



Minnesota Pollution  
Control Agency

520 Lafayette Road North  
St. Paul, MN 55155-4194

# Final Report Format

## Section 319 and Clean Water Partnership Projects or Final Progress Report for TMDL/WRAPS Development and TMDL/WRAPS Implementation Projects

*Doc Type: Reporting/Final Report*

The Minnesota Pollution Control Agency (MPCA) provides grants to organizations to help fulfill the agency's mission. Each grant project is required to complete a final report. Information from this grant report will be used to illustrate progress toward meeting the MPCA's goals and missions and will be shared with interested parties, targeted audiences, and legislators.

More information about preparing a final project report for a Section 319 grant can be found in the [Section 319 Final Project Reports Workshop](#) on the U.S. Environmental Protection Agency (EPA) Polluted Runoff: Nonpoint Source Pollution website at <http://www.epa.gov/owow/nps>. This notebook describes the purpose of Section 319 final reports, the information that should be included in the report, examples of especially effective elements from 319 reports, and ways to expand the final report to be used for outreach and education, building partnerships, and many other uses.

**Instructions:** This grant report must be submitted ***no later than 30 days after the end of the grant contract***. It must include results, in the form of data and information, that best demonstrate achievement of project goals and objectives.

Please follow the attached report format, referring back to the work plan and budget and any subsequent amendments to your grant agreement, contract, or work order. When completed, send an electronic copy of the completed report to your MPCA project manager for review.

# Grant project summary

Project title: Mississippi River – St. Cloud WRAPS Cycle 2 – Phase I  
Organization (Grantee): Sherburne SWCD  
Project start date: 4-15-2019 Project end date: 12-31-2020 Report submittal date: \_\_\_\_\_  
Grantee contact name: Francine Larson Title: District Manager  
Address: 425 Jackson Ave NW  
City: Elk River State: MN Zip: 55330  
Phone number: 763-220-3434 Fax: \_\_\_\_\_ Email: flarson@sherburneswcd.org  
Basin (Red, Minnesota, St. Croix, etc.)  
/Watershed & 8 digit HUC:: Mississippi River - St. Cloud County: Sherburne

## Project type (check one):

- Clean Water Partnership
- Total Maximum Daily Load (TMDL)/Watershed Restoration or Protection Strategy (WRAPS) Development
- 319 Implementation
- 319 Demonstration, Education, Research
- TMDL/WRAPS Implementation

## Grant funding

Final grant amount: \$20,000 Final total project costs: \$  
Matching funds: Final cash: \$ Final in-kind: \$ Final Loan: \$  
MPCA project manager: Phil Votruba

## For TMDL/WRAPS development or TMDL/WRAPS implementation projects only

Impaired reach name(s): \_\_\_\_\_  
AUID or DNR Lake ID(s): \_\_\_\_\_  
Listed pollutant(s): \_\_\_\_\_  
303(d) List scheduled start date: \_\_\_\_\_ Scheduled completion date: \_\_\_\_\_  
*AUID = Assessment Unit ID*  
*DNR = Minnesota Department of Natural Resources*

## Executive summary of project (300 words or less)

This summary will help us prepare the Watershed Achievements Report to the Environmental Protection Agency. (Include any specific project history, purpose, and timeline.)

### Problem (one paragraph)

The Mississippi River – St. Cloud (MRSC) watershed consists of approximately 717,479 acres in central Minnesota within the south central part of the Upper Mississippi River Basin. The watershed includes 59 listed impairments (2009-2010 assessment data) including both river/stream segments and lakes. Common impairments include excessive bacteria, excessive nutrients, excessive turbidity, and low dissolved oxygen.

### Waterbody improved (one paragraph)

The efforts put forth in this project worked to provide the foundation of the Watershed Restoration and Protection Strategies (WRAPS) for the watershed. Elements included partner communication, an evaluation of conservation practices derived from the WRAPS Cycle I strategy tables, public outreach and input gathering, and pollution source assessment to support additional monitoring efforts. These actions were tailored to address the watershed and its waterbodies as a whole, as opposed to a single waterbody.

