



319/Clean Water Partnership (CWP)/
Total Maximum Daily Loads
Semi-Annual Report for Reporting Year 2013

Doc Type: Semi-Annual Report

Reporting Period: [X] January 1 through June 30 (Due August 1)
[] July 1 through December 31 (Due February 1)

All information is required by U.S. Environmental Protection Agency (EPA). Do not leave blanks. This report form can be typed using your computer. Use the "tab" key to move through the fields of this form. Enter responses using text and check boxes as indicated. Keep a copy for your records.

I. General Report Information

- 1. Project title: WF Des Moines River TMDL Implementation Project
2. Project sponsor: Heron Lake Watershed District
3. Project representative: Jan Voit, District Administrator
4. E-mail address: jan.voit@mysmbs.com
5. Funding: [X] 319 [] CWP [] Clean Water Legacy/Clean Water Fund [] Other:
6. Contract number: 37241 PRJ number: PRJ07839
7. MPCA Project Manager: Katherine Pekarek-Scott
8. Contract start date (mm/dd/yyyy): 1/1/2011 Contract end date (mm/dd/yyyy): 8/30/2015

The following six questions refer to the lists on the Minnesota Pollution Control Agency (MPCA) website following this report form:

9. Best Management Practices (BMPs): Waste Utilization

10. Primary and Secondary Categories of Pollution:

Table with 4 columns: Category (name only), Primary, Secondary, Others. Row 1: Animal Feeding Operations, Inappropriate Waste Disposal, n/a

11. Nonpoint Source (NPS) Functional Category:

Table with 4 columns: Category (name only), Primary, Secondary, Others. Row 1: Inspection Activities, Local Education/Information Programs, n/a

12. Waterbody type: Streams

13. Type of pollutant(s) (use name, not code #s): Bacteria

14. Ecoregion: Western Corn Belt Plains

15. Hydrologic unit code (12 digits): 071000010604 Latitude-longitude: 43°50'41.56"N, 95 28'00.06"W

16. Basin name (check all that apply): Statewide []

- [] Lake Superior
[] Lower Mississippi/Cedar
[] Upper Mississippi
[] Minnesota
[] Rainy
[] Red River
[X] Des Moines
[] Missouri
[] St. Croix

II. Project Description

1. **Project Description Summary (taken from work plan summary) – Include at least two paragraphs that briefly summarize the project scope, the processes and the events that occurred before this reporting period.**

The West Fork Des Moines River (WFDNR) watershed encompasses parts of seven counties and is approximately 1,333 square miles in size. Land use within the watershed consists primarily of cultivated land in agricultural production. The river originates in the northwestern part of the watershed from several lakes including its principal source Lake Shetek. The WFDNR flows from the Lake Shetek outlet near Currie in a southeasterly direction for 94 miles to the Minnesota/Iowa boarder and eventually enters the Mississippi River at Keokuk, Iowa. In December 2008, the Environmental Protection Agency approved a Total Maximum Daily Load (TMDL) study encompassing 32 impairments in the WFDNR watershed. This project is unique in that it addressed several impairments on a basin-wide scale, worked with local partners, and developed an advisory stakeholder committee early in the process. The local stakeholder advisory committee that provided input and received project updates during the development of the TMDL Report provided a foundation for developing an implementation plan. A cooperative effort of local, state, and federal representatives from conservation agencies and the advisory committee led to the development of the WFDNR and Heron Lake TMDL Implementation Plan, approved by the Minnesota Pollution Control Agency (MPCA) on September 22, 2009.

The TMDL Report states that the primary contributing sources to fecal coliform bacteria were found to be livestock on overgrazed riparian pasture, surface-applied manure on cropland, feedlots lacking adequate runoff controls, and inadequate septic systems. Through this project, the Heron Lake Watershed District (HLWD) staff, County staff, and Soil and Water Conservation District (SWCD) staff would work together to complete an intensive, onsite inventory and inspection (Level III Feedlot inventory) of eighty percent of the feedlots (592) in the WFDNR watershed through in-kind contributions. The inventory is instrumental in order to gauge the need for funds to address the feedlots and ultimately decrease the bacteria concentrations in the streams and rivers. A staff person dedicated to the project would continue to promote the project and seek additional funding for implementation and education. Project partners would host a one-day manure management workshop for feedlot owners and operators, develop a project brochure and website, and conduct committee meetings.

HLWD staff, county staff, and SWCD staff will employ a team approach in contacting landowners, providing technical assistance for Level III Feedlot Inventories, developing the website and brochure, planning and conducting a manure management workshop, and participating in committee meetings.

By recommendation of Advisory and Technical Committee (AC and TC) members, this project was developed in hopes of using it as a kickoff to implementation and education as described in the TMDL Implementation Plan.

The WFDNR watershed has had several successful Clean Water Partnership (CWP) Projects completed in the last twenty years. The results of the reports indicate that feedlots in the watershed pose a water quality threat. In addition, the WFDNR and Heron Lake TMDL Report addressed 32 impairments of which 15 were related to fecal coliform bacteria. The report stated that to meet the water quality standards, a 10 percent to 86 percent reduction in bacteria would be needed respectively.

