

West Fork Des Moines River Major Watershed Project Phase II

Final Report

Jan Voit, District Administrator

July 31, 2018

Project Sponsor:

Heron Lake Watershed District

Contributing Sponsors:

Citizen Council: Mona Henkels, Paul Henning, and Ron Tibodeau

Lyon County and SWCD

Pipestone County and SWCD

Murray County and SWCD

Nobles County and SWCD

Cottonwood County and SWCD

Jackson County and SWCD

Martin County and SWCD

University of Minnesota Extension

Houston Engineering, Inc.

Grant Project Summary

Project title: West Fork Des Moines River Major Watershed Project Phase II

Organization (Grantee): Heron Lake Watershed District

Project start date: 3/26/2015 Project end date: 6/30/2018 Report submittal date: _____

Grantee contact name: Jan Voit Title: District Administrator

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Basin (Red, Minnesota, St. Croix, etc.)
Watershed & 8 digit HUC:: Des Moines County: Nobles, Jackson, Murray, Cottonwood,
Lyon, Pipestone, and Martin

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: \$141,011.58 Final total project costs: \$141,011.58

Matching funds: Final cash: \$0.00 Final in-kind: \$0.00 Final Loan: \$0.00

Contract number: 89268 MPCA project manager: Katherine Pekarek-Scott

Executive Summary of Project (300 words or less)

The West Fork Des Moines River (WFDMR) watershed is part of the Western Corn Belt Plains and Northern Glaciated Plains ecoregions. The watershed extends across seven counties: Murray, Cottonwood, Jackson, and Nobles and small portions of Pipestone, Lyon, and Martin. It covers an area of 1,333 square miles. The river originates in the northwestern part of the watershed from several lakes including its principal source, Lake Shetek. The river flows from the Lake Shetek outlet near Currie in a southeasterly direction for 94 miles to the Minnesota/Iowa border. It eventually enters the Mississippi River at Keokuk, Iowa.

The Heron Lake subwatershed has an established watershed district. The Heron Lake Watershed District (HLWD) was formed in 1970 with a mission to protect and improve the water resources within its boundaries by supporting watershed residents through the use of education and financial programs.

As the lead organization for the WFDMR Major Watershed Project (MWP) Phase II Watershed Restoration and Protection Strategies (WRAPS) development, the HLWD believes that sound working relationships between Local Government Units (LGUs), citizens, and state government is imperative. The main objective of this grant effort was community involvement. This was done through development of a Citizen Council, four community events, one government leaders' event, a Facebook page, poster and citizen values survey, water quality sampling with the Prairie Ecology Bus Center (PEBC), and Local Work Group (LWG) meetings. The information gathered from these activities will be used to develop the WRAPS Report being written by the Minnesota Pollution Control Agency (MPCA).

Picture: Local Work Group Session 1



Acronyms (Name all project acronyms and their meanings.)

- WFDNR – West Fork Des Moines River
- HLWD – Heron Lake Watershed District
- BMP – best management practice
- MWP – Major Watershed Project
- WRAPS – Watershed Restoration and Protection Strategies
- LGUs – Local Government Units
- PEBC – Prairie Ecology Bus Center
- LWG – Local Work Group
- MPCA – Minnesota Pollution Control Agency
- TMDL – Total Maximum Daily Load
- UM – University of Minnesota
- CE – Civic Engagement
- SID – Stressor Identification
- MPCA – Minnesota Pollution Control Agency
- HEI – Houston Engineering, Inc.
- WECC – Windom Education and Collaborative Center
- MDNR – Minnesota Department of Natural Resources

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- ESRI - Environmental Systems Research Institute
 - BWSR – Board of Water and Soil Resources
 - HLO- Heron Lake-Okabena
 - USDA – United States Department of Agriculture
 - GIS – Geographic Information System
 - MinnFARM – Minnesota Feedlot Annualized Runoff Model
 - HSPF - Hydrologic Simulation Program Fortran
 - MWOA – Minnesota Wastewater Operators Association
 - 1W1P – One Watershed, One Plan
 - SWCD – Soil and Water Conservation District
 - RD – Rural Development
 - PFA – Public Facilities Authority
 - WIF – Water Infrastructure Funds
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Partnerships (Name all partners and indicate relationship to project)

- Heron Lake Watershed District: project sponsor, project staff, project administration, and inkind contribution
- Citizen Council: assist in determining education and community involvement opportunities
- Lyon County and SWCD: serve on LWG
- Pipestone County and SWCD: serve on LWG
- Murray County and SWCD: serve on LWG
- Nobles County and SWCD: serve on LWG
- Cottonwood County and SWCD: serve on LWG
- Jackson County and SWCD: serve on LWG
- Martin County and SWCD: serve on LWG
- University of Minnesota Extension: CE training and meeting facilitation
- Houston Engineering, Inc.: Draft TMDL allocation

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Work Plan Review

1. Work Plan Changes

1.1. Work Plan Change #1: November 8, 2015

Barb Radke took a new position. Toby Spanier, University of Minnesota (UM) Extension, will be the Civic Engagement (CE) lead for the project.

- To allow the Watershed Coordinator to participate in the Watershed Specialist Training, \$414.00* was moved from Task C Project Coordination Sub-Task 1: Project Management Training-Lodging to Training-Registration.
- *Per the contract language, a change order is not required to move funds within a Sub-task. This change order document is to provide documentation of the changes describe, however will not be added in the 10% cumulative amount allowed to move in a change order.

1.2. Work Plan Change #2: December 8, 2015

When creating a budget, it is always difficult to estimate the number of hours that will be required for each task. The number of hours for project coordination was grossly underestimated.

- To allow additional hours for project coordination, 600 hours were moved from Task A Community Outreach Sub-Task 1 LWG to Task C Project Coordination Sub-Task 1 Project Management. These additional hours will be for training, reports, reimbursement requests, orientation of new project coordinator, and ensuring contract requirements are met.

1.3. Work Plan Change #3: May 2, 2016

Funds were needed for shipping samples for the stressor ID work.

- \$150.00 was moved from Task C Project Coordination Subtask 2 Assist MPCA to a new category under the same task and subtask. This was done to provide funds for Stressor Identification (SID) supplies and shipping.

1.4. Amendment #1: December 22, 2016

The HLWD requested an amendment to the contract for the MWP Phase II. After the Watershed Coordinator started the work, it was apparent hours would need to be reallocated to provide adequate funds for each task. The total contract amount would remain unchanged. Details would be provided in the work plan narrative. After the initial amendment request was submitted, the Watershed Coordinator took another position. Since that time, the HLWD has secured an individual to work part-time in the Watershed Coordinator's position. In addition, the HLWD Administrator will assume additional responsibilities in order to ensure that contract commitments are completed. Funds for UM Extension were reallocated in Subtask 1 and Subtask 2, but the amount for the contract with this organization remained the same.

- Objective 1: WRAPS Development Task A: Community Outreach Sub-Task 1: LWG. The amount for Watershed Coordinator 1 was reduced from \$20,655 (765 hours) to \$3,813.75 (141.25 hours), a line item was added for Watershed Coordinator 2 of \$1,080.00 (40 hours), a line item was added for the HLWD Administrator of 125 hours (\$4,375.00). These changes resulted in a reduction of \$11,386.25 in this subtask.