## Project highlights (one paragraph)

The project resulted in numerous detailed discussions between the partnership on challenges and opportunities the watershed faces, as well as an extensive evaluation of implementation actions that were developed in Cycle I of the WRAPS. The strategy table review consisted of a thorough evaluation of Cycle I goal activities and what had been achieved. A “stoplight” scale was applied with staff using their professional judgement to determine if prescribed activities had been implemented in abundance (green), moderately (yellow) or minimally (red) in sub-watersheds in the past 10 years. As a result, the team developed a “Heatmap” displaying the efforts completed in each subwatershed. The stakeholder input, physical data, and evaluations will set the groundwork for the more robust Cycle II, Phase II project that is anticipated for July 2021.

## Results (one paragraph)

This project resulted in several deliverables: 1) Physical data collected on Plum Creek (Stearns County) and the Briggs Lake Bayou (Sherburne County), 2) a stakeholder survey that gathered input from local residents at two outreach sessions (four sessions initially planned but two were cancelled due to COVID-19) and 3) a GIS derived “Heatmap” showing an evaluation of progress related to WRAPS Cycle I strategy tables for the full watershed.

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## Partnerships (Name all partners and indicate relationship to project)

Minnesota Pollution Control Agency

Sherburne Soil & Water Conservation District

Benton Soil & Water Conservation District

Stearns Soil & Water Conservation District

Clearwater River Watershed District

Wright Soil & Water Conservation District

Stearns County Environmental Services

Sherburne County Planning & Zoning

Meeker County Soil & Water Conservation District

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## Pictures

Photos:

*Bottom Left:* Amanda Guertin and Phil Votruba discuss efforts in the MRSC watershed at the Stearns County Shoreland Workshop, January 2020.

*Bottom right:* MRSC watershed partners booth display at the Central Minnesota Farm Show

*Page 5 and 6:* Two-page stakeholder survey developed by MRSC watershed partners.

*Page 7:* MRSC Watershed “Heatmap” exercise showing the Cycle I strategy table evaluation.



## Mississippi River St. Cloud Watershed Survey

***Complete the survey below to be entered into a drawing for a prize!!!***

As rain and snow fall on the land, this water eventually moves across the landscape and finds its way into our many lakes and streams. The landscape features (hill, ridges or other dividing points) route water in one direction or another. The flow of water as directed by geographic features is called a watershed, sometimes referred to as a drainage basin or catchment area. It can be defined on many scales. Understanding a watershed is critical because what we do upstream in a watershed can impact many downstream lakes, streams, and people.

- 1) Please categorize your residency in the Mississippi River St Cloud watershed. *Select one option.*
  - Seasonal residence
  - Year-round residence
  - Do not live in the watershed
  - Unsure
  
- 2) How would you categorize your interactions with the watershed? *Please select all that apply.*
  - Business person (I work within the watershed)
  - Natural Resource Professional (I work on natural resource issues in the watershed)
  - Urban Resident (I reside here and own <2 acres)
  - Rural Resident (I reside here and own >2 acres)
  - Lakeshore Owner (I reside on a lake or river in the watershed)
  - Agricultural Operator / owner (I farm or own farmland within the watershed)
  - Sportsmans Club Member (I am active in an outdoor sporting group in the watershed)
  - I do not work, live or recreate in the watershed
  - Other \_\_\_\_\_
  
- 3) How would you generally characterize the water quality of the lakes and streams in the MRSC watershed? *Select one option.*
  - Very good (majority of waters are of high quality)
  - Good
  - Fair (majority of waters are of medium quality)
  - Poor
  - Very Poor (majority of waters are of very low quality)
  - Unsure
  