2. **Specific Project Goals – Include numeric, quantifiable goals for environmental improvement, the number of Best Management Practices to be installed, pollutant reductions as well as programmatic and social goals.**

To enhance partnerships between Murray, Nobles, Jackson, and Cottonwood Counties and the HLWD through the continued employment of a watershed coordinator to assist with obtaining current feedlot information through onsite inspections and project promotion.

Project Goal 1: Conduct an intensive, onsite inventory and inspection of eighty percent of the feedlots in the watershed through a strong partnership with four counties and the HLWD.

Project Goal 2: Increase the knowledge of 50 feedlot operators through a one-day workshop.

Project Goal 3: Increase public awareness of the WFDNR TMDL Project through the development of a brochure and website.

Project Goal 4: Coordination of project updates and direction through semi-annual meetings with the AC and TC.

3. **Methods to achieve Goals:**

Objective 1: Feedlot management and education

Task A: Conduct Level III Inventory

- A targeted, Level III feedlot inspection would include an inventory of all animals, size of buildings, feedlot drainage area, distance to stream or tile, buffers, and topography. Current MPCA feedlot rules require that a minimum of seven percent of the feedlots be inspected each year. This proposal would require an expedited completion of the Level III inventory. There are currently 742 feedlots in the watershed. The TMDL Implementation Plan stated that a Level III inventory would be completed for each of these feedlots within the first five years of the project. Because this is a four-year endeavor, 592 or 80% of the feedlots would be inspected during the grant period.

- A report that summarizes the results of the inventory will be developed by the Watershed Coordinator. The report will include information about the feedlots, potential repairs, and estimated costs. This information will be instrumental in applying for future funding to address feedlot repairs.

Task B: Host a manure management workshop

- One workshop would be offered to feedlot owners and operators (approximately 50 attendees) to address manure management topics such as proper timing, rate and method of application, existing regulations, setback and winter application requirements, and nutrient management. Workshop would be conducted by county, SWCD, and HLWD staff, with presenters from the MPCA and the University of Minnesota Extension.
- A questionnaire will be used to gauge interest, knowledge, and where more information is needed.

Objective 2: Project promotion

Task A: Website

- A website would be developed and linked to the HLWD, MPCA, and each county's website. This website would contain water quality information, project updates, and program availability and would attempt to reach over 1,000 people. The website would be developed by the watershed coordinator and maintained by the watershed coordinator and HLWD staff.
- Website statistics will be used to learn more information about the website visitors and reported in the final report.

Task B: Brochure

- A color brochure promoting the project and educating residents about the importance of water quality improvement efforts would be developed by the watershed coordinator and HLWD staff. The brochure would be distributed at events and displayed at project partners' offices in an attempt to reach over 1,000 people.

Task C: Conduct Semi-annual Meetings

- Conduct semi-annual meetings with 32 Advisory and Technical Committee members to provide project updates and obtain input and direction.

Objective 3: Project Oversight

Task A: Watershed coordinator

- Past projects show better civic engagement when there is dedicated staff working on the project. A watershed coordinator has been secured through another grant mechanism through September 2011. This proposal would extend the watershed coordinator position from October 2011 to August 2015. This position would direct project activities and seek additional funding to continue restoration efforts within the WFDNR watershed.
- Reimbursement of travel and training costs would be covered through this funding mechanism.
- This position would be housed in the HLWD office. HLWD would provide office space and supplies needed to support the position.

Task B: Reporting

- The district administrator and watershed coordinator would be responsible for reporting according to work plan guidelines. All aspects of feedlot inspections, manure management workshop, and AC and TC meetings would be completed by project partners. The district administrator would be responsible for ensuring that semi-annual, annual, and final reports are submitted on time.

III. Semi-annual Report Information

1. Project activities completed during last six (6) months according to the program elements or tasks:

Objective 1. Task A. Conduct Level III Inventory

- Kiel Tschumperlin, WFDNR Watershed Coordinator, met with Jake Grages, Jackson County Feedlot Officer (CFO) on January 8, 2013 at 9:00 am to run MinnFARMS. The objective of the meeting was to teach Jake the components of the MinnFARM program and how to properly run a MinnFARM.
- Met with Al Langseth, Nobles CFO on January 14, 2013 at 9:30 am to choose inspection sites for the week of January 21-25. Inspections were scheduled for January 23, 2013. MinnFARMS were also reviewed.
- Met with Al Langseth, Nobles CFO on January 17, 2013 at 9:30 am for site evaluations and end of the year information. Feedlot information was updated for the end of the year in Nobles County. Al needed Kiel's information for his records.
- Met with Jon Bloemendaal, Murray CFO on January 22, 2013 at 9:30 am to choose inspection sites for the week of January 28 – February 1. Inspections were scheduled for January 31, 2013.
- Met with Al Langseth, Nobles CFO on January 23, 2013 at 9:00 am to conduct feedlot inspections. A total of five

inspections were conducted with three having open lots and two sites being total confinement hog barns.

