Watson Creek Watershed Initiative

for the

Root River Healthy Watershed Initiative

(Mississippi River Basin Initiative (MRBI))

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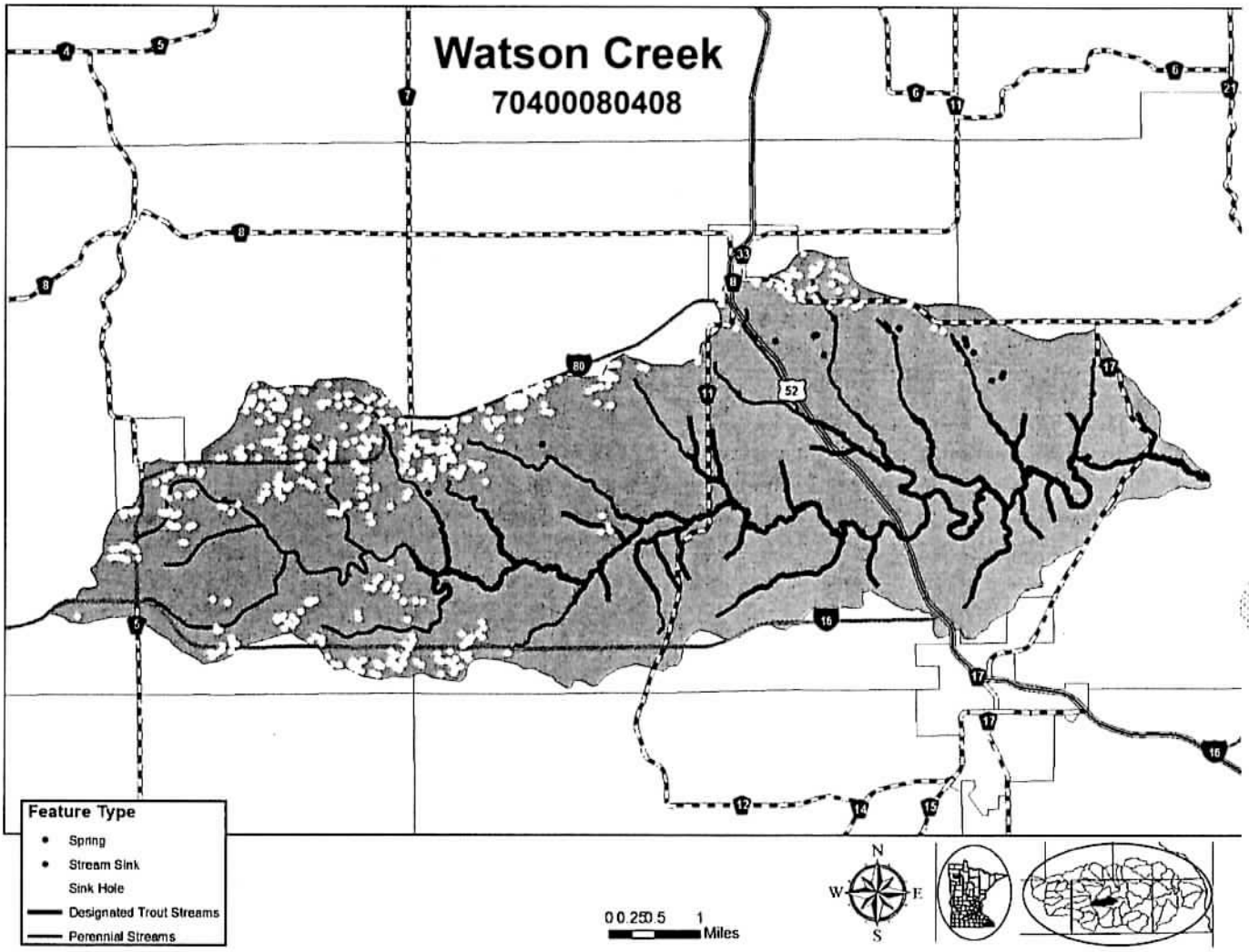
Collaborating Partners:

The Nature Conservancy (TNC)
Trout Unlimited (TU)
MN Board of Water and Soil Resources (BWSR)
MN Department of Agriculture (MDA)
MN Department of Natural Resources (DNR)
MN Pollution Control Agency (MPCA)
SE MN Technical Joint Powers Board (JPB)
University of Minnesota Extension
Hiawatha Valley Resource Conservation & Development (RC&D)

e) The Root River watershed is the 8-digit HUC focus area for this proposal. It includes a drainage area that lies primarily in southeastern Minnesota in the counties of Fillmore, Houston, Mower, Olmsted and Winona. It is located in Congressional District 1 represented by Congressman Tim Walz.

The 12-digit HUC addressed in this proposal is the Watson Creek watershed (070400080408). The Watson Creek watershed drains 21,758 acres, or 2% of the 1,062,279 acres in the Root River watershed. The drainage area is located entirely in Fillmore County.



f) Description/summary of project and resource issues: The natural resource issues in the Watson Creek watershed that relate to the MRBI priorities and objectives are soil erosion, manure storage, manure/nutrient management, grazing and water quality (turbidity, nitrogen, phosphorus, fecal coliform bacteria). Nitrate in ground water is another resource concern that has health implications for infants and other vulnerable populations since all drinking water sources in the watershed are from ground water. The karst landscape creates many interconnections between surface and ground water. There are 505 sinkholes in the watershed. Runoff entering these sinkholes discharges in springs that create the cold water stream habitat found in the watershed. The water bypasses the natural filtering capacity of the soil. Overland flow and ground water discharge from springs each contribute to nutrient loading into Watson Creek and downstream to the Mississippi River. The MDA has been monitoring 18 springs in southeast Minnesota, of which 12 are located in the Root River watershed. Five of these 18 springs are in a comparable geologic setting as those in Watson Creek, and show elevated nitrate levels above the drinking water standard (10 mg/L).

This project is aimed at helping landowners in the watershed implement practices that avoid, control and trap nutrient runoff. Numerous technical and financial resources are available to focus efforts in the watershed to implement best management practices (BMPs) and to monitor effectiveness at the field, sub-watershed and watershed scales. Existing technical assistance is available in the watershed for controlling runoff from feedlots and designing manure storage, developing and implementing manure/nutrient management plans, and developing and implementing prescribed grazing plans. Maintaining the livestock operations in the watershed is very important to keeping pasture and hay acres which would otherwise be converted to row crops. The BMPs proposed for implementation will leverage the existing technical assistance for nutrient management, grazing and feedlots. Funding from TNC will also be available for cover crops and technical assistance. A WREP proposal for restoring riparian wetlands in the lower Root River watershed (HUC 07040080904) will trap sediments and nutrients in the Root River before it joins the Mississippi. The combination of the proposed practices can effectively address the primary sources of nitrogen and phosphorus found in the streams and ground water in the watershed. Existing water quality and flow monitoring at the field, sub-watershed and watershed scales, as well as field scale evaluation tools (P-index, basal stalk nitrate tests) will be used to evaluate the effectiveness of the BMPs.

Description of planning already completed at the field and watershed scales that identify conservation practices needed to address resource concerns: Work is ongoing to assess needs in the watershed. Fillmore County maintains a feedlot database, which has 73 registered feedlots totaling 9,428 animal units (AU) in this watershed. Of these, 11 have been identified as having a pollution runoff problem and are not in compliance with state feedlot regulations. There are four sites that have no manure storage and would benefit greatly from having it in order to time applications of manure for the most efficient use of the nutrients. Three sites need large ag waste systems. Technical assistance is also available from engineering staff from the SE SWCD Technical Support Joint Powers Board, which has representatives from 11 southeastern Minnesota SWCDs including Fillmore SWCD.