- 4) Please rank your top three natural resource challenges within the list below. *Select only three of the options provided.*
  - \_\_\_ Drinking water quality
  - \_\_\_ Erosion of lake shoreline and riverbanks
  - \_\_\_ Forest health
  - \_\_\_ Invasive species (on land or in water)
  - \_\_\_ Quality habitat for fish and wildlife
  - \_\_\_ Polluted runoff from agricultural land
  - \_\_\_ Polluted runoff from urban land
  - \_\_\_ Water quantity – too much water (flooding)
  - \_\_\_ Water quantity – too little water (dry wells, dry creeks, low lake levels)
  - \_\_\_ Other

5) Are there other natural resource challenges that you see in the MRSC Watershed?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

6) In your opinion, what are factors that motivate you or others to address these natural resource challenges? *Select all that apply.*

- Financial incentive to address issues
- Being a good steward of the land
- Leaving behind a cleaner watershed for family / friends / future generations
- Planning assistance from resource professionals
- Unsure
- Other: \_\_\_\_\_

7) In your opinion, what are factors that prevent natural resource challenges from being addressed? *Select all that apply.*

- The financial cost of addressing the challenge
- Having sufficient awareness of the challenge
- The technical knowledge of the challenge
- The willingness to address the challenge
- Unsure
- Other: \_\_\_\_\_

8) Would you like to get involved with activities in the MRSC Watershed? *Select all that apply.*

- I would like to receive regular email updates
- I would like to serve on a planning team if the opportunity comes available.
- I would like to volunteer for activities or natural resource monitoring.
- No, thank you.
- Other: \_\_\_\_\_

If you answered "Yes" to any items listed in Question 8 above, or if you would like to be included for the prize drawing, please leave your contact information below.

Name: \_\_\_\_\_

Email: \_\_\_\_\_

Phone: \_\_\_\_\_

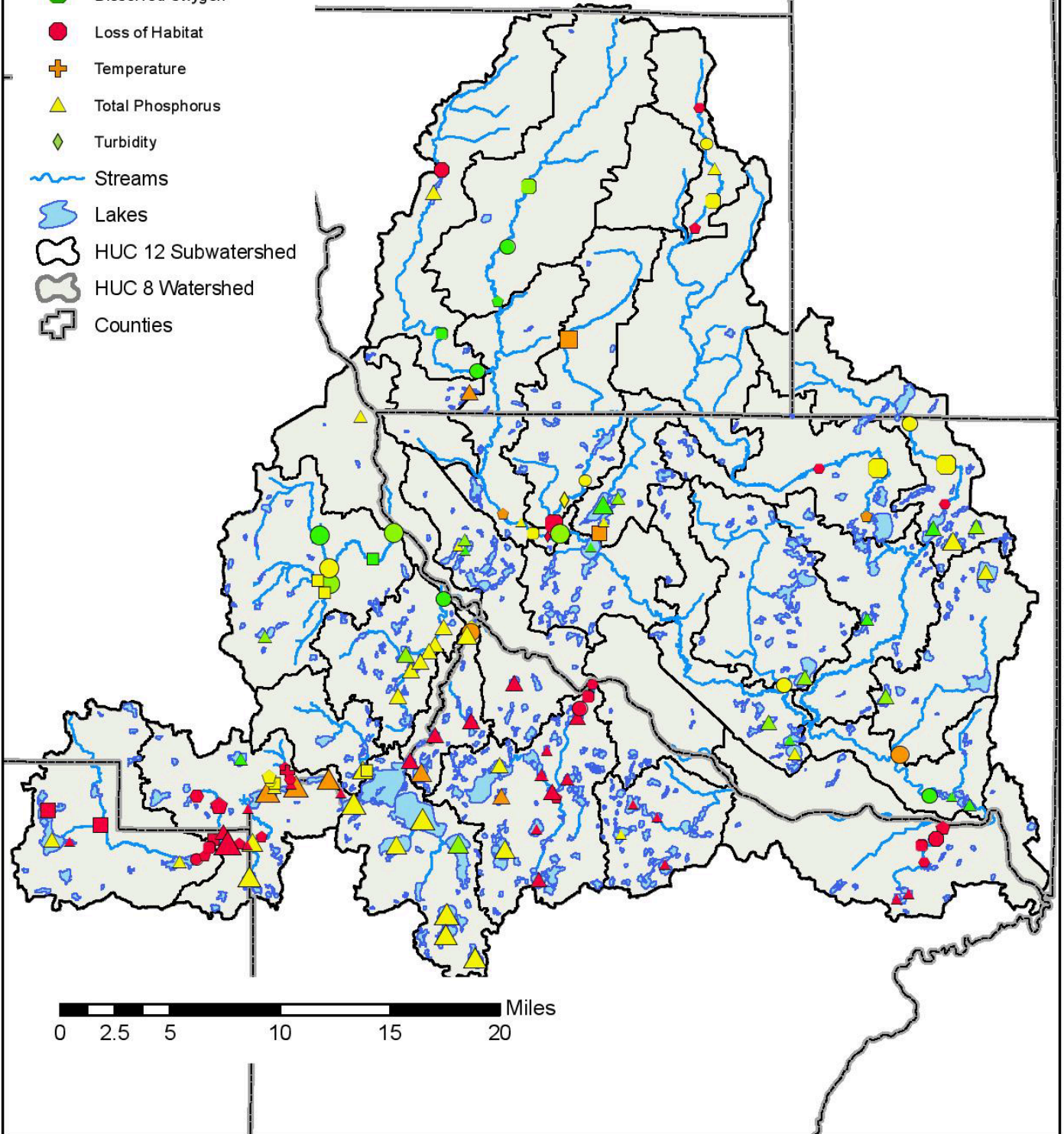
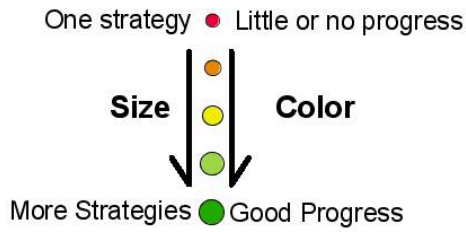
County: \_\_\_\_\_