- Objective 1: WRAPS Development Task A: Community Outreach Sub-Task 2: Citizen Council. The amount for Watershed Coordinator 1 was reduced from \$35,694.00 (1,322 hours) to \$918.00 (34 hours), a line item was added for Watershed Coordinator 2 of \$34,776.00 (1,288 hours), a line item was added for the HLWD Administrator of \$2,625.00 (75 hours), UM Extension Teaching Rate was increased by \$125.00 (1 hour), Coaching Rate was reduced by \$270.00 (3 hours), UM Extension mileage was increased by \$707.20, UM Extension lodging was decreased by \$105.00, UM Extension meals were reduced by \$83, UM Extension Supplies were increased by \$4.00. These changes resulted in an increase of \$3,003.20 in this subtask.
- Objective 1: WRAPS Development Task A: Community Outreach Sub-Task 3: Public Participation and Education. The amount for Watershed Coordinator 1 was reduced from \$6,210.00 (230 hours) to \$459.00 (17 hours), a line item was added for Watershed Coordinator 2 of \$8,613.00 (319 hours), a line item was added for the HLWD Administrator of \$2,625.00 (75 hours), UM Extension Teaching Rate was reduced by \$750.00 (6 hours). UM Extension Prep Rate was increased by \$550 (11 hours), UM Extension mileage was increased by \$209.80, UM Extension lodging was reduced by \$490.00, UM Extension meals were increased by \$72.00, and UM Extension supplies were increased by \$30.00. The changes resulted in an increase of \$5,108.80 in this subtask.
- Objective 1: WRAPS Development Task B: Information Analysis Sub-Task 1: Data Collection. The amount for the Watershed Coordinator 1 was reduced from \$50,139.00 (1,857 hours) to \$25,764.75 (954.25 hours), a line item was added for Watershed Coordinator 2 of \$1,800.00 (300 hours), and mileage was reduced from \$4,480.00 to \$1,904.08. These changes resulted in a reduction of \$18,850.17 in this subtask.
- Objective 1: WRAPS Development Task C: Project Coordination Sub-Task 1: Project Management. The amount for the HLWD Administrator was increased from \$3,290.00 (94 hours) to \$10,500.00 (300 hours), the amount for the Watershed Coordinator 1 was increased from \$20,115.00 (745 hours) to \$23,334.75 (864.25 hours), a line item was added for the Watershed Coordinator 2 in the amount of \$15,403.50 (570.50 hours), Training-Registration was reduced from \$1,194.00 to \$948.00, Training-Meals was reduced from \$630.00 to \$45.32, Training-Lodging was reduced from \$1,176.00 to \$251.70, and mileage was increased by \$29.63. These changes resulted in an increase of \$24,107.90 in this subtask.
- Objective 1: WRAPS Development Task C: Project Coordination Sub-Task 2: Assist MPCA. The amount for the Watershed Coordinator 1 was decreased from \$7,155.00 (265 hours) to \$5,838.75 (216.25 hours), mileage was reduced by \$614.39, and supplies were reduced by \$52.84. These changes resulted in a decrease of \$1,983.48 in this subtask.

1.5. Amendment #2: January 25, 2018

The HLWD requested an amendment to the contract for the MWP Phase II. The Watershed Coordinator and District Administrator's wages were moved within and between subtasks to provide funding for a watershed survey, printing costs, radio advertising, the PEBC, and a meal. They were also reallocated for a contract with Houston Engineering, Inc. (HEI) to conduct the TMDL Allocation Development for the WFDNR watershed. The total contract amount would remain unchanged. Details would be provided in the work plan narrative.

- Task A Sub-task 1: reduce watershed coordinator's hours by 13.25 (-\$357.75) and reduce HLWD administrator's hours by 90 (-\$3,150.00) for a total reduction of \$3,507.75.
- Task A Sub-task 2: reduce watershed coordinator's hours by 922 (-\$24,894.00) and increased HLWD administrator's hours by 55 (\$1,925.00). Added printing costs (\$1,305.00) and Survey Monkey costs (\$372.00). Total reduction of \$21,292.00.
- Task A Sub-task 3: increased watershed coordinator's hours by 64 (\$1,728.00) and increased HLWD administrator's hours by 40 (\$1,400.00). Added room rentals (\$450.00), mailings (\$347.00), Ecology bus (\$975.00), radio advertising (\$3,000.00), printing (\$1,373.00) and meal (\$1,500.00). Total increase of \$10,773.00.
- Task B Sub-task 1: reduce watershed coordinator's hours by 108.25 (-\$2,929.50) and reduced mileage by \$672.18. Total reduction of \$3,601.68.
- Task C Sub-task 1: increase HLWD administrator's hours by 48 (\$1,680.00) and reduced watershed coordinator's hours by 178.75 (-\$4,826.25). Increased mileage by \$13.94. Total reduction of \$3,132.31.
- Added Objective 2: TMDL Allocation Development, Task A Stream TMDL Allocation for \$6,740.50 and Task B Lake TMDL Allocation for \$14,020.24. Total increase of \$20,760.74.

2. Activities and Tasks

Objective 1: WRAPS Development

Task A: Community Outreach

Sub-Task 1: LWG

- The LWG meeting was held on November 12, 2015. This meeting consisted of an introduction to the new watershed coordinator, an overview of the project work plan, an update on the activities of each part of the work plan, and a group discussion. The group discussion involved decisions about the formation of the Citizen Council and about the data collection needs.
- The LWG meeting was held on February 25, 2016. A project update was given from both the HLWD as well as the MPCA. Group discussion was held about the three documents that the group was asked to review. There was also discussion about story maps and next steps in the MWP.
- A phone conversation was held with Katherine Pekarek-Scott, MPCA on May 26, 2016 to discuss the creation of a survey to go out to LWG members. The purpose of the survey is to inform LWG members that the data collection done through this grant may help them get funding for projects more easily. The survey asked:
 - As LGUs, what targeted projects or programs would you like to seek funding for?
 - Aside from quantifiable load reduction numbers, what questions need to be answered in order for your organization to seek funding for these projects?
 - Results can be found in **Appendix 1**.
- The LWG meeting was held on September 15, 2016. Project updates were presented to the group members. Group discussion was held about the upcoming formation of the citizen group, ideas regarding Citizen Council activities, and possible names for the citizen group.
- The LWG meeting was held on February 23, 2017. The purpose of the meeting was to recognize the purpose and goals of a watershed citizens group in the development and completion of the WRAPS Report. The result of the meeting was identification and analysis of

potential watershed stakeholders to serve on the citizen group. There were 17 people in attendance.