Local technical staff have been working with individual operators in the watershed to develop and implement 5 nutrient management plans covering 2,538 acres. Another 7 producers have been identified by the county feedlot officer as potentially needing nutrient management plans. Currently there are no grazing plans developed in the watershed, however the county feedlot officer states there is opportunity to create several grazing plans.

This is the third and final year of monitoring for the Root River Turbidity TMDL which includes 12 monitoring stations spread out across the Root River watershed. Data from these sites are being used to determine sediment load and to allocate sources of sediment. The source allocation will help determine where the greatest reductions can be achieved, which will be part of the TMDL Implementation Plan to be completed in 2011. Watson Creek is on the draft 2010 303(d) Impaired Waters list for nitrate impairment. A comprehensive strategy for addressing sediment and nutrient issues will be developed for the Root River when nitrate data for impaired stream segments are analyzed over the next three years.

A cooperative project funded by an appropriation from Minnesota's Clean Water Fund and a grant from Monsanto to TNC involves MDA, TNC, and the MN Ag Water Resources Coalition to do edge of field monitoring to evaluate agricultural nonpoint source pollution and best management practice (BMP) effectiveness. The three small watersheds for the study were chosen to be representative of the southeast Minnesota region so that the results can be transferable to similar watersheds. One of the evaluation sites is in a small watershed directly south of Watson Creek. The results from this study will be beneficial to understanding the effectiveness of BMPs implemented in the Watson Creek watershed for improving water quality.

A detailed mapping project of the Shoreland District, the area within 300 feet of all DNR protected waters, was completed for Fillmore County in February of this year. This is part of a regional effort to determine where riparian buffers are needed. Digital terrain analysis using new LiDAR data is being utilized to find concentrated flow areas in the Shoreland District that are not buffered or that compromise the integrity of an existing buffer. These areas are being targeted for installation of buffers by contacting landowners and

providing information about financial assistance programs to install buffers, such as Continuous Conservation Reserve Program (CRP).

h) List of approved FOTG practices to address concerns:

Core Practices	
Practice Name	**Practice Code**
Avoiding	
Conservation Crop Rotation	328
Cover Crop	340
Prescribed Grazing	528
Nutrient Management	590
Nutrient Management Initiative	590
Controlling	
Residue & Tillage Management	329/345
Contour Farming	330
Grassed Waterway	412
Pasture & Hayland Planting	512
Upland Habitat Management	645
Strip Cropping	585
Trapping	
Contour Buffer Strips	332
Filter Strip (CRP)	393

Supporting Practices	
Practice Name	**Practice Code**
Avoiding	
Waste Storage Facility	313
Fence	382
Access Control	472
Pipeline	516
Roof Runoff Structure	558
Watering Facility	614
Heavy Use Protection	561
Controlling	
Critical Area Planting	342
Diversion	362
Field Border	386
Grade Stabilization Structure	410
Water and Sediment Control Basin	638

i) Proposed project start and end date: July 1, 2010 to June 30, 2015

j) Total project budget:

			Leveraged Funds		
Year	**EQIP**	**WHIP**	**TNC**	**TU**	**BWSR**
Year 1	352,705	9,395	2,500	25,000	12,500
Year 2	352,705	9,395	3,500	25,000	12,500
Year 3	352,705	9,395	4,000	25,000	12,500
Year 4	352,705	9,395	-	25,000	12,500
Project Total	**1,410,820**	**37,580**	**10,000**	**100,000**	**50,000**

2) *Project Natural Resource Objectives and Actions:*

a) Detail about natural resource concerns and how each objective addresses concerns:

NATURAL RESOURCE CONCERN: Nitrogen

Nitrogen concentrations in the tributaries in the Lower Mississippi River Basin in Minnesota have been increasing for several decades. The MPCA Milestone monitoring program's trend analysis shows that nitrate concentrations are increasing in the Cedar River, Whitewater River, Garvin Brook, Root River, Vermillion River and Zumbro River. Nitrate concentration data have been collected in these river systems since the 1970s. Detections of high concentrations (>10 mg/L) in private wells are common. A Volunteer Nitrate Monitoring Network of 675 wells in a random grid has been established in the 9-county region. In 2008 and 2009, the percentage of samples analyzed with nitrate levels over the drinking water standard of 10 mg/L was 16% in Fillmore County. Water test results from private wells in Fillmore County from 1984 to 2009 show 22% of the samples with nitrates over the drinking water standard. The karst topography in this part of Minnesota creates many interconnections between surface water and ground water so that applications of nutrients on the landscape can easily enter ground water. According to statewide estimates, soil organic matter and nitrogen fertilizer are the leading sources of inorganic nitrogen, the form of greatest concern to ground water contamination. These sources provide 42 percent and 36 percent of total inorganic nitrogen, respectively. While manure and legumes each contribute only 6 percent of inorganic nitrogen in the state, the failure of farmers to take credit for these sources when determining commercial fertilizer application rates leads to excessive fertilizer application and increased potential for nitrogen leaching and runoff. This has been confirmed by farm nutrient management evaluations conducted by the MDA. Southeastern Minnesota river counties, and counties adjacent to them, are estimated to have some of the highest levels of plant-available nitrogen contributions from manure in the state. A 1993 evaluation of dairy farmers in several southeastern Minnesota counties by the MDA showed a higher difference between actual and recommended applications. Factoring in all appropriate credits from fertilizer, legumes and manure, farmers over-applied nitrogen by an average of 53 pounds per acre. Although more recent assessments done by MDA show average nitrogen application rates have dropped, under the new U of M recommendations adopted in 2006, overapplication is still occurring at about 35 pounds per acre.

Nitrate concentrations exceeded 10 mg/L in Watson Creek five times in 2008 and the four remaining samples analyzed were above 9 mg/L. Nitrate in surface water is being assessed by the MPCA as it relates to the drinking water standard of 10 mg/L in cold water trout streams (Class 1B waters) because they interact directly with ground water. Watson Creek along with five other streams in the Root River watershed have been identified with nitrate impairments and are on the 2010 draft 303(d) impaired waters list. MPCA is also working to develop an aquatic life toxicity standard for nitrate, which will likely be less than 10 mg/L. MDA monitoring of springs has also shown nitrate levels above 10 mg/L in springs in the same geologic setting as those in Watson Creek.

Since many of the nutrient runoff concerns in the watershed are related to animal waste management and land application, many of the proposed practices that help to reduce nutrient runoff provide a dual benefit by also reducing runoff of fecal coliform bacteria. The 2007 Implementation Plan for the Lower Mississippi River

Basin Fecal Coliform Bacteria TMDL states that "the widespread problem of fecal coliform impairment is caused by thousands of ubiquitous pollutant sources spread across the Basin – feedlots, manured fields, wildlife, and failing septic systems, to name the main ones -- rather than by a few large, discrete sources. Pollution can be reduced and prevented by ensuring that these individual sources are brought into conformance with state rules and local ordinances as well as Best Management Practices for land use."

With 73 registered feedlots in the Watson Creek watershed with over 9,400 animal units (AU), manure storage and proper timing and rates of land applications of manure can greatly improve nutrient efficiency. Managed grazing can also help to reduce nutrients and fecal coliform bacteria runoff. According to the TMDL plan, there are several studies that have found a strong correlation between livestock grazing and fecal coliform levels in streams running through pastures. However, carefully managed grazing can be beneficial to stream water quality. A study of southeastern Minnesota streams by Sovell found that fecal coliform, as well as turbidity, were consistently higher at continuously grazed sites than at rotationally grazed sites where cattle exposure to the stream corridor was greatly reduced.