# Legend

## Parameter

- Aquatic Life
- Bacteria
- ▲ Bedded Sediment
- ◆ Connectivity
- Dissolved Oxygen
- Loss of Habitat
- + Temperature
- ▲ Total Phosphorus
- ◆ Turbidity
- ~ Streams
- ☾ Lakes
- HUC 12 Subwatershed
- HUC 8 Watershed
- Counties



## Section I – Work plan review

The MRSC WRAPS Cycle II Phase I project ran from 4-15-2019 to 12-31-2020 and followed the workplan very closely, with three small change orders approved by LGU partners and the MPCA. The first Change Order revised the starting month of Objective 4 (Pollution Source Assessment) to begin during the month of May 2019 to allow for early season monitoring. Change Order 2 was initiated in July 2019 to move funds (\$1,512.50) from Objective 4 to Objective 2. With a previously anticipated monitoring project ceasing to take place, it was felt these unused funds would best be used for staff time to complete items within Objective 2. Change Order 3 was initiated in November 2020 to move remaining project funds (\$632.50) to Objective 1 which would cover costs associated with final reporting and administrative tasks towards the end of the project.

### Work Plan Objectives Summary

#### Objective 1 – Project Administration of Invoicing, Reporting, and Communication between Partners.

This task involved the fiscal administration of the grant, completing progress reports, coordinating logistics for meetings and events, as well as communicating project specifics to the partnership. These tasks occurred with no delay or large difficulties through 2019 and 2020. One challenge experienced was the onset of the COVID-19 pandemic which forced the group to change from in-person meetings to phone calls and virtual meeting formats in spring of 2020. Despite this challenge all activities related to Task 1 remained on schedule.

