

**(1) Proposal Cover and Summary:**

**(a) Project Title;** Accelerated Protection and Restoration of Grand Pearl Minor in the Sauk River Watershed

**(b) Project director/manager name, telephone number, mailing address, and email address;**

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**(c) Name and contact information for lead partner entity submitting proposal and other collaborating partners;**

Stearns County Soil and Water Conservation District

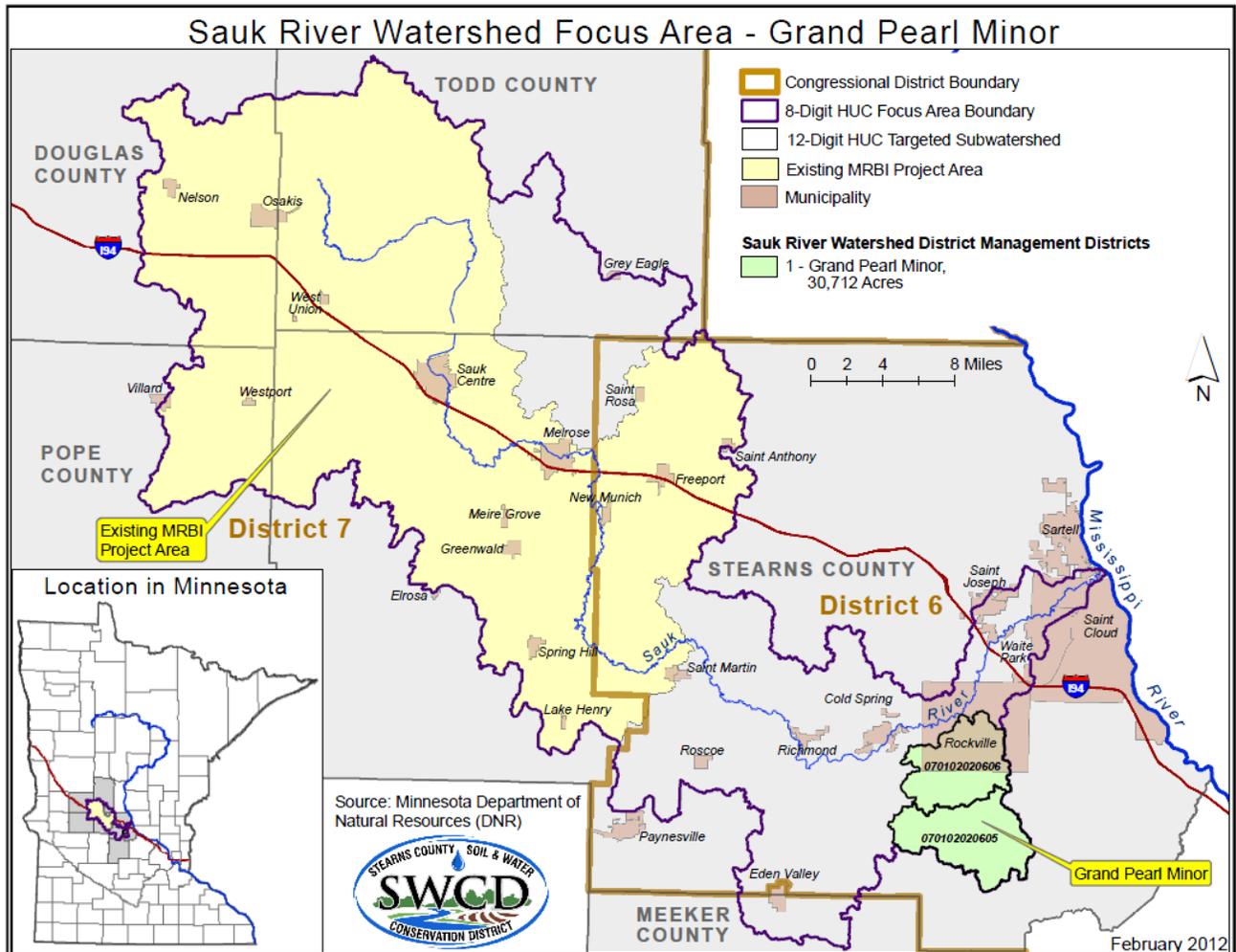
Other Partners: (See letters of support attached)

**(d) Short summary of project including:**

**i. Project Start Date:** Project start date of August 1, 2012, and end date of July 31, 2016.

**ii. Designated 12 Digit HUC (s):** Grand Pearl Watershed includes Mill Creek Sub-watershed #070102020606, and Pearl Lake Sub-watershed #0701020605. The Grand Pearl Watershed is 30,712 acres, and located within the 8 digit HUC 07010202, the Sauk River Watershed.