Goal: Reverse the trend of increasing nitrogen concentrations.

Evaluation and Monitoring

Tier 1: Edge of Field – Utilize results from edge of field monitoring study conducted by MDA in Crystal Creek watershed, which is representative of the landscape and geology in Watson Creek watershed. Basal stalk nitrate tests will also be collected at the field scale at 5 farms. MPCA will be deploying a lysimeter network in various landscapes to monitor nitrate transport through karst.

Tier 2: 12-digit HUC - Nitrogen monitoring will continue in this watershed at the existing location on County Road 17 north of Preston beginning in 2010. A regular schedule of grab sampling will continue for at least three years through the duration of the comprehensive assessment for the Root River and the initiation of the Comprehensive Strategy.

Tier 3: 8 digit HUC – Nitrogen monitoring will continue at long term TMDL sites across the Root River watershed as well as additional sites established through the Root River Comprehensive Strategy. MDA will continue monitoring nitrate levels in springs located in several geologic settings throughout the watershed. MPCA Intensive Water Monitoring (IWM) will be used as another assessment tool.

OBJECTIVES AND ACTIONS

Objective 1: Use core BMP practices to avoid nitrogen leaching and runoff with a goal of implementing practices to treat 20% of the upland acres in the watershed in five years.

Avoiding

Action 1: Complete at least 5 new comprehensive nutrient management plans by 2015 (1/yr) and update plans that have been completed annually

Action 2: Install 5 ag waste systems (1/yr) with storage and 5 small feedlot fixes (roof runoff structures, diversions, filter strips, etc.) (1/yr) for better utilization of nutrients by improved timing of manure applications

Action 3: Promote participation in the Nutrient Management Initiative with a goal of 5 participants by 2015

Action 4: Implement cover crops on 500 acres (100ac/yr) on low-residue cropland

Action 5: Develop a basal stalk nitrate testing program with a goal of sampling 3 farms per year, and investigate coordinating with the Iowa Soybean Association, Environmental Defense Fund, and the Conservation Technology Information Center to develop a more extensive on-farm network for evaluating nutrient efficiency

Action 6: Continue springshed mapping (1 dye trace/yr) and spring temperature monitoring by the DNR in conjunction with regional LCCMR-funded project

NATURAL RESOURCE CONCERN: Turbidity and Phosphorus

High concentrations of suspended sediment impair the Root River at the mouth and in several tributaries. The mean concentration of total suspended solids at the mouth of the river was 99 milligrams per liter (mg/L)

during the 1990s, more than twice as high as any other monitored major tributary in the Lower Mississippi River Basin of Minnesota. An examination of Long Term Resource Monitoring Program (LTRMP) data from the mouth of the Root River from 1993 - 2002 shows mean turbidity to be 52 nephelometric turbidity units (NTU), over twice the state standard of 25 NTU for warm water streams. Following storm events a pronounced sediment plume is evident downstream on the Mississippi River, which is listed as impaired by turbidity between the confluence with Coon Creek in Wisconsin downstream to Lock and Dam #8 at Genoa, Wisconsin.

According to information from the MPCA, excess turbidity can significantly degrade the aesthetic qualities of streams and rivers. People are less likely to fish or swim in waters degraded by excess turbidity. Turbidity can also make the water more expensive to treat for drinking or food processing, and may make it hard for fish and other aquatic animals to find food, breathe through gills, and reproduce when spawning beds are clogged with deposited sediment. Western Corn Belt Plains Ecoregion ("expected") values for Total Suspended Solids (TSS) range from 7.0 – 18.0 mg/L. The MPCA is using a TSS value of 58 mg/L as a surrogate threshold for the turbidity standard of 25 NTU for the Western Corn Belt Plains Ecoregion. The turbidity standard is set even lower for cold water streams at 10 NTU.

Phosphorus is often the limiting growth factor that contributes to the production of excessive algae in surface water in southern Minnesota. Major sources of phosphorus to surface water are from nonpoint sources from agricultural and urban land. Which source predominates depends on precipitation and flow conditions. Nonpoint sources tend to be the dominant source of phosphorus at high and average flows. Much nonpoint source phosphorus is attached to sediment and is transported to surface water as overland flow. Practices that reduce soil erosion also help to reduce phosphorus runoff. University of Minnesota data show that conventionally tilled corn experiences approximately four times as much phosphorus runoff as no-till corn. Soil erosion control practices combined with proper adjustment of rate and placement can reduce phosphorus runoff from agricultural fields by two-thirds or more, compared to black-till conditions. Surface-applied manure is an obvious source of phosphorus runoff, but few studies have estimated the magnitude. MPCA modeling of two lake watersheds in southern Minnesota indicate that livestock feedlot runoff comprises less than 15 percent of all phosphorus runoff. Cropland runoff, which includes the effect of surface-applied manure, typically contributed 80 percent or more of all phosphorus runoff.

Goal: Reduce turbidity and phosphorus by 10% in five years to align with the Clean Water Initiative goal of a 20% reduction in turbidity in 10 years.

Evaluation and Monitoring

Tier 1: Edge of Field – Utilize results from edge of field monitoring study conducted by MDA in Crystal Creek watershed, which is representative of the landscape and geology in Watson Creek watershed. P-index calculations will be performed on 3 farms per year.
Tier 2: 12-digit HUC – DNR Stream Assessments and MPCA Citizen Stream Monitoring will continue. MPCA Stressor Identification work will be performed in the watershed in 2010.
Tier 3: 8 digit HUC – Turbidity and phosphorus monitoring will continue at long term TMDL sites across the Root River watershed.

OBJECTIVES AND ACTIONS

Objective 1: Use core BMP practices to avoid, control, and trap sediment and phosphorus by implementing practices to treat 20% of the upland acres in the watershed in five years

Avoiding

Action 1: Identify areas where soil erosion is most likely to occur using the LiDAR data, digital terrain analysis, and the stream power index
Action 2: Implement forest stand improvement (TSI and invasive species control) on 250 acres by 2015 (50 ac/yr)
Action 3: Implement cover crops on 500acres by 2015 (100 ac/yr) on low-residue cropland
Action 4: Implement prescribed grazing and associated practices on 200 acres by 2015 (40 ac/yr)
Action 5: Calculate P-index values on 15 farms (3/yr) in conjunction with basal stalk nitrate testing

Controlling

Action 6: Implement residue and tillage management on 1000 acres by 2015 (200 ac/yr)
Action 7: Install 5 grade stabilization structures and 5 water and sediment control basins by 2015 (1/yr) along with critical area plantings
Action 8: Install 6 acres of field borders by 2015
Action 9: Install 30 acres of grassed waterways by 2015 (6 ac/yr)
Action 10: Implement contour farming on 500 acres (100 ac/yr) and strip cropping on 200 acres (40 ac/yr) by 2015
Action 11: Implement upland habitat management on 500 acres by 2015 (100 ac/yr)

Trapping

Action 12: Treat 200 acres of cropland using contour buffer strips by 2015 (40 ac/yr)
Action 13: Contact 5 landowners per year to implement filter strips around sinkholes using CRP

Objective 2: Riparian corridor management and in stream management on 20% of areas out of compliance with the DNR Shoreland ag buffer requirement of 50 feet of permanent vegetation along DNR protected waters by 2015.