#### Objective 2 – WRAPS Cycle I Strategy Table Evaluation.

A large component of the Cycle I WRAPS document was development of strategies to implement in the MRSC subwatersheds in order to address pollution sources or to initiate protective measures. During Cycle II Phase I, the partnership discussed ways to evaluate progress that had been made on the strategy tables. Multiple methods were discussed and the group ultimately decided to evaluate each strategy component by documenting the practices that had occurred in that subwatershed, compare to the number of practices projected, and giving each component a “stoplight rating” of red, yellow or green. For example, in a subwatershed that called for 250 acres of cover crops to be planted on agricultural fields, if 250 acres of cover crops were achieved this would be a success and a “green” rating would be applied. Activities that met some but not all expectations would be rated “yellow” and activities with little or no activity would be rated “red”. Assessment of conservation records, along with some professional judgement, were used to make this determination. Once the database of ratings was completed, a “heatmap” was created showing the stoplight rating system overlaying the subwatersheds. This provides a visual representation of work completed in the various subwatersheds. The database serves as a more in-depth resource of this work.

#### Objective 3 – Public Participation / Outreach Planning and Early Cycle II Community Conversations.

The partnership held discussions early in the project about community outreach and involvement for both Phase I and the upcoming Phase II portion of Cycle II. The group felt that it was important to both disseminate information to the community and to develop a formal plan for input and feedback regarding natural resource issues in the watershed. It was decided that the partners would visit four well-attended community events with a display booth to share information but also seek input through a stakeholder survey. The four events include the Stearns County Shoreline Workshop, Central Minnesota Farm Show, Sherburne County Coalition of Lake Associations annual social event, and Clearwater River Watershed District annual lakes convention.

An event booth was created which featured information about the MRSC watershed and example projects from each of the project partners. The example projects featured a diverse array of agricultural, urban, livestock, erosion control, and education types. Accompanying the booth was informational handouts related to the Cycle I WRAPS and other information related to the watershed. The team also created a Stakeholder Survey that was two pages in length. Both electronic and physical versions of the survey were created in order to allow flexibility for distribution. The survey was designed to identify the role the survey taker played in the watershed (rural resident, urban resident, agricultural producer, lake resident, etc.) as well as gather information about their natural resource concerns and what they believe drives conservation work in the region.

In January of 2020, the team attended the Stearns County Shoreline Workshop and in February the Central Minnesota Farm Show. Amanda Guertin and Phil Votruba gave a presentation at the shoreline workshop that featured a history of activities in the MRSC watershed. At both events, the team networked with attendees and encouraged use of the stakeholder survey. Nineteen (19) responses were collected from these events. Unfortunately, the two lake-related events that were scheduled for April and May of 2020 were cancelled due to the COVID-19 pandemic and a concern for safety. The group initially planned to push these efforts off until later 2020 but soon realized that the situation was not going to get better that summer. Currently, discussions have taken place to assess outreach during Cycle II in the years of 2021 and 2022.

#### Objective 4 – Pollution Source Assessment efforts to support the Surface Water Assessment Grant (SWAG) and/or future Total Maximum Daily Load development.

Funds were set aside to assess critical waters which would provide supplementary data for the SWAG or future TMDL studies in the watershed. Initially, three projects were determined by project partners within the Clearwater River Watershed District, Stearns County, and Sherburne County. As the project started the extra assessment within the Clearwater River Watershed District was not carried forward so a change order allocated these funds to another objective. The assessment within Stearns County (Plum Creek) and Sherburne County (Briggs Lake Bayou) were continued as planned. A brief description of both follows below:

- Plum Creek has experienced high bacteria levels in the past and thus has been listed as impaired. Much effort has been expended by Stearns County, Stearns SWCD, and Lynden township residents and officials to understand and address this impairment. Numerous practices have been completed in this watershed aiming to reduce bacteria. Funding from this project helped to pay for *E. coli* monitoring of the stream and connected ditches. The monitoring was used to confirm what project partners had hoped would be true – the efforts in the watershed have been successful in reducing bacteria in the stream to the point that the stream was recommended for impairment delisting in 2019.