**Map 1.**



Mill Creek is a tributary to the Sauk River, located in the southeastern portion of the Sauk River watershed in central Minnesota. It flows into the Sauk River in the city of Rockville, 16 miles upstream of the confluence of the Sauk River and the Mississippi River at Sauk Rapids. The Mill Creek watershed makes up 48 square miles of the approximately 1050-square mile Sauk River watershed, and includes Pearl Lake and Grand Lake. Land use in the watershed is predominantly agricultural. The watershed is administered by the Sauk River Watershed District (SRWD), which is working to identify impaired waters and improve the water quality throughout the greater Sauk River Watershed. Monitoring data for the last ten years shows that the entire length of Mill Creek, from the headwaters to the Sauk River at Rockville, does not meet water quality standards for *E. coli* bacteria. A portion of the watershed, located to the south of Pearl Lake, does not contribute surface flow to the creek during normal conditions. This sub-watershed is approximately 12.1 square miles in size, or 25% of the entire Mill Creek watershed area, and includes several small landlocked lakes. This portion is not included in this application, or depicted in the maps, and lies outside of the 12 digit HUC boundary. Mill Creek was added to the 303(d) list in 2006 due to excess bacteria concentrations that impair aquatic recreation, as defined by Minnesota Rules 7050.0150. The TMDL was originally prioritized to start in 2004 and be completed by 2009. The combined area of the Mill Creek and unnamed creek watersheds accounts for 81% of the watershed that contributes surface flow to Pearl Lake, the remaining 19% of the watershed drains directly to the lake.

Pearl Lake (DNR ID 73-0037) is currently listed on the Minnesota Pollution Control Agency's (MPCA) 2010 303(d) Impaired Waters List due to excessive nutrients (phosphorus). It was first placed on the MPCA's 303(d) list in 2008. Pearl Lake is located in Stearns County, Minnesota and is within the North Central Hardwood Forest (NCHF) ecoregion. It is a relatively shallow, eutrophic lake approximately 750 acres in size, with a maximum depth of 18.2 feet and a mean depth of 8.2 feet. The littoral area (area with a depth of 15 feet or less) is approximately 510 acres. Pearl Lake has two main tributaries: Mill Creek is the largest, and drains an area of approximately 5,758 acres to the west of the lake. An unnamed creek drains an area of approximately 2,108 acres to the south of Pearl Lake. The outlet of Pearl Lake is Mill Creek, on the northern shore of the lake. Mill Creek is also the only named tributary to Pearl Lake, and enters on the western shore.

**iii. General Project objectives and resource concerns:** An extensive long term water quality monitoring network has identified numerous locations that require additional conservation practices to protect, conserve, and enhance natural resources within the targeted 12 digit HUCs. This proposal will simultaneously reduce nitrogen and phosphorus contributions while improving the functionality of the ecosystems and supporting agricultural productivity. Draft TMDL reports have recently been completed for both Pearl Lake (070102020605) and Mill Creek (070102020606) in the Grand Pearl Watershed. The studies found that the most significant source of bacteria loading to Mill Creek is livestock waste, which reaches the stream from riparian pastures and runoff from croplands, feedlots, and storage areas. The pollutant of concern for Pearl Lake is phosphorus. Based on 2008 conditions, a 25% decrease in phosphorus load will be required to meet the overall load capacity of the lake. Nutrient loading from animal feedlots will be the major focus of this application. Overall objectives will be riparian pasture management, nutrient management, and feedlot runoff reduction. The Stearns County Soil and Water Conservation District has identified 8 non-compliant feedlots within the focus area. Of those 8 non-compliant feedlots, 6 are greater than ten animal units. According to the Draft TMDL report on Mill Creek in 2008, feedlots without adequate runoff controls account for an estimated 14% to 15% of the total bacteria loading to Mill Creek. Another significant source of nutrient loading is expected to be the result of non-compliant subsurface sewage treatment systems. The TMDL report for Mill Creek assumes 13 "straight pipe" systems, and 106 failing systems in the Mill Creek watershed or about 19% of the total residential septic systems in the watershed. The Stearns SWCD will work to promote the Ag. BMP loan to address non-compliant systems.

