= calculated value

= result

**ENTER THIS DATA ON FACTSHEET**

	Before	After	Saved
Soil Erosion (tons/yr)	17.60	0.00	17.60
Sediment Load (tons/yr)	3.91	0.00	3.91
Phosphorus Load (tons/yr)	3.91	0.00	3.91

# SCOTT WATERSHED MANAGEMENT ORGANIZATION CONSERVATION FINANCIAL ASSISTANCE APPLICATION AND CONTRACT

## GENERAL INFORMATION

Financial Assistance Provider SCOTT WMO	Contract No. 20-16-SWMO	Other cost share sources? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Project ID: SR-19-136	Board approval date(s) of Amendments, if any	Board approval date of cancellation, if applicable
--	----------------------------	--	--------------------------	--	--

\*If contract amended, attach amendment form(s) to this contract.

## APPLICANT

Name Adam Simon	Address 3001 267th St. E	City/State/ZIP Webster, MN 55088
--------------------	-----------------------------	-------------------------------------

## PROJECT LOCATION

City/Township Cedar Lake	Parcel ID 030930010
-----------------------------	------------------------

## CONSERVATION PRACTICE & COST ESTIMATE

Practice Name	Quantity	Units	Practice Code
Grassed Waterway	300.00	Lin Ft	412
Eligible component(s) 342,484,362	Practice type <input checked="" type="checkbox"/> Engineering <input type="checkbox"/> Ecological		Total Estimated Cost <b>\$8,790.00</b>

## INSTALLATION COST SHARE AMOUNTS

WMO: \$7,032.00                      Scott SWCD:                      Federal: \$0.00                      Landowner: \$1,758.00

## MAXIMUM AUTHORIZED AMOUNTS

Percent based financial assistance shall not exceed \$7,032.00 or 80% of total eligible costs, **whichever is less.**  
Flat rate financial assistance shall not exceed: \$0.00.

Note: Flat rate payments totaling \$600 or more may be considered taxable income and will be reported to the IRS.

## TERMS AND CONDITIONS

I (we), the undersigned, do hereby request financial assistance to help defray the cost of installing the conservation project listed above. I/we understand and agree that:

- 1 This application will be considered by the Approving Authority, which will be either the local Soil and Water Conservation District Board of Supervisors (SWCD) or the Scott Watershed Management Organization (WMO). The Approving Authority may approve it for the full amount requested, approve it for an amount less than requested, or deny it based on consideration of the public interest, including but not limited to cost effectiveness.
- 2 The project Total Estimated Cost and Maximum Authorized Amounts indicated above are estimates based on best available information and professional experience. Amounts are subject to change based on actual project installation costs.
- 3 Upon approval this application shall constitute a legal binding contract, the term of which shall be the date it is signed by all parties through the effective life of the project, unless cancelled or amended by mutual agreement. The effective life of this project is 10 years, which shall commence the date first payment is issued following certification of project installation by the SWCD's Technical Representative.
- 4 Notwithstanding p. 3 above, if the project has not been installed by 7/1/2020, this contract shall terminate automatically on this date unless amended by mutual agreement using a form provided by the SWCD.
- 5 The Applicant is responsible for full establishment, operation, and maintenance of all practices and any specified upland treatment requirements to ensure the conservation objectives of the project are met and the effective life of the practice is achieved. All operation and maintenance and upland treatment requirements will be outlined in an Operation and Maintenance (O&M) Plan prepared by the SWCD.
- 6 Adherence to a Conservation Plan may be required in addition to the O&M Plan. A Conservation Plan is prepared by the SWCD for the Applicant and lists other conservation measures that must be implemented on the property as a condition of receiving financial assistance. If required, the Applicant shall be responsible for complying with the provisions of the Conservation Plan through the contract term. Upland treatment requirements may be specified in the Conservation Plan in lieu of the O&M Plan.
- 7 The O&M Plan and Conservation Plan, upon being signed by the Applicant, are incorporated herein by reference. Should the

Applicant fail to comply with the provisions of the O&M Plan or Conservation Plan through the effective life, they shall be liable to the SWCD for **150%** of the amount received under this contract. The Applicant shall not, however, be liable for repayment if failure of the project was caused by reasons beyond their control, or if alternative conservation measures providing an equivalent level of soil and water protection during the effective life are applied at their own expense.

- 8 If title of the property is transferred to another party before the term of this contract expires, the Applicant shall advise the new owner that this contract is in force and provide them with copies of the O&M Plan and Conservation Plan, as applicable. The Applicant shall also notify the SWCD in writing of any transfer of title or tenancy.
- 9 If title of the property is transferred to another party prior to issuance of full payment, the Applicant will forfeit any outstanding payment(s). Outstanding payment(s) may be made to the new landowner(s) subject to their signing and the Board approving a new contract that extends through the remainder of the term. If a new contract cannot be secured, or transfer is not permitted due to funding source policy restrictions, then any remaining funds shall be forfeited.
- 10 Notwithstanding the above, transfer of property or change in tenancy shall not release the Applicant from liability for repayment due to failure of the Applicant or new property owner or tenant to adhere to the O&M Plan or Conservation Plan.
- 11 The practice and any related components must be planned and installed in accordance with the plans and specifications prepared and/or approved by the WMO or its Technical Representative.
- 12 Payments are made on a reimbursement basis after the practice is certified complete by Technical Representative. Items of cost for which reimbursement is claimed must be supported by invoices/receipts for payments and verified by the Technical Representative as practical and reasonable. Any invoices must include the name of the vendor; materials, labor or equipment used; the component unit costs and the dates the work was performed. The Technical Representative has the authority to make adjustments to the costs submitted for reimbursement.
- 13 Reimbursement for any costs over and above the approved amount is conditioned upon prior authorization by the Technical Representative and approval of an amendment by the Approving Authority. Additional funds are not guaranteed.
- 14 Requests for reimbursement of in-kind costs shall be supported by a signed statement describing the type, quantity, and hourly or unit rate of work completed. The WMO reserves the right to cap in-kind costs as deemed practical and reasonable.

**APPLICANT AND LANDOWNER SIGNATURE(S)**

By signing below, the Applicant(s) and Landowner(s), if different, agree to:

- 1 Acknowledge and abide by the Terms and Conditions listed above;
- 2 Grant the authorized representatives of the SWCD and SWMO access to the property where the project will be located through the term of this contract for the purpose of inspecting proper operation and maintenance.
- 3 Obtain all permits required in conjunction with the installation and establishment of the practice prior to starting construction.
- 4 Not accept cost-share funds from other local, state, or federal sources that all combined exceed 80% percent of the total cost to establish the conservation practice.
- 5 Provide copies of all forms and contracts pertinent to any other state or non-state programs contributing toward this project.
- 6 Abide by the terms and conditions of the Scott County Conservation Practice Financial Assistance Program policies, current as of the date this application is signed by the Applicant.

**Applicant:**



Date: 4-9-20

**Landowner:** (if different)

\_\_\_\_\_

Date: \_\_\_\_\_

I do not want personally identifiable information about me or my project to be used for public education purposes.

**TECHNICAL REPRESENTATIVE SIGNATURE**

I have reviewed the site where the above project will be installed and find that it is needed and feasible, and that the estimated quantities and costs are practical and reasonable.

Technical Representative	Date	Reviewer Initials	Date
	4/9/20	Will Peters	4/10/20

**APPROVING AUTHORITY SIGNATURE**

Approving Authority	Board Chair or Duly Authorized Representative	Date
<input checked="" type="checkbox"/> SWMO Board <input type="checkbox"/> SWCD Board		