- The Briggs Chain of Lakes consists of three closely connected upper lakes and a fourth lake connected by a half-mile stream to the south. The Elk River runs through the southern lake (Elk Lake), but during times of high flow the Elk River diverts from its normal course and delivers massive quantities of water to the northern three lakes. These lakes experience high nutrient swings during this complex hydrology cycle and localized flooding as well. Funding from this project assisted Sherburne SWCD staff and volunteers to collect water quality and quantity data during these high flow periods. The resulting data was used within an engineer's report to calibrate a hydrologic model for the chain and examine opportunities for water storage (flood mitigation). The data may also be used to better assess the nutrient inputs to the chain lakes in Cycle II of the WRAPS for this watershed.

## **Section II – Grant Results**

### Measurements

The project included a stakeholder survey which was intended to measure the knowledge and intuitions of natural resource concerns amongst a variety of watershed residents. The stakeholder survey consisted of two-pages with eight-questions. The survey was designed to be easy and quick to use; something that a stakeholder could complete while at an event booth while networking with others. Unlike other surveys, this survey was not distributed to a large audience – its intention was to follow a personal conversation with a MRSC partner so that it was ensured the survey taker was indeed an area resident and was quite knowledgeable on the subject matter. Therefore the group is optimistic that the data collected is of great quality to the project. In all, 19 responses were collected which is below the desired response rate. However, as previously mentioned the impact of COVID-19 resulted in less opportunities for outreach. The group intends to pursue additional survey input in 2021-2022 in coordination with Cycle II of the WRAPS.

### Products

A large portion of this project included discussion of the Cycle I WRAPS results and how this would drive activities in Cycle II. The group felt it was important to examine the Cycle I strategy tables and reflect upon the work that has been done using these tables as a guide. The strategy tables list impairments and strategies for mitigation/protection on a sub-watershed basis. Evaluation of these strategies would thus be done on a sub-watershed basis with each LGU focusing on activities within their jurisdiction and collaborating when watersheds overlapped county/district boundaries. The partners utilized a “green-yellow-red” format for evaluating the level of progress on the defined strategy table activities. This allowed for a visual interpretation to be made related to how many of the activities had been implemented over the past 5-10 years. The end goal was to summarize efforts using this visual representation, with the spreadsheet data available for a more detailed investigation if needed. The end product is a GIS-derived map showing the stoplight scale with respect to a variety of water quality parameters. One challenge of this study is that the Cycle I WRAPS strategy tables were developed on a HUC-11 basis, where now the state is focused on evaluating on a HUC-12 basis. Therefore, some of the subwatershed lines were not consistent between HUC-11 and HUC-12 resulting in a deeper dive in some areas during the analysis. The end product “heatmap” is provided as an attachment to this report and GIS files are available upon request.

### Public Outreach and Education

This partnership chose to make a presence at four well-attended gatherings in the watershed (Stearns County Shoreline Workshop, Central Minnesota Farm Show, and Clearwater River WD / Sherburne County lake resident gatherings) as opposed to trying to host their own event. It was felt that by going this route, the partners would be able to effectively reach a diverse audience. The Stearns County workshop hosted many shoreline contractors and agency folk, while the farm show is a very well-attended annual event that draws an audience primarily from the rural / agricultural community. And the lake events would of course draw an audience from lake residents in the region. Overall, given the challenges with COVID-19 impacting two of these events, it was felt that the partnership did a good job on outreach and education. Some of the concluding numbers from these events include:

- Nearly 100 people reached at the Stearns County Shoreline Workshop through a Powerpoint presentation and approximately 25 engaged at the MRSC partners booth.
- Roughly 60 people engaged over two days at the Central Minnesota Farm Show MRSC partners booth.
- 19 respondents on the stakeholder survey.
- Future plans to reach out to the lake community in 2021/2022 following COVID-19 restrictions on public gatherings.