Action 1: Utilize the shoreland land use mapping data to identify areas in need of a permanent vegetative buffer
Action 2: Restore and stabilize 5,000 feet of stream bank by 2015 (1,000 feet/yr) with additional habitat for both game and non-game wildlife species
Action 3: Implement 3 prescribed grazing plans by 2015 in the riparian zone encouraging limited access to stream, off stream watering, and stream crossings
Action 4: Promote programs that assist landowners with planting vegetative buffers

Goal: Promote civic engagement and participation by land users in the watershed

OBJECTIVES AND ACTIONS

Objective 1: Provide outreach and education to 85% of the land users.

Action 1: Hold 2 manure management workshops per year (e.g. What is Manure Worth?) in cooperation with MDA and U of M Extension
Action 2: Promote participation in the Nutrient Management Initiative
Action 3: Publicize and conduct two events per year to market and sign up applicants for programs
Action 4: Coordinate one event in 2011 and 2012 targeting historically underserved populations, e.g. beginning farmers
Action 5: Hold one on-farm field day per year focused on the use of no till or cover crops
Action 6: Conduct 1 grazing workshop/field day per year
Action 7: Provide a total of 0.20 FTE for technical assistance, coordination, and administration of initiative objectives and actions

3) Detailed Proposal Criteria:

a) Description of partners history of working with ag producers: Each partner brings a unique perspective and quality to working with ag producers. The SWCD provides technical assistance for implementation of conservation practices and administers many financial assistance programs that pay farmers for implementing conservation practices, such as state cost-share, special projects, and the MDA Ag BMP Low-Interest Program. SWCD staff also assist NRCS staff with design and survey of EQIP and CRP practices. Local SWCDs have been a trusted source of assistance to farmers for over half a century. Fillmore SWCD just celebrated its 65th anniversary in 2007. The SWCD employs technical staff that cumulatively have several decades of experience in conservation implementation. Eleven SWCDs in southeast Minnesota, of which Fillmore is a member, have formed the SE SWCD Technical Joint Powers which provides engineering assistance for conservation practices with a heavy emphasis on feedlot runoff control and manure storage funded through state cost-share, and, in many cases, EQIP. Assistance for feedlot operations has been very successful in Fillmore County for over 8

years combining technical assistance with cost share funds from federal, state, and local sources, as well as MDA low-interest loans. Filter strips, freshwater diversions, roof gutters, manure storage, and other practices have been installed on 121 sites since 2002 to control 100% of open lot runoff to help producers meet requirements related to the state's feedlot rules. Fillmore SWCD has funded a program to aerial seed winter rye as a cover crop since 2006 with 200-400 acres seeded each year. The SWCD received a MDA Sustainable Ag Grant in 2008 to evaluate the use of cover crops for extending the grazing season. Both aerial seeding and drilling after corn silage and soybeans are being evaluated for the study.

The Nature Conservancy offers leveraging funds, technical knowledge, and support of BMPs. TNC works closely with producers to enhance areas of their farms for wildlife and to implement practices that protect areas on their farms and downstream that have significant ecological value. TNC has had funding available for several years for cover crops on canning crop acres and has committed to continued funding of cover crops in the Root River watershed, which can be used for this project. These funds can be used on acres which are not eligible for EQIP in order to increase the total number of acres with cover crops.

MPCA and MDA work with producers to ensure that all rules relating to feedlots and ag chemical use are being followed before enforcement action is necessary. Both are also working with producers on monitoring efforts which involves getting cooperation from landowners to conduct monitoring at sites sometimes located on private property.

Planning and identifying resource concerns is a skill shared by all partners. SWCD staff identify programs and practices that meet the conservation needs of producers in the watershed. The Fillmore SWCD received a USDA-NRCS Civil Rights Team Award in 2000 for its outreach efforts to the Amish community, which has traditionally been an underserved population for conservation programs.

Education and outreach to farmers is a specialty of agencies like University of Minnesota Extension and Hiawatha Valley RC&D, which have been helping organize workshops and field days related to nutrient management, grazing, feedlots, and cover crops. The RC&D's relationship with the Driftless Area Initiative has expanded the resources available to southeastern Minnesota for grazing, cover crops, and nutrient management through grants and assistance with coordinating educational events. RC&D provided funding support for the Nutrient Management Specialist housed with the Fillmore SWCD.

b) Detailed description of the watershed area:

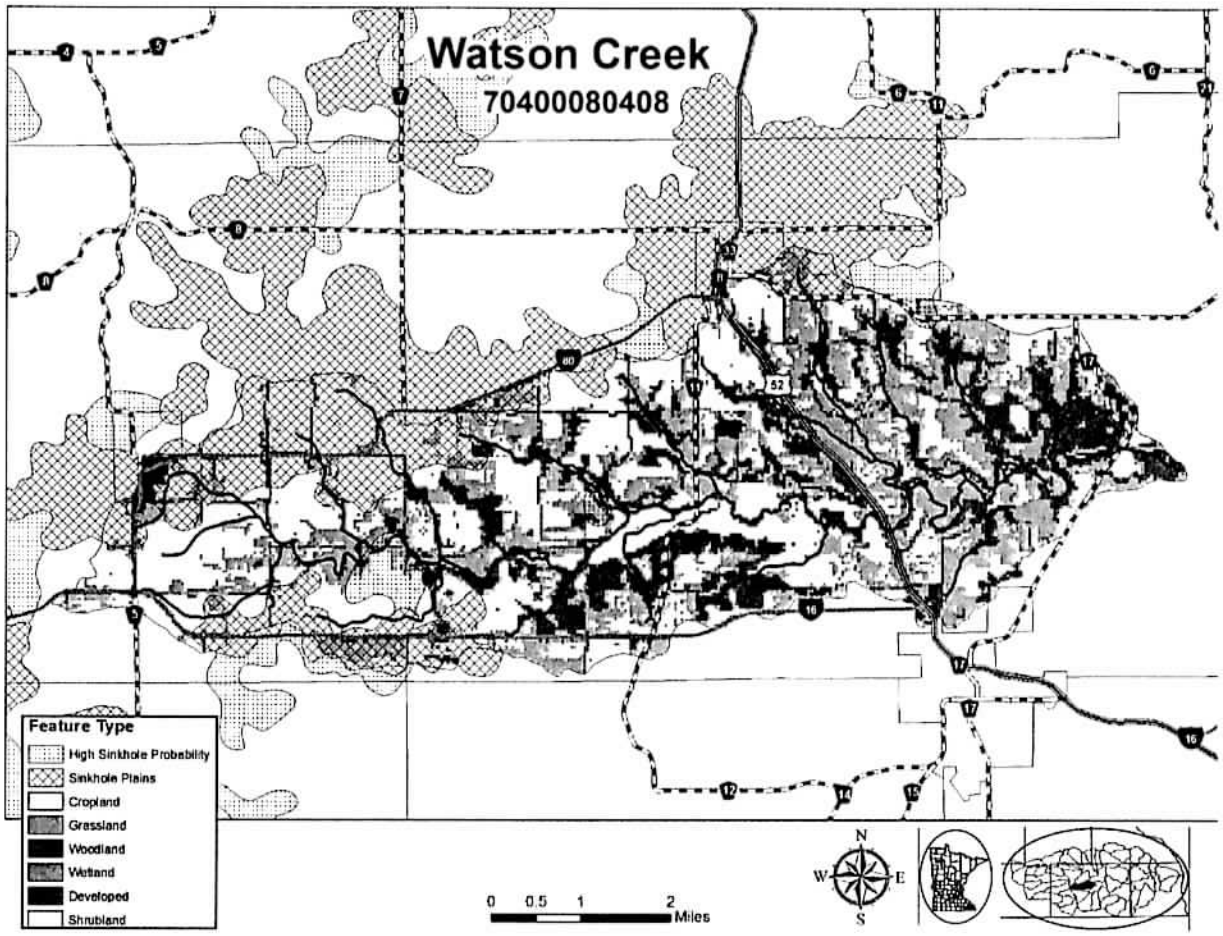
The Watson Creek watershed is located near the center of the Root River watershed in Fillmore County. Watson Creek originates southeast of Wykoff in a heavily karsted upland and flows east between Preston and Fountain about 13 miles to its confluence with the South Branch Root River. There are over 53 miles of perennial streams in the watershed, and 42 of those miles are designated trout stream. The watershed encompasses just under 22,000 acres and includes a variety of land uses. Corn is planted on 30% of the watershed acres, and soybeans on 11% of the acres. Hay/pasture/grassland make up about 33% of the land use with another 18% in forest/woodland.