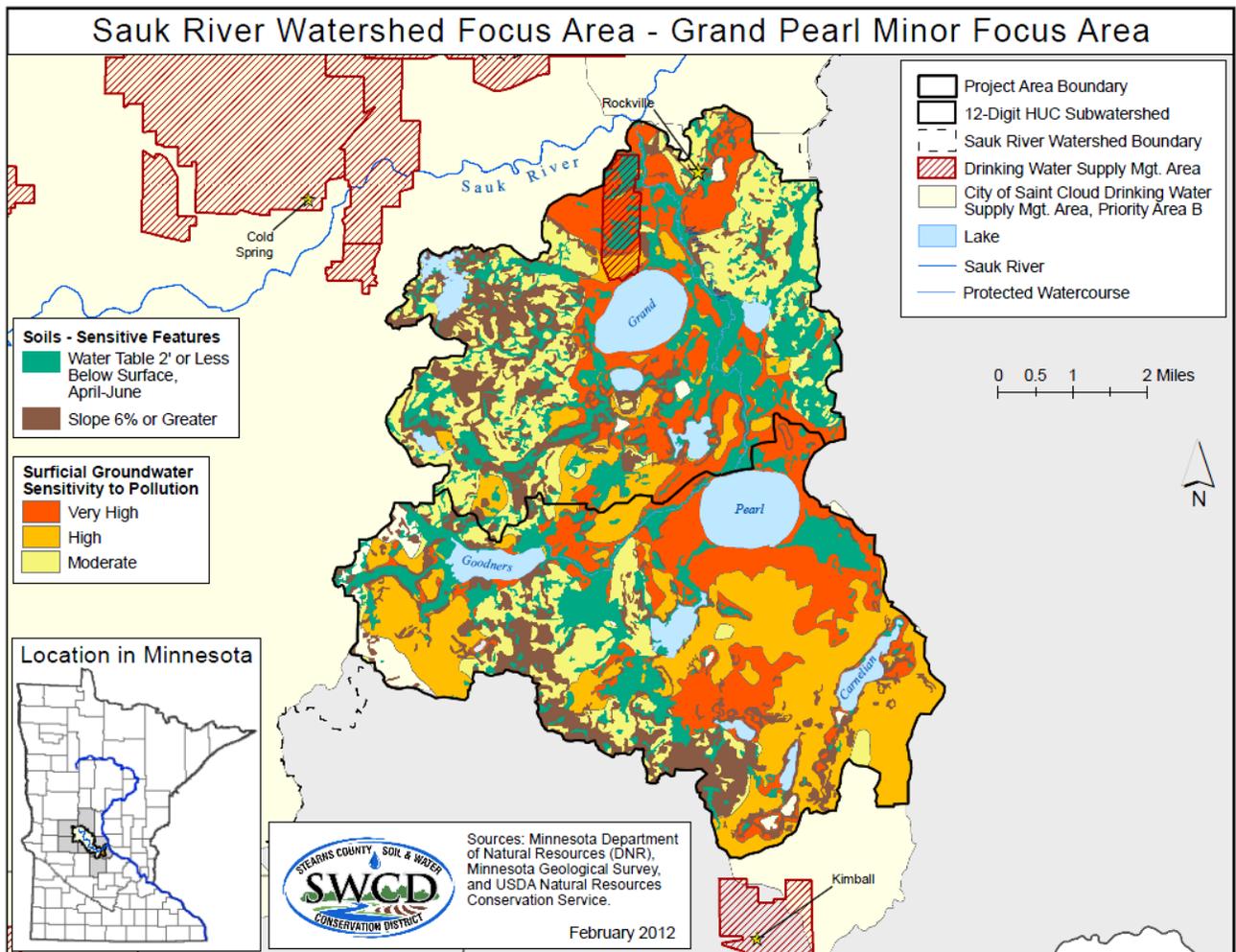
iv. Total amount of CCPI financial assistance being requested: \$670,730 to bring noncompliant feedlots into compliance and to reduce bacteria transport from feedlots, and pastures; and to implement nutrient and pest management practices. We are also requesting \$90,000 for promotion and enrollment of interested producers in the On-Farm Network® for nutrient management through guided stalk sampling.

v. None of the proposed 12-digit project HUCs (070102020606 and 070102020605) has been previously approved for a MRBI CCPI project.