- Met with Al Langseth, Nobles CFO on January 30, 2013 at 9:30 am to choose inspection sites for the week of February 4-8. Inspections were scheduled for February 6, 2013.
- Met with Al Langseth, Nobles CFO on January 31, 2013 at 9:30 am to configure ArcMap and run measurements for MinnFARMS. Inspections were supposed to be conducted in Murray County on this day. The weather was not favorable and inspections were rescheduled for February 5, 2013.
- Met with Lloyd Kalfs, Cottonwood CFO on February 4, 2013 at 8:30 am to choose inspection sites for the week of February 11-14. A total of three sites were scheduled for February 12, 2013. One producer called and rescheduled for February 11, 2013.
- Met with Jon Bloemendaal, Murray CFO on February 5, 2013 at 9:30 am to conduct feedlot inspections. The inspections were rescheduled from January 31, 2013. A total of five inspections were conducted. All sites had open lots present.
- Met with Al Langseth, Nobles CFO on February 6, 2013 at 9:00 am to conduct feedlot inspections. A total of four inspections were conducted. All sites had open lots present.
- Held a CFO meeting on February 7, 2013 at 10:30 am in the HLWD office. In attendance were Jan Voit and Kiel Tschumperlin, HLWD; Al Langseth and Kathy Henderscheidt, Nobles County; Ben Crowell and Katherine Pekarek-Scott, MPCA; Lloyd Kalfs, Cottonwood County; Jon Bloemendaal, Murray County; and Jake Grages, Jackson County. The meeting covered a variety of topics including progress made to date, various aspects of MinnFARM, manure management plans (MMPs) and manure record keeping requirements, shoreland definition, and the manure management workshop. The meeting was adjourned at 12:45 pm.
- Worked on CFO meeting minutes on February 7 and 8, 2013. Minutes were reviewed and sent to attendees at a later date.
- Met with Lloyd Kalfs, Cottonwood CFO on February 11, 2013 at 8:30 am to conduct a feedlot inspection. The inspection was scheduled for February 12, 2013 but the producer called and rescheduled.
- Met with Lloyd Kalfs, Cottonwood CFO on February 12, 2013 at 9:30 am to conduct feedlot inspections. A total of two sites were inspected. One site had total confinement hog barns and the other site had open lots but no livestock were present.
- Met with Jon Bloemendaal, Murray CFO on February 13, 2013 at 9:30 am to choose inspection sites for the week of February 18-22. Inspections were scheduled for February 22, 2013.
- Met with Al Langseth, Nobles CFO on February 14, 2013 at 9:00 am to conduct measurements on sites that were inspected on February 6, 2013. Questions were raised regarding site characteristics when measuring. Site checks were conducted to confirm the questions to ensure accuracy when running MinnFARM.
- Met with Jake Grages, Jackson CFO on February 21, 2013 at 9:30 am to choose inspections sites for the week of February 25 - March 1. Inspections were scheduled for February 28, 2013.
- Was scheduled to meet with Jon Bloemendaal, Murray CFO on February 22, 2013 at 9:30 am to conduct feedlot inspections. Due to projected blizzard conditions, inspections were rescheduled for February 27, 2013.
- Met with Al Langseth, Nobles CFO on February 25, 2013 at 9:30 am to choose inspection sites for the week of March 4-8. Inspections were scheduled for March 7, 2013. Preliminary site visits were also conducted.
- Met with Jon Bloemendaal, Murray CFO on February 27, 2013 at 9:30 am to conduct feedlot inspections. The inspections were rescheduled from February 22, 2013. A total of six inspections were completed. One site was deactivated, another had no fences or livestock present and the remaining sites were active feedlots but one site had downsized dramatically.
- Met with Jake Grages, Jackson CFO on February 28, 2013 at 9:30 am to conduct feedlot inspections. A total of four inspections were conducted. One site had no livestock or lots present, and the remaining sites had livestock on them.
- Met with Al Langseth, Nobles CFO on March 7, 2013 at 9:00 am to conduct feedlot inspections. A total of three inspections were completed. Upon arrival at a total confinement hog site, it was discovered that the site was registered as a National Pollutant Discharge Elimination System (NPDES) site. As a result, the site was not counted as an inspection for the feedlot inventory. Research was done following inspections to confirm that the site was listed under the producer's NPDES permit.
- Met with Lloyd Kalfs, Cottonwood CFO on March 18, 2013 at 9:00 am to choose inspection sites for the week of March 25-29. Inspections were scheduled for March 27, 2013.
- Met with Al Langseth, Nobles CFO on March 19, 2013 at 9:30 am to review MinnFARMS from inspections conducted on the previous two inspection dates. A few sites were in question and further analysis was needed to confirm results.
- Met with Jon Bloemendaal, Murray CFO on March 20, 2013 at 9:30 am to go over MinnFARM results. Several sites proved to be non-compliant and options were explored for each site. We wanted to get the information to producers in a timely manner. A site visit was also conducted to look at a construction site for a new monoslope cattle barn.
- Met with Jake Grages, Jackson CFO on March 26, 2013 at 9:00 am to go over MinnFARM results and choose inspection sites for the week of April 1-5. A total of four inspections were scheduled. MinnFARM results were reviewed so compliance determinations could be made.
- Met with Lloyd Kalfs, Cottonwood CFO on March 27, 2013 at 9:30 am to conduct feedlot inspections. A total of two inspections were conducted. Both sites had open lots.
- Met with Al Langseth, Nobles CFO on March 28, 2013 at 9:30 am to follow up on three sites and re-evaluate pollution potential. We met with producers and discussed their operations to ensure MinnFARMS were run as accurate as possible. Possible improvements were discussed. Upon further analysis, one site reduced registration and another revealed that its buffer was longer and wider than previously projected, altering MinnFARM results. Both sites were located close to surface water.