- The LWG meeting was held on January 3, 2018. Katherine Pekarek-Scott gave an update on the WRAPS. LWG completed the draft survey and made suggestions. The suggested changes will be incorporated and the revised document will be distributed to the LWG for review. Discussion was held regarding education needs and how to proceed with promotion.
- The final LWG meeting was held on June 14, 2018. Ross Behrends, WFDNR Watershed Coordinator, welcomed everyone and described the meeting content. Jan Voit presented the WFDNR Story Map and asked for input from LWG members by June 22. Katherine Pekarek-Scott gave an update on the WRAPS Report and TMDL process. Joanne Boettcher, MPCA led the attendees through a series of questions and group activities to determine the level of involvement the LWG would like as the WRAPS development proceeds after the grant ends on June 30. MPCA staff will summarize the results of the group discussions and distribute them. A proposed timeline, along with tentative meeting needs will also be provided.
- Information regarding the LWG can be found in **Appendix 1**.

Sub-Task 2: Citizen Council

- On October 13, 2015 a meeting was held with UM Extension to make decisions about Citizen Council formation timeline and group design. It was decided that the Citizen Council would not be formed until January of 2017.
- Conducted research on strategies for forming a Citizen Council. The purpose of this research was to determine a way to include as many people that represent the population within the watershed as possible. This includes, women, people of differing ages, and other minority groups. Collected demographic data and calculated numbers of individuals in each group living within the watershed.
- The first meeting of the Citizen Council was held on July 18, 2017. Introductions were given. Purpose and objectives were discussed. Watershed processes and functions were explained. An overview of the watershed approach and WRAPS was given.
- The second meeting of the Citizen Council was held on September 6, 2017. The meeting focused on fostering citizen leadership and engagement in the watershed. Time was spent brainstorming about potential public involvement opportunities. It will be necessary to complete an amendment to move funds for the CE meetings that will be planned.
- The third meeting of the Citizen Council was held on November 28, 2017. The purpose of the meeting was to generate ideas for community involvement events and begin the planning process.
- Information regarding the Citizen Council can be found in **Appendix 2**.

Sub-Task 3: Public Participation and Education

- The Linking Landuse Workshops were held on March 26, 2015. Sponsors included Windom Education and Collaborative Center (WECC), Toro, MPCA, and the HLWD. Following the welcome and introductions, Karen Terry, UM Extension gave a presentation entitled “Linking Land Use and Water Quality”. Jan Voit gave a presentation entitled “WFDNR Watershed Project: TMDLS and WRAPS”. Jon Lore, Minnesota Department of Natural Resources (MDNR) Watershed Specialist give a presentation entitled “Des Moines River Watershed Health Assessment”. The Watershed Game was played by all attendees. (See **Appendix 3** for details.)
- The Facebook page for the project was developed on January 23, 2018. Information was added as necessary.

- *Water in Southwest Minnesota: It Affects You!* was held at Key Largo on February 12, 2018. Following is a summary of the event. Ross Behrends welcomed the attendees. Katherine Pekarek-Scott provided an overview of the watershed approach. She described some of the monitoring and assessment work that has been done in the WFDNR Watershed, as well as a timeline for completion of the WRAPS Report. Toby Spanier led the group in a discussion focused on three key questions: *What would you like to see happen with your water infrastructure and stormwater management? What do you need to make what you want happen? And what can you do to make it happen?* Chuck Ackman from US Representative Amy Klobachar's office told the group he appreciated the invitation and would provide Representative Klobachar with information regarding this meeting. Gene Short, City of Currie moderated a panel discussion with State Representatives Joe Schomacher, Erin Murphy, Dean Urdahl, and Paul Torkelson and State Senator Bill Weber. They responded to: *What are the main areas of water infrastructure and stormwater management you want to see more work done on? What opportunities do you see that exist for this work to happen? And what part(s) of this are you willing to help with?* During the meal, Karen Terry provided water education regarding water, watersheds, stormwater, and practices to slow down runoff. Karen Cavet, S.E.H. Engineering gave an overview of the water and sewer infrastructure needs within the WFDNR Watershed. Heidi Peper, S.E.H. Engineering described potential funding options available at the federal and state levels. (See **Appendix 5** for details.)
- The PEBC worked with high school students from Windom Area School to test the water quality in the HLWD. They tested locations in the spring of 2018. They will also gather information in the fall. Students look at temperature, turbidity, color, smell, dissolved oxygen, pH, nitrates, and phosphates. They also collect macroinvertebrates that live there. Students will compare these tests to the previous year, as well as the results from the fall in the spring. Photos from the event can be found in **Appendix 6**.
- The use of geographic information system was used to create the story map. It was done through Environmental Systems Research Institute (ESRI) with assistance from MPCA. See **Appendix 7** for detailed information.
- The Des Moines River Watershed Shared Leadership session was held on June 18, 2018. Ross Behrends started the meeting with introductions. Katherine Pekarek-Scott gave a PowerPoint presentation covering the watershed approach, WRAPS process, work completed to date, TMDL impairments, and general timeframe for WRAPS Report completion. Ross Behrends presented the results from the WFDNR watershed survey. Toby Spanier explained collaboration and led the group in a visioning exercise. Julie Westerlund, Board of Water and Soil Resources (BWSR), provided information on One Watershed, One Plan (1W1P). See **Appendix 8** for further information.
- The Water Education Event was held on June 26, 2018. Ross Behrends welcomed attendees and asked for introductions through sharing what each individual valued most about water. Karen Terry presented on watershed basics and what residents can do to improve water quality. Ross Behrends gave an update on WRAPS and the status of lakes and streams in the WFDNR watershed. He also gave a presentation on past and current projects in the Fulda Lakes area. Attendees were invited to a picnic at Seven Mile Park, where they had an opportunity to see the lake, water quality projects around the lake, and take part in a poster tour. Details can be found in **Appendix 9**.

Obstacles and Lessons Learned

LWG

Fostering a sense of responsibility for the project among local partners proved difficult. This WRAPS project seeks to involve local partners to a higher extent than WRAPS projects in surrounding watersheds. Due to expectations of this WRAPS work plan, there was less participation than HLWD staff had hoped.

Citizen Council

The recruitment process for the Citizen Council was challenging. The goal was to recruit two citizens from each county. However after much correspondence with the LWG and potential citizens, only three people participated. Despite a surplus of funds in the budget because of staff turnover, the HLWD was not allowed to provide any financial support for Citizen Council members. The financial constraints were a deterrent for keeping the members engaged.

Creating a poster and water values survey were great ideas generated by the Citizen Council. Members were excited about sharing the information at many events. Because the documents could not be developed until an amendment was approved, the delay led to lack of interest in Citizen Council members distributing the poster and survey.

Citizen Council members believed that a Facebook page would be a good means to provide the public with information about the WFDNR watershed. However, time constraints did not allow for frequent postings. The page generated very little response.

Public Participation and Education

Linking Landuse Workshops

Planning for this event was challenging as a result of not having a signed contract until two hours before the event was held. Despite the difficulties with MPCA Contracting, it was a successful event.

Water in Southwest Minnesota: It Affects You!

Planning for this educational event was difficult as a result of not having a signed contract until one day before the event. Despite delays, it was a well-attended and successful event. The inadequacies of our watershed's rural sewer and water infrastructures and the amount of money needed to update those systems needs to be considered in future watershed planning and implementation efforts.