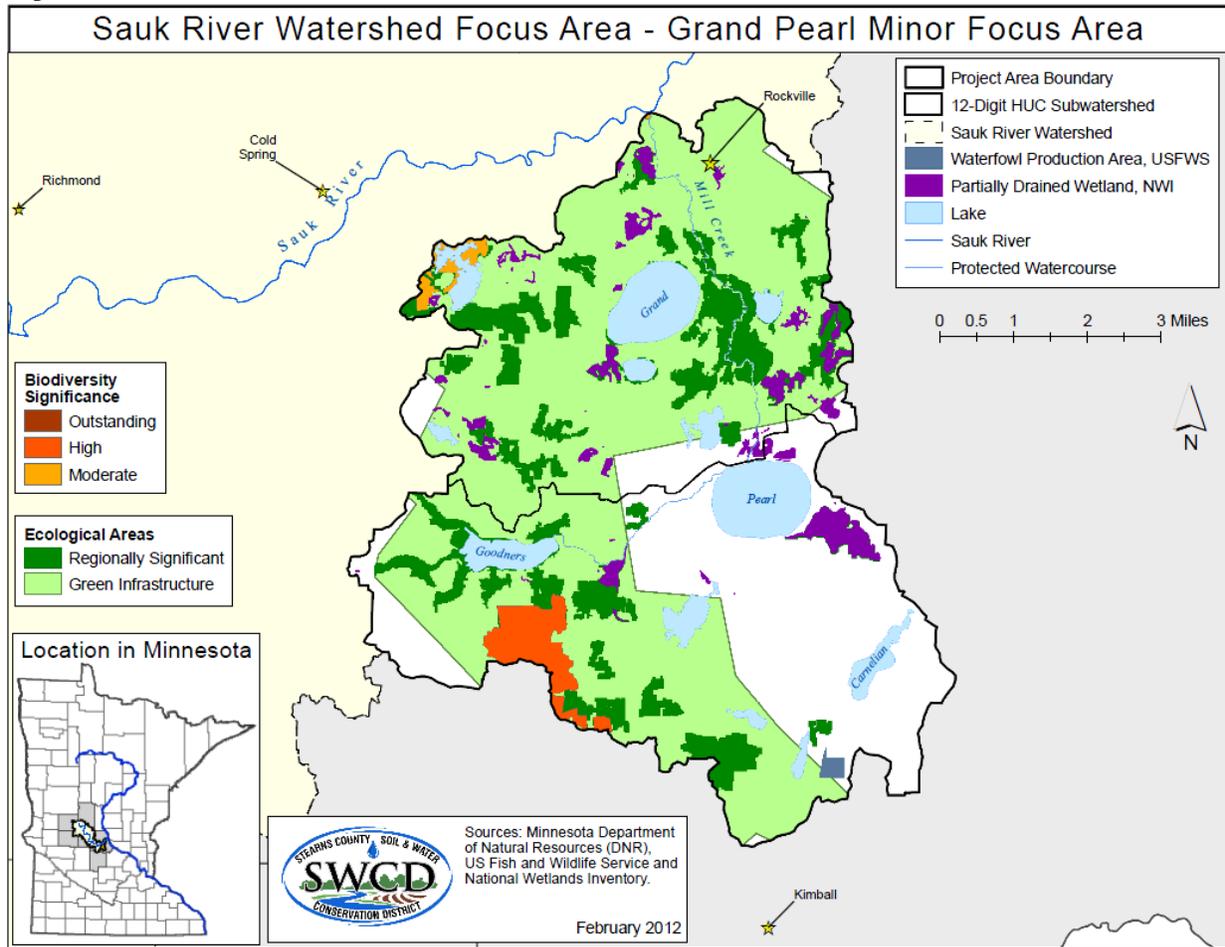
vi. This MRBI-CCPI proposal will not be used in conjunction with a MRBI-WREP, MRBI-CIG or other Federal programs to meet MRBI objectives.

## (2) Project Natural Resource Objectives and Concerns:

Map 2.



Map 3.



**(a) Identify and provide detail about the project objectives. Objectives should be specific, measurable, achievable, and results-oriented.**

The TMDL study for Mill Creek uses a population source inventory and assumed bacteria availability and delivery ratios to estimate the sources of bacteria that contribute to the observed load in Mill Creek. This analysis indicates that riparian pastures, surface applied manure, and feedlots without runoff controls are likely the primary sources of *E. coli* contamination. The primary implementation strategies recommended to address the *E. coli* loading from primarily agricultural sources are agricultural best management practices such as riparian pasture management, manure management, and feedlot runoff protection. The TMDL implementation strategies for Pearl Lake also cites managing livestock access to riparian areas and waterways, improved soil fertility/manure testing, and better managed agricultural drainage as significant phosphorus loading source reductions within Pearl Lake and its watershed. Specific MRBI approved practices that can help to address these concerns are located here: [http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb1046714.pdf](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1046714.pdf)

**Objective 1: Riparian Pasture Management/Streambank and Shoreline Protection**

According to the TMDL study performed on Mill Creek, the most significant measure that can be taken to reduce *E. coli* loading in Mill Creek is to improve riparian pasture management, with a special emphasis on excluding livestock from streams and stream banks. Livestock with access to streams and stream banks contaminate surface waters through direct deposition of fecal matter and through erosion of bank soil material. Excluding livestock from these areas by installing adequate fencing is an essential tool for reducing *E. coli* concentrations in Mill Creek. Typical pasture management projects that include fencing

and alternative water sources for livestock cost between \$1,000 and \$6,500 each. Rotational grazing can also be used to reduce grazing pressure on pastures and to minimize the subsequent erosion of soil and fecal material into surface waters. Pastures are subdivided into paddocks and livestock are moved between paddocks frequently. Consequently, forage plants do not become overgrazed and they continue to slow overland flow of water and to hold soil (and fecal matter) in place and minimize erosion. Approved MRBI conservation practices that are applicable for this objective include prescribed grazing, pasture and hayland planting, stream crossing, access control, and riparian forest buffer. This objective will also focus on correcting accelerated loss of streambank soils due to erosion, and it is our hope that many landowners would not object to in channel and riparian work because it would not be taking acres out of production. Streambank and shoreline soil erosion are identified as approved resource concerns for this application. Other conservation practices that could work to address this resource concern are lined waterway, field border, shallow water development and management, and dike.

