



319/Clean Water Partnership (CWP)/ Total Maximum Daily Loads Semi-Annual Report for Reporting Year 2011

Doc Type: Semi-Annual Report

Reporting Period: 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: hlwd@roundlk.net
5. Funding: 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:

	Primary	Secondary	Others
Category (name only)	Animal Feeding Operations	Inappropriate Waste Disposal	NA

11. Nonpoint Source (NPS) Functional Category:

	Primary	Secondary	Others
Category (name only)	Inspection Activities	Local Education/Information Programs	NA

12. Waterbody type: Streams

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

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
- 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 (Figure 1). 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 border 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 proposal, 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. Workshops would be conducted by county, SWCD, and HLWD staff.
- 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 December 2014. This position would direct project activities and seek additional funding to continue restoration efforts within the WFDNR watershed.
- Reimbursement of travel 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: On November 21, the HLWD hosted a Project Development meeting with Rock County, MPCA, and DNR staff to learn about the components of a Level III inventory as well as Rock County's feedlot inventory successes and failures. Recommendations were given to assist in the inventory component of the grant.

Objective 1. Task A: On December 8, the HLWD hosted a project Kickoff Meeting. The purpose of the meeting was to discuss the grant work plan and the intricacies of conducting the Level III feedlot inventory with project partners. Staff from Cottonwood SWCD, Nobles County, Jackson County, Murray County, DNR, MPCA, and the HLWD was in attendance.

Objective 1. Task A: Lauren Michelsen and Ben Crowell met and traveled to sites to conduct Level III inventories on December 12 and 13, 2011. Following the inspections, information was entered in the MinnFARM program.

Objective 3. Task B: The Work Plan was approved by MPCA on November 8, 2011.

Objective 3. Task B: The grant agreement was approved by MPCA on November 14, 2011.

Objective 3. Task B: The annual report was submitted on January 7, 2012.

2. Challenges faced (optional):

n/a

3. Summary of monitoring data collected:

n/a