- Met with Jon Bloemendaal, Murray CFO on April 1, 2013 at 10:30 am to choose inspection sites for the week of April 8-12, 2013. Inspections were scheduled for April 9, 2013.
- Met with Jake Grages, Jackson CFO on April 2, 2013 at 9:30 am to conduct feedlot inspections. A total of four inspections were conducted. All sites had open lots present.
- Met with Jake Grages, Jackson CFO and Lloyd Kalfs, Cottonwood CFO on April 4, 2013 at 12:30 pm to discuss inspections and MinnFARMs. Each of us had questions on sites and having a third opinion on compliance determinations was helpful.
- Meeting was scheduled with Jon Bloemendaal, Murray CFO on April 9, 2013 at 9:30 am for feedlot inspections. Inspections were rescheduled for April 17, 2013 because of hazardous weather conditions.
- Met with Al Langseth, Nobles CFO on April 16, 2013 at 10:30 am to choose inspection sites for the week of April 22-26. Inspections were scheduled for April 24, 2013.
- Met with Jon Bloemendaal, Murray CFO on April 17, 2013 at 9:30 am to conduct feedlot inspections. A total of seven inspections were conducted. Two producers had multiple sites. A couple sites had no livestock, and one site was deactivated.
- Met with Jake Grages, Jackson CFO on April 22, 2013 at 9:00 am to review MinnFARMs. A few sites were in question and compliance determinations needed to be made.
- Met with Al Langseth, Nobles CFO on April 24, 2013 at 8:30 am to conduct feedlot inspections. A total of four inspections were conducted. All sites had open lots. One site had no livestock and will most likely be deactivated.
- Met with Al Langseth, Nobles CFO on April 29, 2013 at 9:30 am to conduct measurements for MinnFARMs. The direction to which runoff flowed on two sites was in question. A drive-by of each site was conducted to confirm our previous results.
- Met with Al Langseth, Nobles CFO on May 7, 2013 at 9:30 am to conduct measurements for MinnFARMs. A site visit was conducted to confirm results. MinnFARMs will be run and delivered at a later date.
- Met with Lloyd Kalfs, Cottonwood CFO on May 8, 2013 at 8:30 am to choose inspection sites for the week of May 13-17. Inspections were scheduled for May 16, 2013. A total of two inspections were scheduled.
- Met with Jake Grages, Jackson CFO on May 14, 2013 at 1:30 pm to choose inspection sites for the week of May 20-24. Inspections were scheduled for May 21, 2013. A total of two inspections were scheduled.
- Met with Lloyd Kalfs, Cottonwood CFO on May 16, 2013 at 9:00 am to conduct feedlot inspections. A total of two inspections were conducted. One site was a total confinement hog barn and the other site had no livestock present and all the barns were removed from the site. No MinnFARMs will be run for these sites. The owner of the hog barn was not present. He will be contacted at a later date for his MMP.
- Met with Jake Grages, Jackson CFO on May 21, 2013 at 8:30 am to conduct feedlot inspections. A total of two inspections were conducted. Both sites had open lots present. MinnFARMs will be run for both sites. One site was in shoreland and the other site was within 300 feet of a drainage ditch, but was not considered in shoreland.
- Met with Jon Bloemendaal, Murray CFO on May 23, 2013 at 9:30 am to review MinnFARMs and choose inspections sites for the week of June 3-7. Inspections were scheduled for June 5, 2013. MinnFARMs were examined to determine if all numbers were accurate and if further analysis was needed in determining compliance.
- Met with Al Langseth, Nobles CFO on May 30, 2013 at 9:30 am to review MinnFARMs. Site visits were conducted to confirm results. MinnFARMs were confirmed and were delivered to Al for entry into the DELTA database.
- Met with Jon Bloemendaal, Murray CFO; Russ Hoogendoorn and Mike Skoglund, Southwest Prairie Technical Service Area (SWPTSA), and Craig Christensen, Murray SWCD on May 31, 2013 at 9:30 am to discuss construction of a manure storage basin for a landowner using EPA 319 grant dollars. Russ and Mike are the engineers. The purpose of the meeting was to draft a design that will meet Natural Resource Conservation Service (NRCS) standards and be appealing to the landowner while keeping his costs as low as possible. The landowner was very interested in acquiring cost share in hopes that he would be able to save money on the project. The landowner provided input on the design and what he would like from the project. Another meeting will be setup with the landowner when a more accurate estimate is drafted.
- Met with Jon Bloemendaal, Murray CFO on June 5, 2013 at 9:30 am to conduct feedlot inspections. A total of three inspections were conducted. A couple of producers called to reschedule their inspection dates.
- E-mailed a list of feedlots that have pollution potential based on MinnFARM rating to Ed Lenz, Nobles SWCD on June 18, 2013. Ed reported the findings to the SWCD board. He also wanted to be aware of what is being discovered during feedlot inspections. Ed will take part in implementing feedlot fixes, so providing him with up-to-date information on our findings is important.
- Met with Jake Grages, Jackson CFO on June 20, 2013 at 2:30 pm to discuss MinnFARMs from inspections conducted on May 21, 2013. MinnFARMs were deemed accurate and inspection follow-up information will be mailed to the producer.