PEBC Water Quality Testing

Due to a wintery start to the spring, PEBC was unable to do Heron Lake-Okabena (HLO) and Fulda programs. HLO will be going out again in the fall and Fulda next spring.

Story Map

The Story Map development was challenging, but rewarding. The narrative development began with Erin Nordquist when she was employed as the WFDNR Watershed Coordinator. It was completed by Jan Voit with the assistance of MPCA staff.

Shared Leadership

The Shared Leadership event was originally scheduled for March 26, 2018. Due to a snow storm, the event was rescheduled for June 18. Waiting until two weeks before the end of the grant to hold the event was unfortunate. Participation may have been greater in March.

Water Education Event

Due to time constraints, the event was held the last week of the grant period. Planning and preparation for the event felt rushed. But the overall event was well received.

Working with the UM Extension throughout the grant period was very enjoyable. The working relationship was very good. The work they did with the Citizen Council and all the events resulted in valuable information that HLWD staff could not have gathered. Their expertise in working with public participation and community involvement was greatly appreciated.

Task B: Information Analysis

Sub-Task 1: Data Collection

- Accompanied MDNR staff on the annual survey of five channel cross sections on Jack, Lime, and Okabena Creeks on October 14, 2015.
- Collected data from the US Department of Agriculture (USDA) Agricultural Census. She compiled all necessary data between the years of 1950-2012. The purpose of this data collection is to show the change in farm practices over time as a means of better characterizing the watershed.
- Collected data about cities within the watershed (size, human population, pet population, etc.) and any storm water oriented ordinances they may have. The purpose of this data collection is to show that all entities within the watershed are responsible for water quality.
- Analyzed the collected USDA census data. The purpose of the analysis was to learn about the context of certain trends seen in the census data.
- Created and compiled Geographic Information Systems (GIS) maps of watershed characteristics. These maps were distributed at the next LWG meeting to ensure accuracy.
- Researched possible drained lakes and created a shapefile for visualization. LWG members and local historical societies will be asked to review shapefile for accuracy.
- Collected estimated pet population data for urban areas within the watershed.
- Researched TMDL water quality standards. The purpose of this research was to put the standards into a context that the general public may better understand. Instead of using a measurement such as milligrams per liter, something like dump truck loads could be used to better demonstrate the standards. The need for this was brought up at the LWG meeting on November 12, 2015. It was discussed that the LWG needs to be very clear about what the water quality standards really mean for stakeholders.
- Researched historical records from County Historical Society websites. The purpose of this research was to find any historical descriptions of the watershed to visualize how the watershed has changed. Particular attention was paid to descriptions of lakes to determine locations of lakes that have been drained.
- Researched information on past and current wildlife patterns within the watershed.
- Interpreted aerial photos of the watershed to determine watershed characteristics, shoreline buffer placements, possible bank failures, and sediment islands.
- Created an infographic to help the general public visualize the water quality standards that were put into plain language.
- Facilitated a meeting with the County Feedlot Officers Brooke Burmeister, Jackson County; Jon Bloemendaal, Murray County; Al Langseth, Nobles County; and Jared Morrill, Cottonwood County on February 25, 2016. The purpose of the meeting was to discuss the plans for the 20 percent of feedlots within the watershed that remain to be inspected.
- Prepared inspection forms and maps for feedlot inspections.
- Worked on an infographic to explain the WFDNR watershed's Water Quality Standards in plain language.

- Attended a webinar about the use of the Minnesota Feedlot Annualized Runoff (MinnFARM) model.
- Created a GIS shapefile of the longitudinal survey data.
- Developed narrative for the Story Map project. The objective and intended audience for the Story Map were identified.
- Conducted a longitudinal Secchi tube survey of Lime Creek on July 12, 2016.
- Completed feedlot inspections for the WFDNR watershed on August 8, 2017.
- Completed MinnFARM data entry for the WFDNR watershed on April 21, 2018.

Obstacles and Lessons Learned

The majority of tasks in this objective were done by online research. Though time consuming, no difficulties were encountered. Coordination with feedlot officers was key to the successful completion of the feedlot inventory.

Task C: Project Coordination

Sub-Task 1: Project Management

- On September 30, 2015, MPCA staff hosted a Des Moines River WRAPS meeting. Following introductions, project updates were given from MPCA, MDNR, and the East and West Fork watersheds. Andrea Plevan, TetraTech gave a PowerPoint presentation about the Hydrologic Simulation Program Fortran (HSPF) modeling for the WRAPS being done by their firm. The model will be based on flow and water quality data for 1995 through 2014. Discussion was held regarding data needs for model development.
- Presented at the Southwest Region Minnesota Wastewater Operators Association (MWOA) annual meeting on February 17, 2016. The presentation included an overview of the TMDL process, an explanation of the impaired reaches in the watershed, the limitations of the TMDL process, and an overview of the new watershed approach.
- Participated in and finished all coursework for the Watershed Specialist Training through the UM.
- Attended the Professional Judgment Group meeting for the WFDNR watershed on June 17, 2016. The purpose of this meeting was for the MPCA to obtain local input on the conclusions that have been made about the impaired reaches within the watershed.
- Semi-annual and annual reports were completed and submitted to MPCA as required by the work plan and contract.
- Detailed information can be found in **Appendix 10**.

Sub-Task 2: Assist MPCA in Data Collection in Watershed Approach

- Erin Nordquist attended training for the SID data collection project on March 23, 2016. The training was led by Katherine Pekarek-Scott and Bryan Spindler, MPCA. It included training on how to take proper water samples and field data, information on the SID work, how to fill out the field data sheet, chain of custody, and bottle labels, and what to take photos of in the field. Attendees were also provided with sample bottles for the project.
- Erin Nordquist met with Catherine Wegehaupt, HLWD Technician on May 18, 2016 to discuss sampling logistics. Catherine answered questions about the sampling process and shipping samples.

- Erin Nordquist conducted SID sampling in May, June, July, and August of 2016. Entered SID data and photos, prepared cooler, chain of custody forms, and coordinated shipping on each sampling day.
- Assisted Katherine Pekarek-Scott and Matt Moon, MPCA, on August 4, 2016 to deploy sondes at some stream sites around the WFDNR watershed. Sondes are probes that stay in a stream for an extended time that periodically record water quality data. This gives watershed analysts a better understanding of the water quality data. They may be able to find patterns in what the data indicates at certain times of the day.

Obstacles and Lessons Learned

Project Management

Staff turnover proved to be a big challenge. When Ross Behrends began working in January 2017, he was the third person in this position.

Delays in contract and amendment approval at the state level caused difficulties for HLWD staff to implement work plan tasks. In addition, staffing issues within MPCA resulted in missed deadlines for drafting the WRAPS Reports. As a result, the WRAPS Report will not be completed until early 2020, nearly two years behind schedule.

Assist MPCA

Not having access to ideal project tools like ArcGIS and having to coordinate water sampling resources with other HLWD staff have been obstacles that may have affected the overall timeline of the project.