### Long-term Results

This project was a “kick-off” for the larger Cycle II Phase II project that the partnership intends to begin in 2021. Despite the challenges with COVID-19, it is felt the project was successful from a variety of angles. First, the project brought together water planning staff from each county/district to work collaboratively towards the work plan topics including public outreach, communication, pollution source assessment and Cycle I strategy table evaluation. There has been some turnover in staff from the Districts from Cycle I so it was a great opportunity for the team to work collaboratively for the first time. The project allowed the team to feature the diverse strengths of each other; for example, one partner took on the responsibility of coordination, one took the strategy table “stoplight” data and developed a GIS map from it, a third partner used her artistic abilities to create a visually stunning booth display and present to a large audience. As a result of this project, this group is well versed in the personalities of each other and have navigated the ins and outs of “group work” to develop a collaborative model that can achieve success in Cycle II. The



group has additionally included discussions about One Watershed, One Plan during each of their meetings. Of importance to note is the discussions that took place not only on WRAPS and 1w1p as individual efforts, but how the partnership can best streamline the transition from our WRAPS to 1w1p.

This project has resulted in a variety of products and information which will be helpful in future efforts. These resources include detailed stakeholder survey information from a diverse array of watershed residents, detailed pollutant loading information which helped to certify the impairment delisting of Plum Creek and shed light on complex hydrology in the Briggs Chain, and a comprehensive review of Cycle I strategies that will help the partnership make decisions for Cycle II activities.

Due to the ongoing COVID-19 pandemic dissemination of these data have not been completed as plans. However, the partners have been including ongoing updates about this WRAPS project to local constituents, residents and other interested parties. Discussion of this effort was included in the Clearwater River Watershed Districts new Comprehensive Plan for example. Updates on the project have been shared with the Sherburne County Water Plan Advisory Committee on two occasions, and with the Sherburne County Coalition of Lake Associations on another occasion. Finally, each partner has included regular updates on the project to their supervisory boards as the process has moved along.

### Section III – Final Expenditures

Final expenditures for the project are as follows:

Objective	Line Item	Task	MPCA Funds Awarded	MPCA Funds Expended prior to this Invoice	MPCA Funds Expended this Invoice	MPCA Funds Expended	Balance	Budget Expended (%)
Objective 1	Project Administration	1A	\$3,492.50	\$2,860.00	\$632.50	\$3,492.50	\$0.00	100%
Objective 2	Cycle 1 Strategy table Evaluation	2A	\$2,420.00	\$2,420.00	\$0.00	\$2,420.00	\$0.00	100%
	Cycle 1 Strategy table Evaluation	2B	\$3,932.50	\$3,423.75	\$508.75	\$3,932.50	\$0.00	100%
	Cycle 1 Strategy table Evaluation	2C	\$2,420.00	\$1,787.50	\$632.50	\$2,420.00	\$0.00	100%
Objective 3	Public Participation / Outreach Planning	3A	\$2,090.00	\$1,815.00	\$275.00	\$2,090.00	\$0.00	100%
	Public Participation / Outreach Planning	3B	\$2,750.00	\$2,392.50	\$357.50	\$2,750.00	\$0.00	100%
	Other Expense	3C	\$24.20	\$24.20	\$0.00	\$24.20	\$0.00	100%
Objective 4	Pollution Source Assessment	4A	\$1,485.00	\$1,485.00	\$0.00	\$1,485.00	\$0.00	100%
	Laboratory	4A	\$1,210.35	\$1,210.35	\$0.00	\$1,210.35	\$0.00	100%
	Shipping	4A	\$175.45	\$175.45	\$0.00	\$175.45	\$0.00	100%
<b>Total:</b>	<b>Total:</b>		<b>\$20,000.00</b>	<b>\$17,593.75</b>	<b>\$2,406.25</b>	<b>\$20,000.00</b>	<b>\$0.00</b>	<b>100%</b>

In addition to the expenditures above, the partnership contributed time in excess of the grant amount. Total reported “match” time and expenses for this project by all partners was calculated to be \$3,414.53.