Objective 1. Task B. Host a Manure Management Workshop

- Discussion was held at the CFO meeting on February 7, 2013 about potential topics and dates regarding the manure management workshop. Nothing was discussed in detail. A meeting will be setup at a later date to finalize the details of the workshop.
- On March 7 and 8, 2013, potential workshop topics along with potential sponsors were researched. Names and contact information was recorded for various organizations. The goal was to be prepared for the Manure Management Workshop Planning Meeting slated for April 4, 2013.
On March 14 and 15, 2013, I reviewed documents pertaining to manure management techniques, nutrient management, and manure application. The purpose of this was to determine which strategies are most pertinent to the producers in the watershed and how to maximize what attendees take away from the workshop. Topics will be

discussed further at the Manure Management Workshop Planning Meeting.

- Research was done on April 4, 2013 prior to the manure management planning meeting. Research consisted of finding potential speakers and topics for the meeting, calculating costs, and finding names and contact information for local groups such as the Corn and Soybean Growers, Cattlemen, and Pork Producers.
- Held a Manure Management Planning Meeting on April 4, 2013 at 10:30 am in the HLWD office. The purpose of the meeting was to choose the date, time, location, speakers, topics, food options, sponsorship, and target audience for the manure management workshop this summer. It was determined that the workshop would be held on Wednesday, July 31, 2013 at 10:00 am in the Heron Lake Community Center. Food will be purchased from Hy-Vee. The Cattlemen's Association and Pork Producers will be asked if they are willing to supply a grill and be in charge of the grilling at the workshop. Topics and speakers for the workshop include, Kiel Tschumperlin, HLWD, providing background information on the project; Wayne Cords, MPCA, speaking on setbacks, emergency response, record keeping requirements, and proper manure sampling techniques; Jose Hernandez, University of Minnesota Extension (U of M), speaking on phosphorous (P) management and its economics; and Andy Nesseth, Extended Ag, speaking on grid soil sampling, precision agriculture, and its economics. The regional representative for the Minnesota Corn Growers was contacted for sponsorship. Sponsorship was granted in the amount of five hundred dollars from the Corn and Soybean Growers of Cottonwood, Jackson, and Nobles Counties. The target audience for the workshop will be all producers in the watershed with an emphasis on smaller producers. Kathy Henderschiedt, Nobles County, acquired fifty manure sampling kits for distribution at the workshop from Minnesota Valley Testing Lab (MVTL) and fifty from Stearns Dairy Herd Improvement Association (DHIA). Manure record keeping forms will also be provided at the workshop. Other local crop consultants will be contacted and offered a booth at the workshop.
- E-mailed the regional representative for the Minnesota Corn Growers Association on April 4, 2013 asking for sponsorship.
Worked on Manure Management Workshop Planning Meeting minutes on April 5 and April 8, 2013.
- Met with Jim Nesseth and Andy Nesseth, Extended Ag on May 6, 2013 at 9:00 am to discuss the manure management workshop. The purpose of the meeting was to ask Extended Ag if they would present on grid soil sampling and other precision ag topics at the manure management workshop on July 31, 2013. Andy Nesseth, Extended Ag, agreed to present on the topics discussed.
- On June 12, 2013, Kiel contacted a landowner in regards to providing a grill for the workshop. He stated that he was unsure if he will be able to attend the workshop. He will be contacted in early July to confirm attendance.
- Worked on a newsletter for the manure management workshop on June 12, 13, 18, 19 and 20. The newsletter will be sent to all feedlot operators. An agenda was also drafted for distribution at the workshop. The agenda will be posted in local businesses prior to the workshop. The newsletter was sent to the printer for formatting and design on June 24, 2013. The printer returned several drafts for pending approval. The final newsletter design was sent to the printer on June 27, 2013.
- Created a mailing list of feedlot operators in the watershed. Worked on the mailing list on June 17, 19, 20, and 24-27. The mailing list consisted of 607 producers. Newsletters will be distributed to all producers on the mailing list. The mailing list will be sent to the printer in early July. The mailing list was completed on June 27, 2013.
- Met with Gordon Olson, Cottonwood County Planning and Zoning Administrator on June 24, 2013 at 3:30 pm to acquire a watershed map for Cottonwood County. The purpose of acquiring the map was to draft the mailing list for the manure management workshop.
- Met with Al Langseth, Nobles CFO on June 27, 2013 at 9:30 am to revise the Nobles County mailing list for the workshop. The master feedlot list had several sites on it that were longer registered feedlots and the list needed to be finalized.