### **Objective 2: Nutrient Management**

Manure management plans are required as part of feedlot operation and expansion permits. Effective manure management requires that manure be applied to fields in a manner which maximizes the nutrients available to crops without providing excessive nutrients or manure that is likely to run off cropland fields, or leach into groundwater. Because surface applied manure (along with the similar non-riparian pastures) is estimated to be a major contributor of *E. coli* loading to Mill Creek, better manure management practices are necessary in order to reduce in-stream *E. coli* concentrations. Improvements in manure management could include installation of runoff controls such as filter strips or adequate buffer zones separating manure stockpiles from surface waters or drainage systems, installation of liquid waste storage facilities, and increased use of manure incorporation. The costs of installing filter and buffer strips can range widely, from as little as \$1,500 to as much as \$25,000 depending on the width of the strip and the amount of grading necessary. In addition, vegetative practices such as wetland restorations, riparian buffers, filter strips and grassed waterways can help to reduce the amount of pollution that is transported from croplands to surface waters through erosion and overland flow. Perhaps the most important way landowners can make a positive environmental impact with their manure management is to follow a nutrient management plan. Nutrient management plans assist in determining accurate rates of application, help to identify sensitive features where setbacks must be maintained, incorporate soil tests to adequately determine crop nutrient needs, and many other imperative tools that every agricultural producer should have at their disposal.

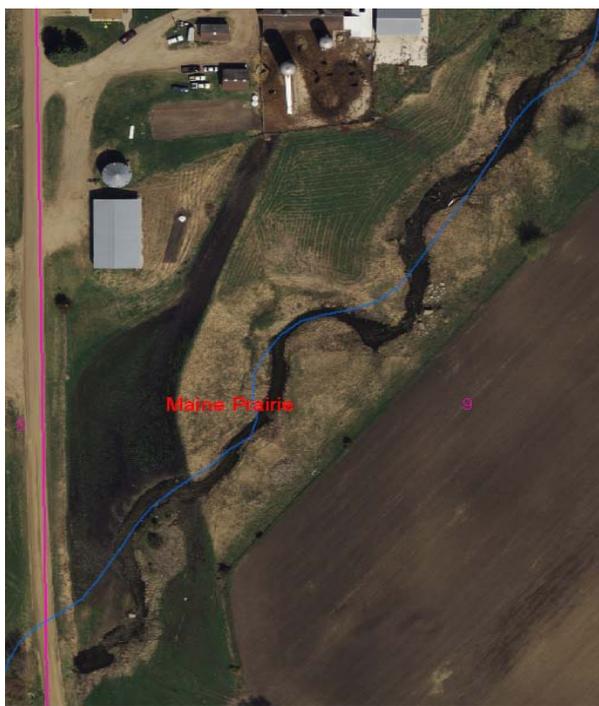
### **Objective 3: The On-Farm Network®**

The On-Farm Network® component of the project will demonstrate how the new Monitoring and Evaluation practice standard can be used to verify and document quantifiable results from nutrient management through data collected from each producer each year, combined with Corn Stalk Nitrate Tests (CSNT) results that provide a report card on N use efficiency for that growing season, strip trials comparing the relative effectiveness of different practices, and aerial imagery. In addition, landowners are surveyed annually to verify improvements in N management. The data are reported back to the landowners as their individual farm data and as aggregate results. Aggregate results are used publically for educational purposes. Field history information is collected from every participating producer – previous crop, manure history, manure applications, commercial N applications (including timing of application, form, and rate), and tillage. This information is combined with analysis of results from on-farm evaluation plots comparing different management practices (timing, form, application rate, etc). Assessing and distributing information on the economic benefits of the network and its tools is critical to the success of the On-Farm Network® and to the adoption of an approach by landowners to continually improve. As detailed above, we will gauge the cost-effectiveness of the tools and the overall approach by developing a cost/benefit analysis based on our data. The analysis will be a partial budget analysis of N costs, costs of using the CSNT, costs for data collection, aerial imagery, and for winter meetings. We will collect information to assess the relative nutrient use efficiency of different management practices

through strip trials, which will be developed into a method of benchmarks to rank practices. Preliminary analysis of data from Iowa and the Chesapeake Bay using survey logistic regression indicates that timing and form of N (which includes different forms of both fertilizer and manure N) and crop rotation are important factors affecting N use efficiency. The progress of the project in terms of EQIP enrollments and practice implementation; aggregate data results, especially from CSNT and on farm evaluation plots; and economic evaluation will be reported to NRCS and other interested stakeholders at minimum on an annual basis, and more frequently as requested. Results and impacts will be published via fact sheets, brochures, and other means as well to reach additional producers, technical assistance providers, and others.

#### **Objective 4: Feedlot Runoff Reduction**

Feedlots without adequate runoff controls account for an estimated 14% to 15% of the total bacteria



**Map 4.**

loading to Mill Creek (see Map 4, left). Financial assistance programs are available through the Environmental Quality Incentive Program (EQIP) administered by NRCS, and through funds from the Board of Water and Soil Resources (BWSR). This funding is typically used to install both high cost solutions such as liquid manure storage facilities (average cost of approximately \$60,000) and low cost solutions such as gutters and filter strips. Feedlot owners within the Mill Creek watershed and Pearl Lake watershed will be encouraged and assisted in applying for cost share funding to make needed upgrades to their operations.