Objective 2: TMDL Allocation Development

Task A: Compute loads and margins of safety

- HEI computed sub-watershed load capacities, waste load allocations, load allocations, and margin of safety for each impaired reach in the Des Moines basin. Stream water chemistry, flow data, standard information and the HSPF model data was provided by MPCA.

Task B: Bath Tub Models and Technical Memorandum

- HEI developed stochastic BATHTUB models and determine waste load allocation, load capacities, load allocations, and margin of safety for each impaired lake in the Des Moines basin. Stream water chemistry, flow data, standard information and the HSPF model data was provided by MPCA.

Obstacles and Lessons Learned

No difficulties were encountered.

Grant Results

3. Measurable Outcomes

Successful implementation of a grant program requires an extensive effort in recordkeeping. Section 2 summarized the activities completed during the grant period. The methods of measured results and success are varied and dependent upon the tasks. The measurements are described below by objective and task as presented in the work plan.

Objective 1: WRAPS Development

Task A: Community Outreach

Sub-Task 1: LWG

- The LWG met six times.
- The LWG participated in a process for identification and analysis of potential watershed stakeholders to serve on the citizen group.
- The LWG completed the water values survey and made constructive comments that were incorporated into the document.
- The LWG identified education needs and recommended the implementation of a water education event.

Sub-Task 2: Citizen Council

- The Citizen Council met three times.
- Brainstorming about potential public involvement opportunities resulted in:
 - Facebook page
 - Poster
 - Water values survey
 - Education event with the City of Currie
 - Funding for an education program with PEBC

Sub-Task 3: Public Participation and Education

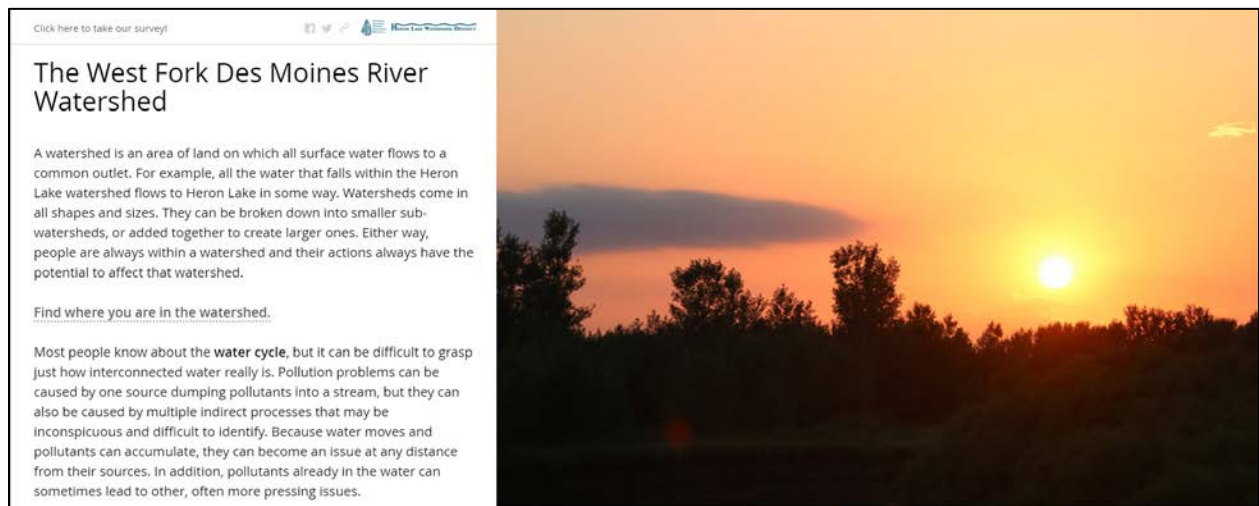
- Linking Landuse and Water Quality Workshops
 - Session one: 39 attendees
 - Session two: 13 attendees
- Facebook page
 - 47 followers as of June 28, 2018

Figure 1. Facebook Page Followers



- Water in Southwest Minnesota
 - 50 attendees representing almost all of the 18 cities and seven counties
- PEBC Water Quality Testing
 - Water sampling with 22 students
- Story Map
 - The Story Map was completed at the end of June. It will be used as an education tool by partners in the WFDMR watershed. It will also be used as a tool when moving into 1W1P.

Figure 2. Story Map Image



- Shared Leadership
 - 33 attendees, representing six of the seven counties in the watershed
- Water Education Event
 - 36 attendees

Task B: Information Analysis

Sub-Task 1: Data Collection

- Completed 52 feedlot inspections and completed MinnFarms on 24 open lots through the WRAPS. Throughout the entire project, which began with WFDNR TMDL Implementation Project in October of 2011, inspections were completed on 1,002 registered sites.

Task C: Project Coordination

Sub-Task 1: Project Management

- Project update meeting with 12 attendees.
- Provided TMDL and WRAPS information to 50 attendees at the MWOA Southwest Region meeting.
- Semi-annual and annual reports were submitted and approved as described in Section 2 above. The reports were uploaded to the web page.

Sub-Task 2: Assist MPCA

- Monitoring data was gathered to assist MPCA and MDNR work.

Objective 2: TMDL Allocation Development

Task A: Compute loads and margins of safety

- Technical memorandum

Task B: BATHTUB models

- Technical memorandum

4. Products

There have been several products produced through this grant. Below is a list of the products created and the appendices in which the products are located.

4.1. Appendix 1 – LWG

- Invitation – November 2015
- Agenda – November 2015
- LWG PowerPoint Presentation – November 2015
- Brainstorming questions
- Minutes – November 2015
- DesMoines_PotentialTileDrain
- WQS infographic
- Power-interest grid
- USDA Census data
- Data Collection Update Handout
- Minutes – February 2016
- Inventory survey answers
- WFDNR survey data needs
- Agenda – September 2016
- Map Activity
- MWPII General Project Update Handout
- Secchi Tube High Flows
- WFDNR Drained Lakes
- Minutes – September 2016

- Planning Agenda
- Facilitator Agenda
- Meeting Agenda
- Meeting Notes
- Photo 1
- Photo 2
- Lead Roles and Responsibilities
- Negotiables for LWG
- Stakeholder Analysis
- Vision Worksheet
- Power & Interest Grid
- Check in Notes – June 2017
- Stakeholder Identification, Mapping, and Analysis
- Invitation – December 2017
- WRAPS Update
- CC CE Plans
- Educational Workshop Descriptions 2017-2018
- LWG Minutes 1-3-18
- LWG meeting follow up
- Save the Date
- Agenda

4.2. Appendix 2 – Citizen Council

- Citizen Council Purpose and Promise
- Check In June 30, 2017
- Facilitators Agenda Session 1
- Agenda Session 1
- WRAPS Overview
- Session 1 Photo
- Session 1 Evaluation Summary
- CC Agenda Session 2
- CE Examples
- Citizen Council CE Outcomes
- Fostering Citizen Leadership in Heron Lake
- Session 2 Evaluation Summary
- CC Agenda Session 3
- Citizen Council Ideas and Audiences
- CC CE Plans