Objective 2. Task A. Website

- No activities during this reporting period

Objective 2. Task B. Brochure

- No activities during this reporting period

Objective 2. Task C. Conduct Semi-Annual Meetings

- Time and date was set for the Semi-Annual Meeting on April 4, 2013. It was decided that the Semi-Annual Meeting would be held on Thursday, May 2, 2013 at 10:00 am at the Heron Lake Community Center.
- Held a Semi-Annual Meeting at the Heron Lake Senior Citizens' Center on May 2, 2013 at 10:00 am. Project partners from Jackson, Nobles, and Cottonwood SWCDs, Minnesota Department of Natural Resources (DNR), Board of Water and Soil Resources (BWSR), Jackson and Cottonwood County NRCS, Nobles County, Minnesota Soybean Growers, Martin SWCD, and MPCA were present for the meeting. The watershed coordinator gave a detailed presentation regarding background information on the project as well as an update on the project. Statistics were given on compliant versus non-compliant sites, general trends over the course of the project, and what the future holds in terms of fixing some of the problem sites. Much discussion was held regarding feedlot fixes and the grant process. Many were unsure of the funding situation, but attendees from BWSR were able to answer many of the questions regarding grant funding.
- Worked on the Semi-Annual Meeting minutes each day on May 3, 6, and 7 until they were completed and finalized.

Objective 3. Task A. Watershed Coordinator

- Attended HLWD Board Meeting on January 15, 2013 at 9:00 am. The managers were given an activity report and

updated on the progress of the WFDNR TMDL Implementation Project.