In order to ensure that our objectives are met, a systems approach will be utilized. 1) Identify Problems. Using high resolution digital elevation maps, soils and other natural resources data, high priority sites will be (and have already begun to be) identified. The conservation planner will assist the landowner in determining the resource problems, opportunities, and concerns in the planning area.

This includes an early identification of all natural resource problems. This will be further clarified as the process continues. 2) Determine Objectives. The

conservation planner will record the landowner's objectives. This might include how the area is to be used, what is the intended use of the property over the long term, what are the family considerations, and other factors that might influence the choice of conservation practices to be applied. 3) Inventory Resources. A comprehensive inventory will be completed of the natural resources, such as the soils, plants, animals, physical structures, available labor, equipment, and anything else that might be needed to solve the conservation problems. 4) Analyze Resource Data. The information gathered in Step 3 will be analyzed to clearly define the conditions of the natural resources along with the economic and social issues. The causes and effects of conservation problems will be summarized. 5) Formulate Alternatives. One or more conservation alternatives will be prepared that will achieve the landowner's objectives, solve the natural resource problems, and take advantage of opportunities to improve or protect resource conditions. Landowners will be provided any products explaining the details of the conservation practices being considered. This would include job sheets, fact sheets, standards, or similar materials. 6) Evaluate Alternatives. Each of the alternatives will be evaluated to determine if it is addressing the landowner's objectives and the natural resource problems. The effects of the alternatives should be evaluated both for

on-site and off-site impacts. The alternative should also be acceptable to the landowner. Special attention will need to be given to those ecological values protected by law or Executive Order. 7) Make Decisions. The landowner will select the alternatives that will best serve their business. The conservationist then prepares the conservation plan of operations (CPO) for the landowner which includes the practices to be implemented and the schedule. The CPO is a record of conservation decisions made by the landowner. 8) Implement Plan. The conservation planner will deliver the plan to the landowner and reviews it for accuracy and clarity. The plan contains a listing of the conservation practices and a schedule for implementation. Included with these practices should be a description of the impacts of the selected practices on their natural resources. Plans usually include a map, field boundaries, soil map and other items specific to the landowners' property. The conservationist may also include other alternatives that the landowner has not or is not ready to make a decision on, but are needed to protect the resource. The landowner then requests needed assistance from the NRCS and partners to implement the practices. 9) Evaluate the Plan. NRCS and partners will assist the landowner to evaluate the effectiveness of the plan as it is implemented. Conditions often change and may bring about the need to adjust the plan. NRCS and partners will use information gathered during evaluations to "fine-tune" our conservation practices in meeting natural resource needs.

**(b) Identify and provide detail about the natural resource concern(s) to be addressed in this project.**

The resource concerns most likely to be addressed in this project will include water quality (excessive nutrients and organics in surface water), soil erosion (sheet and rill, ephemeral gully, classic gully, streambank), and soil condition (contaminants, animal waste and other organics N and P, commercial fertilizer N). Other concerns may be addressed if landowners are interested in implementing conservation practices. A list of approved natural resource concerns to address in project proposals can be found here. [http://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/home/?cid=nrcsdev11\\_024120](http://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/home/?cid=nrcsdev11_024120)

**(3) Detailed Project Description:**

**(a) A detailed description of the geographic area covered by the proposal, including:**

**i. Types of land uses to be treated;**

The size of the Pearl Lake watershed is approximately 18,237 acres (28.5 square miles). Land use percentages of the Pearl Lake watershed, based on the 2001 National Land Cover Database (NLCD), are summarized as follows:

- 53% cultivated agriculture
- 21% pasture and grassland
- 13% forest
- 7% open water and wetland
- 6% developed

Mill Creek and an unnamed creek are the primary sources of surface water inflows to Pearl Lake. A large portion of the Pearl Lake Watershed is landlocked and does not contribute surface flow to Pearl Lake. These watersheds are located to the south and southeast of Pearl Lake. It is assumed that these areas do not contribute phosphorus to Pearl Lake.

- The land use percentages for watershed areas contributing surface flow (i.e., drain to either Mill Creek or /and unnamed creek) are summarized as follows:
  - 46% cultivated agriculture
  - 25% pasture and grassland
  - 17% forest
  - 7% open water and wetland
  - 5% developed

**ii. The location and size of the proposed project area, and what 12-digit HUC sub-watershed(s) the project will be within.** The proposed project area is located in Southeast Stearns County in Maine Prairie, Fair Haven, Wakefield, and Luxemburg Townships, and the Cities of Rockville and Kimball. The Grand Pearl Watershed is 30,712 acres and contains approximately 58 active feedlots. The Pearl Lake sub-watershed is identified as 070102020605 and the Mill Creek sub-watershed is identified as 070102020606. Both sub-watersheds are located in the Sauk River Watershed, identified as 07010202.

**(b) A detailed map showing the project area. Include on the map:**

- i. Outlined areas that need conservation treatments;** See Maps 2, 3, and 4
- ii. Location where conservation treatments are needed;** See Maps 2, 3, and 4
- iii. Priority order for the different areas to be treated.** See Maps 2, 3, and 4

**(c) A description of the project timeline. Include:**

**i. Duration of the project, not to exceed 4 consecutive years in length beginning in FY 2012;** Duration of the project will be from August 1, 2012, through July 31, 2016.