Table 1. Watson Creek Land Cover

Cover	% Cover
Cropland	41%
Grassland	33%
Forest	18%
Developed	8%

Karst features such as springs and sinkholes cover the landscape and create intimate connections between surface water and ground water. The Watson Creek watershed includes 505 sinkholes and 29 springs. This relationship increases the potential for contamination along with the need for conservation. The coldwater springs provide baseflows for Watson Creek and create water quality conditions suitable to support coldwater

species such as trout. Protecting the water quality of these coldwater trout streams is critical not only from a biological standpoint, but from an economic standpoint as well. A recent study conducted by Trout Unlimited in 2008 indicated that trout anglers produce an economic benefit to the Driftless Area in excess of $1.1 billion every year. This figure includes both direct and indirect spending effects.



Watson Creek is managed by the Department of Natural Resources (DNR) for Brown Trout. Historical stocking records indicate that Brown Trout, Brook Trout, and Rainbow Trout have all been stocked at some point in time. These records date back to 1952, and the number of fish stocked per year ranges from 300 – 30,000. The size of fish stocked includes fry, fingerlings, and yearlings. The DNR started re-introducing Brook Trout in one of Watson Creek's coldwater tributaries in 2008. 2010 is scheduled to be the last year of re-introductions.

Due to the large amount of karst, this watershed, like most of the rest of the Root River and like other watersheds in southeast Minnesota, has few upland wetlands except in the very western, glaciated portion of the basin. The majority of the watershed's wetlands lie in the riparian bottomlands, the largest being closer to the confluence with the Mississippi River. For this reason, the focus for a WREP proposal for the Root River is in the lower reaches (HUC 070400080904) of the watershed where preliminary work by DNR and TNC have already identified as many as six willing landowners for wetland restorations and easements. Reductions in sediment and nutrient transport into the Mississippi could be reduced by as much as 25-50% if flood waters can flow through these river bottom wetlands.

c) Description of partners' roles and responsibilities and capabilities:
***Fillmore SWCD*:** Technical assistance for grazing management, feedlot fixes, EQIP structural practices, and water quality monitoring; outreach and promotion of MRBI programs; coordination and administration of MRBI project
***TNC*:** Technical Assistance (TA) for the Root River watershed for implementation of MRBI practices; financial assistance for cover crops and conservation practices for canning crop acres
***MDA*:** Conduct edge of field monitoring in neighboring watersheds with similar geology and topography; assist with research and evaluation of the effectiveness of BMPs, i.e. cover crops, no till; assist with nutrient monitoring in springs and streams
***MN DNR*:** Springshed mapping; assist with stream habitat restoration, streambank stabilization, wildlife habitat restoration
***MPCA*:** Assistance with water quality monitoring
***SE SWCD Technical JPB*:** Engineering assistance for feedlot fixes and manure storage facilities; technical assistance for nutrient management
***University of Minnesota Extension*:** Education and outreach activities
Hiawatha Valley RC&D: Education and outreach activities
Trout Unlimited: Technical assistance and funding for stream restoration projects
BWSR: Technical assistance funding for implementation of conservation practices

d) Description of project duration, plan of action and implementation schedule: The duration of this project will be five years (2010 – 2015), and a final report will be submitted in 2015 after project completion.

Activity	Responsible Party	Timeline
Program announcement events	Fillmore SWCD, NRCS	July 2010
Develop basal stalk nitrate testing and P-Index programs	Fillmore SWCD, MDA	November 2010
Shoreland land use data analysis	Fillmore SWCD	December 2010
LiDAR digital terrain analysis and stream power index	Fillmore SWCD	December 2010
MRBI practice implementation	NRCS, Fillmore SWCD, JPB, TU, TNC	August 2010 - June 2015
Outreach and education	Extension, NRCS, Fillmore SWCD	Annual events 2010-2015
Program promotion events	Fillmore SWCD, NRCS	January – March Annually 2011-2014

e) Description of financial and technical assistance resources requested from EQIP, WHIP and CSP and non federal resources provided by partners:

Program	Resources Requested	Partner	Partner Non-federal Contribution Leveraged		
			Financial Assistance	Technical Assistance	Other Resources
EQIP	1,410,820	Fillmore SWCD		x	Coordination and administration
		TNC	10,000	x	
		TU	75,000	x	
		BWSR	50,000		
		DNR		x	Springshed mapping
		MPCA		x	Water quality monitoring

		MDA		x	Edge of field monitoring
		JPB		x	
		Extension			Outreach and education
		Hiawatha Valley RC&D			Outreach and education
WHIP	37,580				
		TU	25,000	x	

f) <u>A description of the plan for monitoring, evaluating, and reporting on progress made toward achieving the objectives of the agreement.</u>

Previous and current monitoring in the Watson Creek watershed includes bacteria, fish, invertebrate, habitat, and water quality data. The Minnesota Pollution Control Agency (MPCA) has a bacteria monitoring site near the mouth of Watson Creek. This site is part of their Intensive Watershed Monitoring (IWM) design, and is sampled on a ten year cycle. Results from this site in 2008 and 2009 indicated a geometric mean of 698.83 MPN/100 ml in June, 519.93 MPN/100 ml in July, and 603.13 MPN/100 ml in August. These values are well above the standard (126 organisms/100 ml from April – October). Also included in the IWM design are biological monitoring sites that monitor fish, invertebrates, habitat, flow, and water quality. There is one of these sites in the Watson Creek watershed at the same location as the bacteria monitoring site. MPCA is planning on doing some stressor identification work in 2010 as well. This work will identify potential stressors to the biological community in the Watson Creek watershed, and is another component of the IWM design. Measurements such as transparency tube (t-tube) have also been collected as part of the Citizen Stream Monitoring Program (CSMP).

The Fillmore SWCD monitored 25 stream sites within the Root River watershed for bacteria from 2003 – 2005. All sites were sampled once during snowmelt conditions and once during baseflow conditions each year. These sites were established to monitor manure runoff. Average Fecal Coliform concentrations for snowmelt were 1,546.67 MPN/100 ml and 1,186.67 MPN/100 ml for baseflow. Nitrate, ammonia, and transparency tube data were also collected. All 25 sites were ranked based on Fecal Coliform, nitrate, and ammonia values, and Watson Creek ranked out in the highest (most impaired) category.