- Attended Jackson County Water Plan Committee Meeting on January 24, 2013 at 10:00 am. Gave a PowerPoint presentation about 2012 activities in the WFDNR TMDL Implementation Project and answered questions regarding the project.
- Attended HLWD Board Meeting on February 19, 2013 at 7:00 pm. The managers were given an activity report and updated on the progress of the WFDNR TMDL Implementation Project. They were also given an update on the Jackson County Water Plan Committee Meeting held on January 24, 2013 and the CFO meeting held on February 7, 2013.
- Attended HLWD Special Meeting regarding the Personnel Policy on February 20, 2013 at 8:00 am. The personnel policy was gone through in detail and revised as needed.
- Attended Nobles County Planning and Zoning Meeting on February 27, 2013 at 7:00 pm. The Planning and Zoning Committee were given a presentation on the project that offered them background information, progress to date, and a chance to ask any questions about the Implementation Project.
- Worked on the Major Watershed Project budget multiple times and observed and revised the work plan for the project as well.
- On March 7 and 8, 2013, potential workshop topics along with potential sponsors were researched. Names and contact information was recorded for various organizations. The goal was to be prepared for the Manure Management Workshop Planning Meeting slated for April 4, 2013.
- On March 14 and 15, 2013, reviewed documents pertaining to manure management techniques, nutrient management, and manure application. The purpose of this was to determine which strategies are most pertinent to the producers in the watershed and how to maximize what attendees take away from the workshop. Topics will be discussed further at the Manure Management Workshop Planning Meeting.
- Met with Alyson Buschena, Worthington Daily Globe, on April 3, 2013 at 9:30a m for an interview. The purpose of the interview was to promote the Implementation Project and be published in the *Farm Market News* on April 24, 2013. A timetable was set for Alyson to meet the CFO and Kiel on site for a photo with a producer. On April 17, 2013 Alyson met Kiel and the CFO on site for a photo for the newspaper.
- Attended HLWD Board Meeting on April 16, 2013 at 7:00 pm. The managers were given an update on the feedlot inspection process. Topics discussed at the manure management planning meeting were also explained to the board.
- Attended an Aquatic Invasive Species Meeting on April 23, 2013 at 7:00 pm in the Nobles County Government Center. Topics discussed were zebra mussels, aquatic plants, and Asian carp. Ryan Doorenbos, DNR, provided PowerPoint presentations on all topics and answered questions. Gary Nordseth, DNR Conservation Officer, explained regulations regarding the transportation of lake water and bait. Pulling drain plugs from boats when traveling between water bodies was also emphasized. Regulations will be enforced.
- Attended Watershed Network News Meeting on April 25, 2013 at 10:00 am in the Redwood Falls Pizza Ranch. Topics and speakers at the meeting included: Stephanie Johnson, Houston Engineering Inc., on tracking the effectiveness of Minnesota's agricultural BMPs and also on prioritizing agricultural nonpoint source management areas through the use of LiDAR and GIS; Brent Dalzell, U of M, on the results from Lake Pepin full-cost accounting project; John Hickman, water videos; and other presentations consisting of Drainage Working Group and the Ag Water Quality Certification Program.
- Met with Stephanie Johnson, Houston Engineering; Katherine Pekarek-Scott, MPCA; and Jan Voit and Ross Behrends, HLWD on May 2, 2013 at 1:00 pm to discuss the Major Watershed Project. The steps of the watershed project were described in chronological order. Work plan development and other project processes were described.
- Attended a Major Watershed Project Meeting on May 3, 2013 at 10:00 am at the Windom DNR Office. The purpose of the meeting was to determine stream survey sites for the WFDNR Major Watershed Project. The DNR watershed specialist is not familiar with the WFDNR watershed, and he was seeking input on potential stream survey sites from watershed employees. It was determined that watershed employees will give the watershed specialist a list of sites they believe are suitable for the survey.
- Attended a CFO Regional Meeting on May 9, 2013 at 10:00 am in Marshall. Topics covered at the meeting included NPDES thresholds and Environmental Assessment Worksheet (EAW) reviews, Minnesota Water Quality Certification Program, proper carcass management disposal techniques, emphasizing in disasters, and how to use clickers when giving a presentation and the data that can be generated from them. Clickers engage the audience by quizzing them on the information and making them apply what they have learned. The carcass management presentation was very informative, especially on the method of composting. It is a very environmentally friendly and effective method of carcass disposal when done properly. Educating CFOs on these techniques could benefit feedlot operators as a result.
- Attended HLWD board meeting on May 21, 2013 at 8:00 pm in the HLWD office. The managers were given an update on the feedlot inspection process, Aquatic Invasive Species Meeting, Watershed Network News Meeting, manure management workshop, Semi-Annual Meeting, CFO Regional Meeting, and the two Major Watershed Project Meetings that were held in May.
- Attended the Foundations of Agronomy Workshop on May 22, 2013 at 10:00 am in Mankato. The workshop covered many topics regarding nutrient cycling, manure management techniques, and how to assess a MMP. Many MMPs are not accurate and knowing the proper agronomic rates will aid in correcting inaccuracies. Sample manure application forms were given and attendees were given the opportunity to determine the incorrect information on each form. The workshop was an opportunity to brush up on some of these skills and seek assistance from more experienced individuals when needed.
- Worked on an EPA 319 Grant application from June 3-7, 2013. The grant was for the construction of a manure storage basin to assist in capturing runoff from a feedlot. The budget and work plan were configured to give the

producer an estimate of his total cost, as well as in-kind and his cash match contribution. Budgetary setbacks were encountered throughout the drafting process. Application deadline was June 11, 2013.

- Met with Jon Bloemendaal, Murray CFO; Craig Christensen, Murray SWCD; Russ Hoogendoorn and Mike Skoglund, SWPTSA; and the landowner on June 5, 2013 at 10:00 am to discuss the grant work plan and budget. The meeting took place on-site. The landowner was presented with the plans and the layout of the site was discussed. He was supportive of the plans that were drafted, although he wanted to know his projected out-of-pocket cost. Kiel assured him that a final budget would be drafted and could be reviewed to determine if the project is to continue. The landowner agreed to proceed with the project. Another meeting was slated for June 10, 2013.
- Met with Craig Christensen, Murray SWCD on June 10, 2013 at 10:00 am to discuss the final budget for the 319 Grant application. The landowner was also present. The final budget was explained and discussed in detail. The landowner was wondering what it would cost him to do the project on his own. With time being a factor, this would not be feasible to find out before the grant deadline. He also wanted to know when construction could begin if grant funds were acquired. Construction would not begin until at least mid-summer if grant funds were acquired. The landowner was informed that SWPTSA engineers would still provide services even if he chose to build the project himself. With the deadline fast approaching and so many uncertainties, it was determined that the landowner would explore other options and opted not to pursue EPA 319 grant dollars. He may be interested in applying for a Clean Water Fund grant in the coming months.
- Met with Tom Kresko, DNR on June 12, 2013 at 1:00 pm to explore the WFDNR watershed for potential study sites for the Major Watershed Project. Another purpose of the meeting was to familiarize Kiel with the watershed because he will be coordinating the Major Watershed Project.
- Attended eLINK training in Mankato on June 18, 2013 at 12:30 pm. The purpose of the training was to familiarize attendees with the new eLINK system. BWSR staff provided a test page for the workshop that could be explored and existing data would not be altered or harmed. The training was very useful because attendees were given demonstrations followed by exploratory exercises where questions could be asked.
- Attended the HLWD board meeting on June 18, 2013 at 8:00 pm. The board of managers was informed of the EPA 319 grant process and its outcome, the major watershed project that lies ahead, and the eLINK training in Mankato.
- Met with Katherine Pekarek-Scott, MPCA on June 20, 2013 at 10:00 am to conduct a longitudinal secchi tube survey on Okabena Creek. Recent data collected on the waterway revealed a reduction in water clarity. A stream survey of dissolved oxygen (DO), pH, temperature, transparency, and conductivity was conducted to pinpoint where the sediment was entering the creek. The purpose of the study was to determine if the decline in water quality was a cumulative effect or if it was coming from one particular source.
- Attended HLWD special meeting on June 25, 2013 at 8:00 am to conduct interviews for the proposed feasibility study for a flood control and water quality improvement project. Three firms gave presentations stating their qualifications. Questions were asked by the board of managers. Discussion about the firms followed the interviews. No decision was made.