4.3. Appendix 3 – Linking Land Use Workshops

- WECC contact list
- Linking Land Use and Water Quality flyer
- Media Release
- Linking Land Use and Water Quality – UM Extension
- TMDL and WRAPS Presentation
- Linking Land Use and Water Quality – DNR
- Photo 1
- Photo 2
- Photo 3
- Evaluation 12 pm to 4 pm Summary

- Evaluation 5 pm to 9 pm Summary
- Summary

4.4. Appendix 4 – Poster and Survey

- Heron Lake Watershed Poster – WITH Survey
- Heron Lake Watershed Poster – NO Survey
- WFDNR Watershed Survey
- Survey Export March 2018
- Survey Export July 2018
- WFDNR Survey Participants
- \$100 Prize Winner

4.5. Appendix 5 – Water in Southwest Minnesota

- City of Currie planning meeting summary
- Water in Southwest Minnesota invite
- Audience Responses
- MPCA Presentation
- Effects of Urban Runoff on a Watershed
- SW Water Presentation – SEH
- News Release – Water in Southwest Minnesota

4.6. Appendix 6 – PEBC

- Water Sampling Event Summary
- Photo 1
- Photo 2
- Photo 3

4.7. Appendix 7 - Story Map

- USDA Census data
- Census data
- City Data
- DesMoines_1969
- DesMoines_AgChemSpills
- DesMoines_Agroecogrions
- DesMoines_AlteredWatercourse
- DesMoines_AnnualPrecip
- DesMoines_DamLocations
- DesMoines_DrainedLakes
- DesMoines_Feedlots
- DesMoines_Hillshaed
- DesMoines_Impairments
- DesMoines_LTAs
- DesMoines_PresettlementVeg
- DesMoines_RegulatedAreas
- DesMoines_Restorable_Wetlands
- DesMoines_SchoolDistricts
- DesMoines_Slope
- DesMoines_UrbanAreas
- MPCAGIS_WFMR_Story_Map_Narrative
- Story Map

- Story Map Works Cited
- The WFDMR - Print

4.8. Appendix 8 - Shared Leadership

- Save the Date – March 2018
- Agenda – March 2018
- Shared Leadership Facilitation Notes – March 2018
- Reflections on Collaboration and Engagement
- Cover Story Vision
- Survey Export March 2018
- Shared Leadership Cancellation Notice
- Shared Leadership Agenda – June 2018
- MPCA Presentation – Shared Leadership
- WFDMR Survey Results
- Collaboration Tips
- IAP2 Spectrum
- Reflections on Collaboration and Engagement
- Watershed Vision Elements
- 1W1P for Des Moines River WRAPS
- 1W1P Fact Sheet 2018
- Using WRAPS reports in local water planning
- Shared Leadership Summary

4.9. Appendix 9 - Water Education Event

- Event Planning Information
- Flyer
- Marketing outlets
- KDOM Advertisement
- KJOE Advertisement
- KWOA Advertisement
- Marshall radio advertisement
- KDOM and KMHL Radio Interview Questions
- Agenda
- Watersheds 101
- WRAPS Presentation
- Fulda Lakes
- What You Can Do
- Resources
- Fulda Lake Restoration Posters
- Photo 1
- Photo 2
- Water Education Event Summary

4.10. Appendix 10 - Project Management

- WFDMR Project Tasks
- Contact Information
- MWP II Monthly Report 03-2015
- MWP II Monthly Report 04-2015
- MWP II Monthly Report 05-2015
- MWP II Monthly Report 06-2015

- MWP II Monthly Report 07-2015
- DMR Meeting Agenda September 2015
- DMR Project Update Notes
- MWP II Monthly Report 10-2015
- MWP II Monthly Report 11-2015
- MWP II Monthly Report 12-2015
- MWP II Monthly Report 1-2016
- MWOA Presentation
- MWP II Monthly Report 2-2016
- MWP II Monthly Report 3-2016
- MWP II Monthly Report 4-2016
- MWP II Monthly Report 5-2016
- MWP II Monthly Report 6-2016
- MWP II Monthly Report 7-2016
- MWP II Monthly Report 8-2016
- MWP II Monthly Report 9-2016
- MWP II Monthly Report 10-2016

5. Public Outreach and Education

The following section summarizes the public outreach and education efforts undertaken.

The first education endeavors undertaken were the Linking Land Use and Water Quality Workshops. These workshops were the result of a grant application by the WECC to the Toro Corporation. The grant provided 50 percent of the costs for the UM Extension to present two instructional courses for education and information for community leaders, members, and families to work together for cleaner water.

The workshops were held on March 26, 2015 at the Fulda American Legion. Sponsors included WECC, Toro, MPCA, and the HLWD. Following the welcome and introductions, Karen Terry gave a presentation entitled “Linking Land Use and Water Quality”. Jan Voit gave a presentation entitled “WFDNR Watershed Project: TMDLS and WRAPS”. Jon Lore gave a presentation entitled “Des Moines River Watershed Health Assessment”. The Watershed Game was played by all attendees. (Detailed information regarding the workshops can be found in **Appendix 3**.)

Convening the LWG was one of the work plan tasks. Over the course of the grant, the LWG met six times. They were part of brainstorming sessions and completed a survey. They participated in a process for identification and analysis of potential watershed stakeholders to serve on the Citizen Council. Once the list was developed, LWG members made initial contact with the individuals. Ross Behrends and Jan Voit followed up with those that were considering serving on the Citizen Council. Three people agreed to participate: Mona Henkels, Paull Henning, and Ron Tibodeau. (Details regarding each of the LWG meetings can be found in **Appendix 1**.)

The first meeting of the Citizen Council was held on July 18, 2017. Only two of the members were able to attend. Introductions and a warm-up activity were done. Ross Behrends explained the purpose and objectives for the Citizen Council. Karen Terry gave an overview of watershed processes and functions. Katherine Pekarek-Scott described the watershed approach and gave a WRAPS update. (Details regarding each of the Citizen Council meetings can be found in **Appendix 2**.)

The second meeting of the Citizen Council was held on September 6, 2017. Following introductions and a warm-up, Toby Spanier provided information about CE. Citizen Council members were asked to

brainstorm ideas for CE. Time was spent identifying water values in the watershed. A homework assignment was given as well. The book Strengths Finder 2.0 was distributed. Instructions were given to read the book and complete the survey before the next meeting.

The final meeting of the Citizen Council was held on November 28, 2017. Discussion was held regarding the “must haves” for public gatherings, as well as what the MPCA and HLWD could bring to those events. Time was spent using the snow carding technique to identify and prioritize ideas for public gatherings. The results of the snow carding activity are identified below.