All the past, current, and future monitoring in the Watson Creek watershed provides baseline data that will help with the evaluation of conservation practices and changes in water quality. The Root River small watershed project (Root River: From Field to Watershed), Root River Turbidity TMDL, and Root River Watershed Comprehensive Strategy Development will also play a role in evaluation. The Minnesota Department of Agriculture (MDA) is the lead on a new small watershed study looking at quantifying the effects of Best Management Practices (BMPs) on water quality in three small watersheds (< 5,000 acres) within the Root River watershed. This project includes both edge of field and in-steam monitoring, and should aid in practice selection and evaluation. Although the watersheds being monitored are outside the Watson Creek watershed, there are similarities that should allow for extrapolation. Results from the small watershed monitoring piece will not only help with implementation and evaluation at the edge of field and 12-digit HUC scale, but at the 8-digit HUC scale as well. Sediment and nutrient data from the Root River Turbidity TMDL and Root River Watershed Comprehensive Strategy Development projects will also supplement data gaps through extrapolation. Sediment fingerprinting is a component of the Root River Turbidity TMDL that will help identify sediment sources. It will determine whether the sediment source is field or non-field (bluffs, ravines, in-stream, floodplain), and be very useful for implementation and practice selection. In addition, Fillmore SWCD was recently certified to test for Total Coliform and E. Coli bacteria and plans to use their services to assist with monitoring and evaluation.

<u>Tier 1: Edge of Field</u>

- MDA edge of field monitoring for nutrients and TSS to evaluate BMP effectiveness
- P-index and basal stalk nitrate tests on 3 farms per year to evaluate nutrient efficiency
- MPCA lysimeter network to monitor nitrate transport in karst landscapes

Tier 2: 12-digit HUC

- Nutrient monitoring at County Road 17 site
- MPCA IWM monitoring site (fish, invertebrates, water quality)
- DNR stream assessments
- Citizen Stream Monitoring Program volunteer data (transparency, temperature, etc.)

Tier 3: 8 digit HUC

- Nutrient and sediment monitoring at long term TMDL sites
- Monitoring at additional sites established for the Root River Comprehensive Strategy
- MPCA IWM monitoring at over 100 sites (fish, invertebrates, water quality)
- MPCA Milestone monitoring at the mouth of the Root River
- MDA surface and ground water monitoring for pesticides and nutrients

Reporting will be done annually summarizing practices planned, practices implemented, and the monitoring conducted at all three tiers.

g) Potential criteria to be used by NRCS to prioritize and rank producer applications in project area: Based on the outcomes from EQIP Local Work Group meetings, a systems approach will be used so that those applications that combine practices will rank higher. National and state ranking criteria will be used in conjunction with those developed by the 2010 EQIP Local Work Group. The following Local Work Group criteria will be used to rank each producer application based on the environmental objectives for this watershed:

Ranking Criteria	Points
Installation of practices that will reduce soil loss to Tolerable Soil Loss Limits, and these practices are located within a DNR designated trout stream watershed, or are placed on Class IIIe or greater soils.	40
Installation of manure storage for dairy or beef which will alleviate winter manure application concerns as defined by MPCA regulations, and documented in a manure management plan.	30
Installation of manure storage for dairy or beef where the operation has been cited by MPCA for manure spreading violations	10
Implementation of either no-till or nutrient management	50
Implementation of both no-till and nutrient management	10
Installation of prescribed grazing systems	25
Installation of prescribed grazing systems where livestock access to a DNR designated trout stream will be controlled.	10
Implementation of nutrient management within 300 feet of a perennial stream or karst feature	25
Installation of buffers along streams and around sinkholes to meet NRCS standards and DNR shoreland regulations	30
Installation of buffers along streams and around sinkholes to meet NRCS standards and DNR shoreland regulations and cover crops are planted on low residue crops with > 4% slopes.	20

h) Estimated percentage of producers expected to participate: Out of the estimated 100 producers in the watershed, roughly 25% are expected to participate in the project. It is known that there are 11 feedlots out of compliance with 4 that need manure storage, 3 grazers that are not doing prescribed grazing, and as many as 7 producers that need nutrient management plans. Participation will be encouraged through program promotion events, field days, workshops, and other education and outreach events to increase the likelihood of project success. Fillmore SWCD, NRCS, and Extension will be the primary staff responsible for outreach and promotion.

i) Statement describing participation by beginning farmers, socially disadvantaged farmers, and limited resource farmers: There are no known historically underserved populations in the watershed. Staff will work to identify farmers that may be beginning or limited resource farmers in the watershed.

j) Listing and description of conservation practices, plans, enhancements to be implemented:

Core Practices			
Practice Name	**Practice Code**	**Amount Planned**	**Cost Share**
Avoiding			
Conservation Crop Rotation	328	100 acres	
Cover Crop	340	100 acres	3,000
Prescribed Grazing	528	40 acres	1,480
Nutrient Management	590	150 acres	1,280
Nutrient Management Initiative	590	1 no.	2,000
			7,760
Controlling			
Residue & Tillage Management	329/345	200 acres	4,600
Contour Farming	330	50 acres	500
Grassed Waterway	412	3 acres	5,100
Pasture & Hayland Planting	512	5 acres	445
Upland Habitat Management	645	50 acres	7,500
Strip Cropping	585	20 acres	780
			18,925
Trapping			
Contour Buffer Strips	332	20 acres	4,000
Filter Strips (CRP)	393	10 acres	
			4,000
Supporting Practices			
Avoiding			
Waste Storage Facility	313	1 no.	250,000
Fence	382	2,500 ft.	2,225
Access Control	472	1 no.	50
Pipeline	516	7,000 ft.	15,000
Roof Runoff Structure	558	100 ft.	700
Watering Facility	614	10 no.	3,000
Heavy Use Protection	561	3 no.	2,700
			273,675
Controlling			
Critical Area Planting	342	8 acres	1,100
Diversion	362	200 ft.	550
Field Border	386	0.6 acre	160
Grade Stabilization Structure	410	1 no.	20,000
Water and Sediment Control Basin	638	1 no.	4,500
			26,310
TOTAL OF CORE AND SUPPORTING PRACTICES			**330,670**
Additional Practices			
Conservation Activity Plans	102	1 no.	1,350
Streambank and Shoreline Protection	580	1,000 ft.	25,000
Forest Stand Improvement	666	50 acres	4,450
Stream Habitat Improvement and Management	395	1 ea.	630
			31,430
TOTAL OF CORE, SUPPORTING, AND ADDITIONAL PRACTICES			**362,100**

k) Description of amount of funds needed annually for producer contracts or agreements by program (EQIP, WHIP, CSP): The amount of financial assistance needed annually for producer contracts or agreements is $362,100 (**EQIP** - $352,705, **WHIP** - $9,395). The total amount of financial assistance requested for the duration of this project is $1,448,400 (**EQIP** - $1,410,820, **WHIP** - $37,580), and the fiscal year breakdown is as follows:

Year	EQIP	WHIP
FY 2010	352,705	9,395
FY 2011	352,705	9,395
FY 2012	352,705	9,395
FY 2013	352,705	9,395
Project Total	**1,410,820**	**37,580**

l) Description of any requested policy, procedure, and technical adjustments by program needed to achieve objectives: Stream banks are a significant contributor to sediment and phosphorous bound to sediment, up to 85% of the total load in some Driftless Area streams. Stream bank stabilization will trap sediment and phosphorous, preventing it from being delivered downstream, improving aquatic habitat and increasing the attenuation of nitrates within the riparian corridor. Stream bank stabilization (Practice Code 580) has been identified as a need in Watson Creek watershed. Trout Unlimited has funding from a grant from the Legislative Citizens' Commission on Minnesota Resources (LCCMR) to assist with streambank projects, and they have committed to using some of those funds in this watershed.