Objective 3. Task B. Reporting

- The annual report was submitted on January 18, 2013. The report was approved by MPCA on January 23, 2013.
- Work began on the semi-annual report on June 27, 2013.

2. **Challenges faced (optional):**

n/a

3. **Summary of monitoring data collected:**

n/a

4. **Have all monitoring stations been established in STORET?** Yes No N/A

5. **Is the data being routinely submitted for storage into STORET?** Yes No Last submittal date: _____

6. **Is the data being annually entered into E-Link?** Yes No N/A Date last entered: _____

7. **Identify any significant findings and results of the project to date, as well as any unanticipated findings:**

Entire Watershed – 174 Sites Inspected

124 Open Lots

31 Total Confinement or No Discharge Sites

15 Deactivated Sites or No Lots Present

4 Sites Under 10 AU

Open Lots – 124 sites inspected

- Avg. MinnFARM index – **8.16**

- Compliant Sites – **73**

- Non-Compliant Sites – **51**

- Total sites with Surface H₂O within 1000 feet – **86**

- Compliant Sites – **46**

- Non-Compliant Sites – **40**

- Total sites in Shoreland – **26**

- Compliant Sites – **11**

- Non-Compliant Sites – **15**

Total Confinements & No Discharge Sites – 31 sites inspected

- Total Compliant Sites – **31**
- Total sites with Surface H2O within 1000 feet – **12**
- Total sites in Shoreland – **4**

Entire Watershed – 155 Active Sites

- Avg. MinnFARM index – **8.16**
- Total Compliant Sites – **104**
- Total Non-Compliant Sites – **51**
- Total sites with Surface H2O within 1000 feet – **98**
 - Compliant Sites – **58**
 - Non-Compliant Sites – **40**
- Total sites in Shoreland – **30**
 - Compliant Sites – **15**
 - Non-Compliant Sites – **15**

8. Describe specific (quantifiable, if possible) results achieved during this period:

n/a

Phosphorus Load Reduction: _____ lbs./year
 Nitrogen Load Reduction: _____ lbs./year
 Sediment Load Reduction: _____ lbs./year

9. Summarize any work plan changes:

A change order was approved on May 3, 2013. The changes made include:

- Objective 1, Task B: adding Minnesota Pollution Control Agency (MPCA) and University of Minnesota (UM) Extension Service staff as part of the manure management workshop. It has been determined that MPCA and UM Extension staff will be speaking at the manure management workshop, so travel funds were necessary for UM Extension staff.
- Objective 3, Task A: Reducing the watershed coordinator wages and benefits for 2012 by \$198.00. Because the watershed coordinator is not participating in the health care plan, there are funds for benefits that were not expended in 2012. \$198.00 was moved from this task to a line item for travel in Objective 1, Task B.

10. List anticipated activities for next six (6) months:

- Objective 1. Task A: Send letters to landowners regarding the inventories
- Objective 1. Task A: Project partner meeting in August
- Objective 1. Task A: Conduct Level III feedlot inventories
- Objective 1. Task A: Enter information in MinnFARM
- Objective 1. Task B: Host manure management workshop
- Objective 2. Task A: Update website as needed
- Objective 2. Task B: Distribute project brochure
- Objective 2. Task C: Plan fourth semi-annual meeting
- Objective 3. Task B: Complete semi-annual report
- Objective 3. Task B: Begin annual report
- Objective 3. Task B: Meet with MPCA Project Manager

11. List all products (documents, pamphlets, videos, maps, etc.) produced in this reporting period.

- Project updates for January, February, March, April, May, and June
- PowerPoint presentation for Semi-Annual Meeting

IV. Expenditure Information for this Period

Provide a copy of your work plan budget showing cumulative expenditures and budget balances by work plan objective and task.

Expenditure Report attached

Complete the table below:	Amount
Total Grant Amount:	\$190,248.00
Total Match Amount (if applicable)	\$163,975.00
Total Project Amount:	\$354,223.00
Cumulative Grant Expenditures through this period:	\$49,681.77
Cumulative Match Expenditures through this period:	\$55,830.39
Total Cumulative Expenditures through this period:	\$105,512.16

Date form completed: July 8, 2013, revised version July 10, 2013

Please submit to: Your project manager