**ii. Project implementation schedule that details when different objectives and conservation practices and enhancements will be completed;** Certain conservation practices will be 3 years in duration such as nutrient and pest management (590 and 595) or residue management (329). Others will be dependent on construction scheduling such as waste storage facilities (313) and will likely be completed within one year of sign-up. Producers who enroll in the guided stalk sampling will have the option to sign up each year through the duration of the project. All enhancements, conservation practices and objectives will be completed by July 31, 2016.

**iii. When partner and Federal resources will be used within the timeframe of the project.**

**Table 1.**

EQIP	FY 2012	FY 2013	FY 2014	FY 2015	TOTAL (\$)
Practices	175,200	200,200	200,200	200,200	<b>775,800</b>
On-Farm Network	22,500	22,500	22,500	22,500	<b>90,000</b>
					<b>\$865, 800.00</b>

**iv. When the final project report will be submitted.** The project will be four years in duration, beginning August 1, 2012 and ending July 31, 2016. A final report will be provided at the end of the project describing the results of all of the objectives.

**(d) A description of the plan for evaluating and reporting on progress made toward achieving the objectives of the agreement.** Report progress in Protracts and Toolkit as contract requirements are met.

**(e) Identify potential criteria to be used by NRCS to prioritize and rank agricultural producers' applications for EQIP, CSP, and WHIP in the project area.** The National and State Application Evaluation and Ranking Tool will be used to prioritize and rank producers.

**(f) An estimate of the percentage of producers, including nonindustrial private forest landowners, in the project area that may participate in the project along with an estimate of the total number of producers located in the project area.** The Sauk River Watershed District has identified 105 feedlots within the Grand Pearl Watershed. There are approximately 34 feedlots in the Pearl Lake watershed that contributes surface water runoff to the lake. According to the Stearns County Environmental Services Department, six feedlots are non-compliant that are greater than 10 animal units. We are expecting non-

compliant as well as compliant agricultural producers to enroll in the On-Farm Network® to benefit from better nitrogen management. We estimate that 10-20% of the total number of agricultural producers will participate in the program in some way such as implementing buffer strips, or enrolling in prescribed grazing. Our goal is to bring at least 4 of the 8 animal feedlots into compliance with Minn. R. 7020.2003 Water Quality Discharge Standards through this MRBI proposal.

**(g) A listing and description of the approved MRBI-CCPI core conservation practices, conservation activity plans, enhancements, and partner activities to be implemented during the project timeframe and the general sequence of implementation of the project.** All conservation practices that avoid, control and trap nutrients will be promoted. The approved list of practices can be found at [http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb1046714.pdf](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1046714.pdf) . The nine step planning process will be implemented to identify the appropriate conservation practices for each individual producer. All partners identified in this application will have a role to increase conservation practice implementation. The partner activities have been identified in their letter of support (attached). A detailed breakdown of each conservation practice to be implemented by producers in the targeted watersheds is not available at this time. MRBI funds would be used to assist landowners with feedlot regulatory compliance issues that do not require a NPDES permit. Possible core practices include but are not limited to 328, 340, 528, 590, 329, 512, 393, and 635. Possible supporting practices include but are not limited to 313, 472, 595, 382, 386, 342, and 350.

**(h) Also address technical assistance efforts that will be made by the partner. Describe any activities that are innovative and include outcome-based performance measures, such as water quality monitoring, to be implemented by the partner.** MinnFarm and RUSLE 2 will be used to model pollutant loading reductions from conservation practices implemented.

**(i) Indicate whether the project will address specific regulatory compliance and any other outcomes the partner expects to complete during the project period.** The primary goal of this application is to bring non-compliant feedlots into compliance with Minn. R. 7020 water quality discharge standards. Other goals include promoting the importance of nutrient management planning, especially working with producers greater than 300 animal units that are required by Minn. R 7020 to have a manure management plan in place. Minnesota shoreland management rules require a minimum 50-foot wide buffer on agricultural land in shoreland areas adjacent to designated public waters. Through studying high resolution aerial photography within the Grand Pearl Watershed, we have identified areas of concern where feedlot improvements are needed (see map 5 below), as well as buffer strips (see map 6 below). We plan to contact landowners in those areas and promote the implementation of conservation practices on their property. It is also the goal of this project to delist Mill Creek from the 303(d) list.



Map 5



Map 6

**(j) A detailed description of any requested adjustments, by program, with an explanation of why the adjustment is needed in order to achieve the objectives of the project. Requested adjustments or flexibilities must comply with statutory and regulatory requirements.** None at this time.

**(k) A science-based description of how the proposal's objectives also may provide additional benefits by addressing energy conservation or mitigating the effects of climate change, if applicable.** Producers enrolled in the On Farm Network's Guided Stalk Sampling program will fine tune and improve nitrogen management practices that will result in reduced traffic in fields, more efficient nitrogen use and less commercial fertilizer being applied. This could mean less nitrogen lost to volatilization, decreased amounts being leaching to groundwater, and reduced compaction.