There are very few wetlands to trap and utilize excess nutrients in Southeast Minnesota. However, the stream corridors in Watson Creek watershed have the potential to attenuate excess nitrates if a modest floodplain is reestablished and stable banks are reintroduced. Stream restorations within other agricultural areas have reduced nitrate delivery by 20%, total phosphorous by 30% and turbidity by 30%, by restoring stream function and increasing surface area of vegetation. Stream restoration proposed with this program amendment will have a significant impact on nutrient reduction within the Watson Creek watershed and demonstrate this as a practice for nutrient reduction and habitat improvement.

Minnesota Board of Water & Soil Resources

April 21, 2010

Jennifer Heglund, Acting MN State Conservationist
Minnesota Natural Resources Conservation Service
375 Jackson Street, Suite 600
St. Paul, MN 55101-1854

Dear Ms. Heglund:

I am writing on behalf of the Minnesota Board of Water and Soil Resources (BWSR), Minnesota's state conservation agency, in regard to the Mississippi River Basin Healthy Watersheds Initiative (MRBI).

Minnesota is pleased to have four 8-digit HUC areas under consideration for this program: Middle Minnesota River, Root River, Sauk River, and the Upper Cedar River (multi-state with Iowa). SWCDs, watershed districts, other local units of government, partnering agencies, supporting civic groups and residents in all four of the focus areas have proven track records of success in implementing conservation through targeted efforts that result in real conservation outcomes.

In order to help ensure the success of the Minnesota projects selected for the MRBI, BWSR is committed to providing up to $300,000 of technical assistance funds in state fiscal year 2011 beginning July 1, 2010 for a two-year grant period to eligible organizations. The funding will be distributed equally among selected proposals, with a maximum contribution of $150,000 in technical assistance funding per proposal. These state funds will supplement or match federal technical assistance available for the selected project areas. Future funding cannot be guaranteed, because these funds are legislatively appropriated on a biennial basis. However, BWSR is committed to continue to help successful MRBI partnership projects as funding and priorities permit.

BWSR looks forward to providing assistance to all successful proposals. Please do not hesitate to contact me if you need additional information or have questions regarding this letter of support and commitment.

Sincerely,

John Jaschke
Executive Director

cc: Don Baloun, incoming MN State Conservationist

[illegible]	Brainerd	Duluth	Fergus Falls	Marshall	Mankato	New Ulm	Rochester
[illegible] Minnesota Ave., Suite 234 Bemidji, MN 56601 (218) 333-8024	1601 Minnesota Drive Brainerd, MN 56401 (218) 828-2383	394 South Lake Ave., Room 403 Duluth, MN 55802 (218) 723-4752	1004 Frontier Drive Fergus Falls, MN 56537-2505 (218) 736-5445	1400 East Lyon St., Box 267 Marshall, MN 56258 (507) 537-6060	1160 Victory Drive S., Suite 5 Mankato, MN 56001-5358 (507) 389-1967	261 Highway 15 South New Ulm, MN 56073 (507) 359-6074	2300 Silver Creek Rd N.E. Rochester, MN 55906 (507) 206-2889

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MINNESOTA DEPARTMENT OF AGRICULTURE

April 26, 2010

Don Baloun, State Conservationist
USDA Natural Resources Conservation Service
375 Jackson Street, Suite 600
St. Paul, MN 55101-1854

Dear Mr. Baloun:

I am writing to express the Minnesota Department of Agriculture (MDA)'s support for the Mississippi River Basin Healthy Watersheds Initiative (MRBI) in all four of Minnesota's MRBI 8-digit HUC focus areas – the Middle Minnesota River, Root River, Sauk River, and Upper Cedar River watersheds.

To help locally led MRBI projects succeed, MDA is committed to offering guidance as needed, and as time and resources allow, in one or more of the following areas of expertise:

- Edge Of Field Monitoring setup, QA/QC, data analysis, interpretation and reporting , and/or developing sampling protocols
- Nutrient Management Initiative demonstrations/evaluations
- Rainfall Simulator setup, QA/QC, data analysis, interpretation and reporting
- Drainage Water Management systems and monitoring/evaluation
- Cover Crop systems and monitoring/evaluation
- Prescribed Grazing planning and monitoring/evaluation
- Digital Terrain Analysis to identify, map and prioritize critical areas for practice implementation
- Farm Nutrient Management Assessment Program (FANMAP) surveys to determine existing practices
- General Technical Support in designing and evaluating field-scale projects
- Education and Outreach

MDA looks forward to collaborating with other partners to support all Minnesota MRBI projects, as needed, to the extent practicable.

Attached for reference is the list of federal and state agency contacts developed following a January 2010 interagency meeting that MDA convened to discuss coordinated assistance for locally led MRBI projects. The list has been distributed to MRBI stakeholders in each of the four watershed focus areas. MDA will continue to assist with statewide MRBI stakeholder communications as needed.

Please do not hesitate to contact me if you have questions or would like additional information regarding MDA's support for the MRBI.

Sincerely,

Joe Martin
Assistant Commissioner

April 27, 2010

Donna Rasmussen
Fillmore County SWCD
900 Washington Street NW
Preston, MN 55965
Phone: (507) 765-3878

RE: USDA Mississippi River Basin Initiative for the Root River Watershed

Dear Mrs. Rasmussen,

The Minnesota Pollution Control Agency strongly supports applications for the funding of small watershed restoration projects within the Root River watershed as part of the Mississippi River Basin Healthy Watershed Initiative. The Root River is richly endowed with high-value trout streams that are often impaired by excessive levels of nitrates, turbidity and e-coli bacteria. The larger cool- and warm-water tributaries also have a high potential for diverse fish and other aquatic life that is not being realized because of excessive runoff.

The Root River watershed has become a priority site for a variety of resource investigation and restoration efforts. Collectively, state agencies and local governmental units have gathered excellent baseline monitoring data at several sites against which future progress can be measured. The Minnesota Department of Agriculture has set up several intensive, state-of-the-art small watershed monitoring stations for measuring the effect of alternative land uses. The MPCA has worked and will continue to work closely with all parties involved so that the best possible information is used to develop comprehensive watershed plans for resource protection and restoration. The funding of priority watersheds under the MRBI will provide an excellent opportunity to see how intensive implementation efforts within a small area can make a difference to water quality and broader ecosystem indicators. Such results are needed to improve the selection of BMPs to address erosion and water quality concerns in the challenging terrain of southeast Minnesota.

The MPCA is currently involved (in partnership with the Fillmore SWCD) in a turbidity TMDL study on the Root River that includes many water quality monitoring stations. If previously collected data can be of help to this project, it can be summarized and provided as needed. Also, if there is a need for further monitoring with current equipment and staffing capabilities, that support is available. The MPCA can also be of assistance with identification of critical areas, project selection, and overall project planning.

Sincerely,

Shaina Keseley

Shaina Keseley

April 29, 2010

Donna Rasmussen
Fillmore SWCD
900 Washington St. NW
Preston, MN 55965

Dear Donna:

The SE SWCD Technical Joint Powers Board (JPB) supports the Watson Creek Watershed Healthy Watershed Initiative to address nutrient runoff to the Mississippi River. The JPB has been in existence since 1995 for the purpose of providing support for soil and water conservation district programs by seeking grant funding from the State of Minnesota and other sources to use within the 11 counties in southeastern Minnesota.

In support of the Watson Creek Watershed Initiative, the JPB has engineering assistance available to design ag waste systems that alleviate pollution runoff problems from open feedlots and provide manure storage to improve the utilization of nutrients through better timing of land application of manure. In addition, two nutrient management specialists funded through Clean Water Legacy grants from the MN Board of Water and Soil Resources to the JPB assist livestock producers in the region with developing and implementing nutrient management plans. The nutrient management specialist housed with the Fillmore SWCD is available to do nutrient management plans in the Watson Creek watershed and has already been working with producers in the watershed.