CE actions

- Develop survey to gather public input and a poster to promote clean water
- Develop a Facebook page
- Connect with other civic organizations and events to distribute surveys and discuss watershed issues

Educational Activities

- PEBC for watershed experiences
- Public officials summit in partnership with the City of Currie

When the Citizen Assessment and Values Survey was being developed, the draft version was reviewed by the LWG. Comments received were valuable for question clarification and were incorporated into the document. (Information regarding the survey and poster can be found in **Appendix 4.**)

The survey was distributed at the Cottonwood County Game and Fish League’s annual meeting. Other venues were Soil and Water Conservation District (SWCD) offices and libraries throughout the watershed, as well as to the HLWD Advisory Committee and attendees of the *Water in Southwest Minnesota* meeting. The survey link was also included on the HLWD website, Story Map, and the Facebook page. The printed survey data was entered into survey monkey. The results can be found in **Appendix 4.**

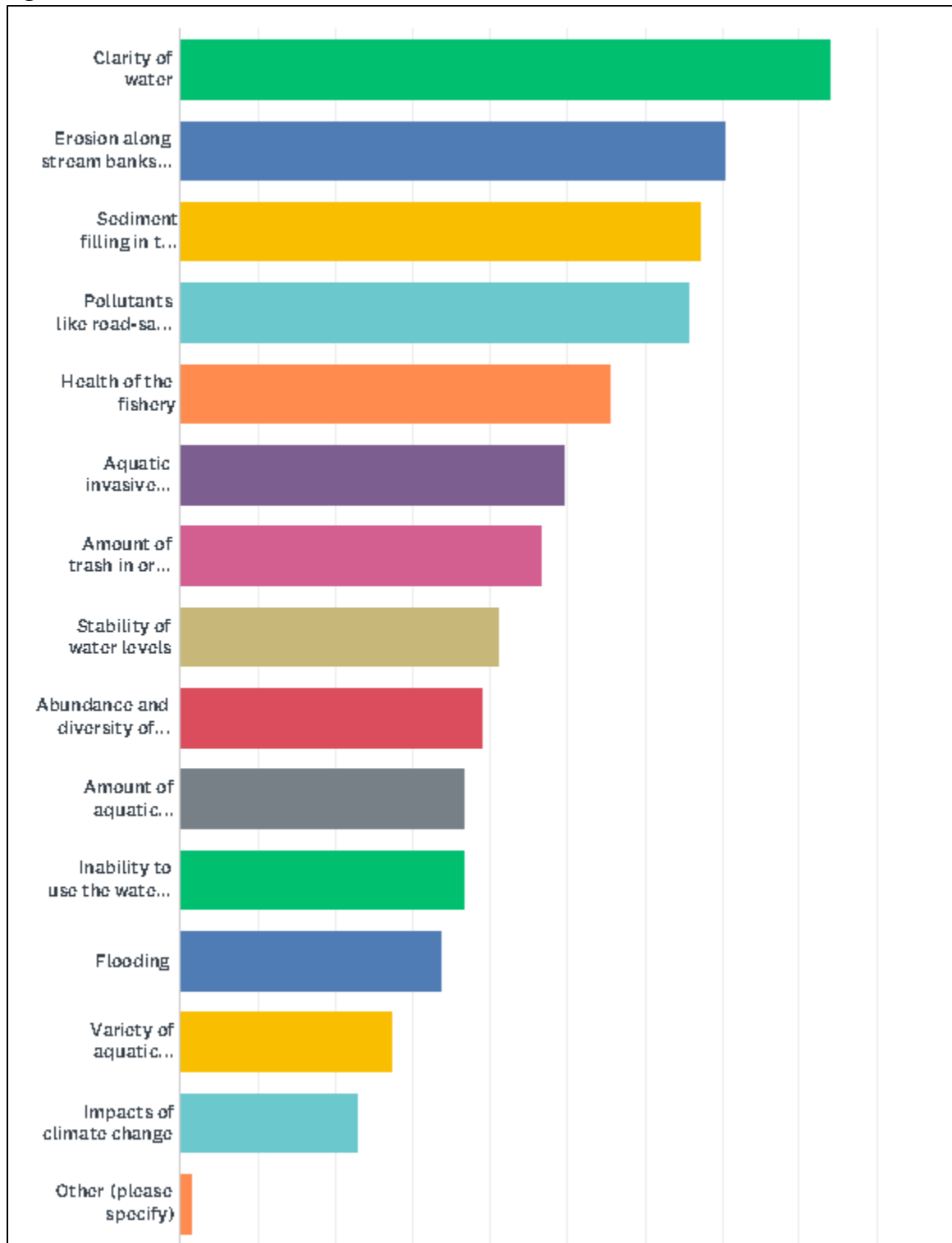
Information from the survey will be used by MPCA and the LWG in developing the implementation strategies for the WRAPS report. Responses were received from a variety of individuals as shown in Figure 3.

Figure 3. Response Representation

ANSWER CHOICES	RESPONSES	
SWCD/NRCS	24.82%	34
Production Ag.	13.14%	18
Sportsman Association	6.57%	9
Rural Resident	18.98%	26
Elected Official	18.98%	26
Civic Organization	2.92%	4
Lake Association	1.46%	2
Student	2.19%	3
Ag. Business	1.46%	2
Business Owner	8.03%	11

Concerns about the condition of the lakes, creeks, ponds, and wetlands in the watershed are shown in Figure 4. Survey results as of July 17, 2018 can be found in **Appendix 4**.

Figure 4. Concerns



The Facebook page was developed in January of 2018. Information was posted regarding upcoming events, as well as links to the citizen values survey and the story map. It is hoped that all of the partners

will share this page and invite others to “like” it. It could then be used as a platform to post events and other information for the entire watershed.

One of the education events identified by the Citizen Council developed into *Water in Southwest Minnesota: It Affects You!* The meeting was held at Key Largo on February 12, 2018.

Ross Behrends welcomed the attendees. Katherine Pekarek-Scott provided an overview of the watershed approach. She described some of the monitoring and assessment work that has been done in the WFDNR Watershed, as well as a timeline for completion of the WRAPS Report. Toby Spanier led the group in a discussion focused on three key questions: *What would you like to see happen with your water infrastructure and stormwater management? What do you need to make what you want happen? And what can you do to make it happen?*

Chuck Ackman from US Representative Amy Klobachar’s office told the group he appreciated the invitation and would provide Representative Klobachar with information regarding this meeting. Gene Short, City of Currie moderated a panel discussion with State Representatives Joe Schomacher, Erin Murphy, Dean Urdahl, and Paul Torkelson and State Senator Bill Weber. They responded to: *What are the main areas of water infrastructure and stormwater management you want to see more work done on? What opportunities do you see that exist for this work to happen? And what part(s) of this are you willing to help with?*

During the meal, Karen Terry provided water education regarding water, watersheds, stormwater, and practices to slow down runoff. Karen Cavet, S.E.H. Engineering gave an overview of the water and sewer infrastructure needs within the WFDNR Watershed. Heidi Peper, S.E.H. Engineering described potential funding options available at the federal and state levels. (Detailed information about this event can be found in **Appendix 5.**)

The Citizen Council identified the need to work with students. Because of time constraints, they requested that funding be provided to the PEBC to assist with water quality programs underway at three schools within the WFDNR watershed. The PEBC worked with high school students from Windom Area School to test the water quality in the HLWD. They tested locations in the spring of 2018. They will also gather information in the fall. Students look at temperature, turbidity, color, smell, dissolved oxygen, pH, nitrates, and phosphates. They also collect macroinvertebrates that live there. Students will compare these tests to the previous year, as well as the results from the fall in the spring. Due to a wintery start to the spring, PEBC was unable to do HLO and Fulda programs. HLO will be going out in the fall and Fulda next spring. Information regarding the PEBC event can be found in **Appendix 6.**

The work plan called for holding two Shared Leadership events. The LWG did not believe that these were necessary because there would be such a long period of time between the end of this grant, when the WRAPS Report would be completed, and when 1W1P could begin. However, since these were specifically identified in the work plan, one session was planned. It was scheduled for March 26, 2018. A snow storm that day caused the event to be cancelled. County commissioners, SWCD supervisors, and HLWD managers were invited to attend the Des Moines River Watershed Shared Leadership session on a new date of June 18.