We look forward to working with the partners in this initiative to improve water quality through the reduction of nutrient runoff in the Watson Creek watershed.

Sincerely,

Glen Roberson
SE SWCD Technical JPB

April 27, 2010

Donna Rasmussen
Administrator
Fillmore SWCD
900 Washington St. NW
Preston, MN 55965

Dear Ms. Rasmussen,

Trout Unlimited - Driftless Area Restoration Effort is in full support of your proposal for the Watson Creek Watershed Initiative for the Root River Healthy Watershed Initiative. Watson Creek has a natural self reproducing and sustaining wild trout population. We have identified this stream as a "high" priority stream in our strategic plan and a stream we would be very interested in working with Fillmore SWCD stabilizing the streambanks and adding habitat for both trout and nongame species (frog, turtles & snakes).

Trout Unlimited has more than 30 years experience with restoring streams in the Driftless Area and could offer both technical and financial support. We would also be interested in helping with outreach in the way of workshops and news releases on stream restoration.

Watson Creek has had troubles in the past with nutrients and sedimentation, but with some watershed protection and stream bank stabilization it has the potential to be one of the best trout streams in Southeast Minnesota.

Sincerely,

Jeff Hastings

Jeff Hastings
Project Manager
Driftless Area Restoration Effort
608-606-4158

UNIVERSITY OF MINNESOTA

EXTENSION

Fillmore
County

902 Houston St. NW
Suite #3
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fillmore@extension.umn.edu

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http://www.extension.umn.edu

April 30, 2010

Donna Rasmussen
Fillmore Soil and Water Conservation District
900 Washington Street
Preston MN 55965

RE: Root River Healthy Watershed Initiative

It is with great pleasure the University of Minnesota Extension of Fillmore, Houston, and Winona Counties join with the collaborating partners in the Upper South Fork Root River Watershed Initiative, the Watson Creek Watershed Initiative, and the Rush-Pine Creek Watershed Initiative for the Root River Healthy Watershed Initiative of the Mississippi River Basin Initiative.

We have a long history of collaboration in matters related to education and outreach on many water quality topics through the Water Plan in each of the three counties. Extension Educator Tom van der Linden serves Winona County while Extension Educator Jerrold Tesmer serves Houston and Fillmore Counties in Agriculture Production Systems.

The current focus on nutrient management, grazing, and cover crop education and outreach continues this relationship with the local Soil and Water Conservation Districts, the Natural Resources Conservation Service, and the Hiawatha Valley RC&D. With the Root River being the major watershed in these counties, any positive actions will not only benefit the local water quality, but contribute to water quality downstream.

Sincerely,

Jerrold Tesmer

Jerrold Tesmer
Extension Educator
Fillmore/Houston Counties

The Nature Conservancy
Protecting nature. Preserving life.

Minnesota, North Dakota, and South Dakota
1101 West River Parkway Suite 200
Minneapolis, MN 55415-1291

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Fax (612) 331-0770

nature.org

April 28, 2010

Fillmore SWCD
Donna Rasmussen, District Manager
900 Washington St
NW Box A,
Preston, MN 55965

Re: NRCS Mississippi River Basin Initiative

Dear Mrs. Rasmussen:

The Nature Conservancy is pleased to continue working with Fillmore SWCD and agriculture producers within the Watson Creek portion of the Root River Watershed. TNC and our partners in agriculture support your efforts to increase the implementation of upland conservation practices. We have agreed to contribute $10,000 toward the implementation of cover crops, grassed waterways and similar conservation practices within the Watson Creek subwatershed.

The Nature Conservancy will also help with project coordination and promotion of practices. TNC will continue to work with our agriculture partners in the area to pair interested landowners with sound conservation practices.

We have identified altered hydrology, primarily increases in peak flow, as a major stressor to aquatic systems. Increasing the amount of upland practices will reduce peak flow while reducing nutrient delivery and bringing back much needed upland and aquatic habitat in the Watson Creek watershed.

TNC will continue to seek additional funds and expand our partnership to continue this and other working lands conservation efforts in the future and we look forward to working with you.

Sincerely,

Tom Landwehr
Assistant State Director

Cc: Todd Holman, Prairie Forest Border Program Manager

HIAWATHA VALLEY RESOURCE CONSERVATION & DEVELOPMENT AREA
1485 Industrial Drive NW, Room 104 • Rochester, Minnesota 55901 • (507) 281-1959 • Fax(507) 536-0176

28 April 2010

Wally Hildebrandt, Chairman
George Poch, Vice-Chair
Roland Wood, Sec'y-Treasurer
Bruce Kubicek, Alternate

The Hiawatha Valley RC&D strongly supports The Watson and Upper South Fork applications for funding within the Root River watershed as part of the Mississippi River Basin Healthy Watershed Initiative. The Root River is richly endowed with high-value trout streams that are often impaired by excessive levels of nitrates, turbidity and e-coli bacteria. The larger cool- and warm water tributaries also have a high potential for diverse fish and other aquatic life that is not being realized because of excessive runoff. The Root River watershed has become a priority site for a variety of resource investigation and restoration efforts.

Hiawatha Valley RC&D had been providing natural resource conservation and development activities in the 11counties of SE Minnesota for nearly 40 years. The RC&D partnered with five other RC&Ds to form the four-state Driftless Area Initiative. The DAI is a non-profit management partnership which strives to coordinate natural resource conservation efforts of organizations and interested people within the 24,000 square-mile driftless region of the upper Mississippi River Basin.

The Hiawatha Valley RC&D has worked and will continue to work closely with all parties involved so that the best possible information is used to develop comprehensive watershed plans for resource protection and restoration. The funding of priority watersheds under the MRBI will provide an excellent opportunity to see how intensive implementation efforts within a small area can make a difference to water quality and broader ecosystem indicators. The RC&D commits to assisting with outreach and education efforts to assist with the successful implementation of these proposals.

Sincerely:

George Poch

George Poch
Vice-Chairman
Hiawatha Valley RC&D

All programs and services of the Hiawatha Valley Resource Conservation and Development Association are available without regard to race, color, national origin, religion, sex, age, marital status or handicap.

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Minnesota Department of Natural Resources

1200 Warner Road
St. Paul, MN 55155
651.259.5800

May 3, 2010

Donna Rasmussen
Fillmore County Soil and Water Conservation District
900 Washington St. SW
Preston, MN 55965

RE: Mississippi River Basin Initiative Root River Watershed

Dear Ms. Rasmussen:

The Root River watershed in Southeastern Minnesota is an important ecological area that provides high biodiversity and habitat for many plants, fish, and wildlife including many rare species. This area, with its unique karst geology has been a priority for restoration and protection by the Minnesota Department of Natural Resources. Our staff has been actively engaged in resource planning, management, and assessment over many years and have participated on the many partnerships and ongoing efforts to promote conservation in this area.

The recently initiated Mississippi River Basin Initiative (MRBI) provides an opportunity to continue to focus efforts and bring additional resources to this critical watershed. It will be especially valuable in accomplishing water quality improvements under the leadership of the Soil and Water Conservation District and other partners. In addition to our ongoing efforts to manage state owned lands, provide assistance to private landowners, and increase recreational opportunities, we will be conducting hydrologic evaluations throughout the Root River watershed. We look forward to working with you to focus these efforts on priority sub-watersheds.

We appreciate your leadership and hope your proposal is successful in securing funding, and look forward to working with you and other partners on this important effort.

Sincerely,

Joseph M. Kurcinka
Central Region Director

Cc: Jeff Green