The purpose of the this meeting was to bring together elected and appointed officials, as well as the Citizen Council and LWG, for an update on the Des Moines Watershed WRAPS Report, as well as an introduction to the 1W1P process. There were 33 people in attendance, representing six of the seven counties in the watershed.

Ross Behrends started the meeting with introductions. Katherine Pekarek-Scott gave an overview of the watershed approach, described land use and altered watercourses, provided an update on the WRAPS process including preliminary assessments for stream and lake impairments, including biological impairments and stressors, and explained work completed to-date. She also provided a summary of the TMDL impairments and general timeframes towards the overall completion of the WRAPS Report.

Ross Behrends presented the results from the WFDNR Watershed Survey. To date there were 103 surveys completed and entered online into Survey Monkey. Results will be used in the WRAPS Report, as well as included in the MWP Phase II Final Report.

Tobias Spanier explained collaboration. The purpose of collaboration is to create a shared vision and joint strategies to address concerns that go beyond the concerns of any particular party. To begin to develop a shared vision within the Des Moines Watershed, attendees were broken up into small groups to develop their vision for the watershed. Each group's vision was shared with the whole group and discussion was held. Key values were shared from the group. Values shared were: drinking water; quality of life – clean, recreational use, social; controlled drainage; water storage; improved water quality; community involvement – and sense of personal responsibility; partnerships lead to measured success; reduced algae blooms; business growth; improved farming techniques; community involvement to use resources; hard work; education about goals; personal responsibility; and maintaining what has been achieved.

Julie Westerlund provided information on 1W1P. BWSR's vision for 1W1P is to align local water planning on major watershed boundaries with state strategies towards prioritized, targeted, and measurable implementation plans – the next logical step in the evolution of water planning in Minnesota. The benefits of a shared watershed plan would be: a shared understanding of the concepts of prioritized, targeted, and measured; agreement on the expectations, benefits, and outcomes for implementing 1W1P; implementation activities that address the largest threats and provide the greatest measurable environmental benefit; an understanding of the procedures for substituting or replacing all or portions of existing water plans; and an understanding of next steps for coordinated funding and implementation. (Details regarding the Shared Leadership meeting can be found in **Appendix 8.**)

The Shared Leadership meeting was the first step in developing a shared vision for the future of the WFDNR watershed and its water resources. There were different visions from the participants. Leaders from the upper portion of the watershed focused more on water quality aspects. Whereas, leaders in the lower portions of the watershed were more concerned about water quantity and water retention. This meeting demonstrated that in order to move forward with future watershed planning efforts, a complete understanding of the issues, along with the options available to work toward solving those issues, are vital components for developing a unified vision. Future watershed planning efforts must continue to develop a shared vision in order to responsibly and successfully improve our water resources.

The LWG was asked to provide input regarding the topic for the final education event required in the grant work plan. The discussion revolved around identifying education needs. The LWG recommended the implementation of a water education event. Data regarding this event can be found in **Appendix 9.**

The result of the LWG recommendation for a water education event was *Where Does Your Water Go? Presentations and Picnic*. A flyer was created and distributed to the Citizen Council, SWCDs, the HLWD

Advisory Committee, county commissioners and county staff, local agriculture cooperatives, cities and city staff, and conservation groups. It was posted on the HLWD website and uploaded to the Facebook page. Radio advertising was done on KDOM, KJOE, KWOA, and KMHL radio stations. This event was held on June 26, 2018, at the American Legion in Fulda, MN. Where Does Your Water Go? was developed to bring watershed awareness to the residents of the WFDNR watershed. There were 36 people in attendance.

Ross Behrends started the event by welcoming the attendees and asking everyone to introduce themselves and share what they value most about water.

Karen Terry presented on watershed basics and what residents can do to help improve water quality. Clean water is important to all of us for the life it sustains and the opportunities it provides. Every drop of water that runs across the surface of the land has the ability to pick up pollution (like phosphorus and dirt) and carry it to a nearby lake or stream. To improve and protect water quality, we need to stop water from running overland into our waterbodies. That can be done by creating spaces for the water to slow down and soak into the ground or be taken up by plants. Some of the ways to do that are by creating rain gardens and shoreline restorations, installing rain barrels, restoring wetlands, and building bioretention basins. She commented that the HLWD can help attendees identify the best strategies for their property.

Ross Behrends gave an update on the WRAPS and presented on the current status of the lakes and streams in the West Fork Des Moines River watershed.

Following the WRAPS and WFDNR update, Ross Behrends highlighted past and current projects throughout the Fulda Lakes area that have led to the successful improvement of Fulda Lakes. Partnerships and active participation from the Fulda Lakes community have driven this grassroots effort to become one of the great water quality success stories in Southern Minnesota.

Questions were asked and discussion was held following the presentations. Several Fulda residents commented on the excellent health of their lake and thanked the HLWD for their efforts. Some concerns and possible areas for improvement were mentioned.

Attendees were invited for refreshments at Seven Mile Park. At the park, attendees had an opportunity to see the lake, water quality projects around the lake, and also take part in a poster tour highlighting specific Fulda Lakes' projects.

6. Long-term Results

Products developed through this grant will be helpful for future education endeavors. The Facebook page will be maintained and used to share information regarding the WFDNR watershed and planned events. The story map will be used as an educational tool at meetings and events. The survey will remain live until the end of 2018. The information will be compiled and distributed to partners to help guide decisions regarding project implementation and education event development.

Based upon information received from Senator Bill Weber's office on June 18, 2018, the City of Currie's drinking water and wastewater projects will be funded with a combination of USDA Rural Development (RD) loans and grants and Public Facilities Authority (PFA) Water Infrastructure Funds (WIF) grants. Funding commitments were made known on July 19, 2018.

The City of Currie was informed that they were approved for \$5.2 million in funding. Grant funds will comprise 80 percent and loan funds 20 percent of that figure.

It is the hope of HLWD staff that the relationship building that began with the Shared Leadership meeting will continue over the next two years. That relationship is vital to the successful enactment of education, implementation, and community involvement opportunities. It is also necessary for the review and development of the WRAPS Report. Once the WRAPS Report is complete, it is the HLWD'S intention that it be used as the basis to move forward with 1W1P.

This grant helped HLWD staff with efforts for education and implementation as described in the HLWD Watershed Management Plan. Staff will continue to seek funding to assist with water quality improvement efforts.

7. Final Expenditures

The cash and inkind expenditures for the WFDNR MWP Phase II grant period are included in the attached budget.