**(l) If applicable, a detailed description of a plan to conduct water quality monitoring and evaluation and the reporting of progress made toward achieving MRBI objectives and desired outcomes.**

The SRWD measures lake and stream water quality, stream flow, and weather conditions at multiple locations throughout the greater Sauk River watershed. For the purposes of this TMDL, the most important data is that from the monitoring station on Mill Creek in Rockville (ID S000-444). The continued collection of monthly or weekly *E. coli* data will be essential to track water quality trends, assess progress towards implementation goals and make adaptive management decisions.

In addition to its regular monitoring program, the SRWD implements special monitoring projects to track the outcome of specific actions or to investigate water quality concerns. Supplemental monitoring of this nature will occur throughout the course of TMDL implementation. The following recommendations are made to supplement the regular monitoring program:

- Continue monthly or bi-weekly water quality monitoring on Mill Creek and coordinate sampling at monitoring locations S003-880 (Unnamed tributary from Grand Lake at 230<sup>th</sup> St.) and S003-882 (Mill Creek at 230<sup>th</sup> St.) to separate out *E. coli* loading from the unnamed tributary and the main stem of Mill Creek.
- Perform instantaneous flow measurements when water quality samples are collected to aid in the determination of total *E. coli* loading.

The findings of this study indicate that the primary *E. coli* sources to Mill Creek are riparian pastures, surface applied manure, and runoff from feedlots without runoff controls. Bacteria load reductions from these sources will be the most effective towards meeting water quality goals. Given the severe bacteria load reductions that are required in the Mill Creek watershed, all stakeholders in the drainage area must be empowered to participate in a variety of load reduction strategies.

The water quality of Pearl Lake has been monitored infrequently over the past three decades. Water quality data (phosphorus and TSS) were collected in 2009 for Mill Creek and the unnamed creek. The Sauk River Watershed District will coordinate continued monitoring of water quality in Pearl Lake, as well as Mill Creek and the unnamed creek. For the years in which monitoring is conducted (e.g., just prior to and after implementation) and with consideration of fund availability, water quality measurements should be collected monthly in Pearl Lake from May through September.

- Secchi disc transparency
- Dissolved oxygen (1-meter depth intervals)
- Temperature (1-meter depth intervals)
- pH (1-meter depth intervals)
- Total phosphorus (surface, mid-depth, and near bottom)
- Dissolved phosphorus (surface, mid-depth, and near bottom)
- Chlorophyll *a* (surface only)

For years in which monitoring is conducted (e.g., just prior to and after implementation) watershed monitoring (Mill Creek and the unnamed creek) should be conducted at a frequency of once every two weeks for the period of April through November. The following parameters should be collected from the watershed monitoring locations:

- Total phosphorus
- Dissolved phosphorus
- Total suspended solids
- Flow

**(4) Partner Description:**

**(a) A description of the partner(s) history of working with agricultural producers to address conservation priorities;** The Stearns County SWCD has a strong partnership with the SRWD. Where the SWCD and NRCS provided the local technical leadership in implementing conservation practices and the SRWD provided the water quality and monitoring education leadership. Other partners listed are critical in achieving a higher level of applied conservation practices. The Stearns County SWCD and partners have delivered conservation at record levels. Stearns County has more completed EQIP contracts than many States. The Stearns County SWCD has 62 years of putting conservation on the ground, and has fostered an efficient and longstanding relationship with landowners in Stearns County.

**(b) A description of how the partner(s) will collaborate to achieve the objectives of the agreement including:**

**i. The roles, responsibilities, and capabilities of the partners; (Please see attached letters of support for additional details)**

- SWCDs/NRCS: provide leadership in identifying natural resource concerns, motivated producers, program promotion and marketing.
- Sauk River Watershed District (SRWD): monitoring and program promotion and marketing.
- USFWS: Identification of potential wetland restoration
- USGS: Monitoring support
- Board of Water and Soil Resources (BWSR): Financial assistance
- Minnesota Department of Agricultural (MDA): Program promotion and technical assistance
- Minnesota Pollution Control Agency (MPCA): Program promotion and technical assistance
- Minnesota Department of Natural Resources (DNR): Program promotion and technical assistance
- The Nature Conservancy (TNC): Program promotion and technical assistance
- Midwest Organic and Sustainable Education Service (MOSES): Program promotion
- Minnesota Milk Producers Association (MMPA): Program promotion and technical assistance
- Minnesota Agricultural Water Resources Coalition (MAWRC): Program promotion and technical assistance
- Minnesota Corn Growers Association (MCGA): Program promotion
- Minnesota Soybean Growers Association (MSGGA): Program promotion
- Environmental Defense Fund (EDF) will coordinate the On-Farm Network® program within the watershed. In addition to providing outreach to producers through publications, meetings, and on-on-one interactions, EDF will train the SWCDs and crop consultants on aerial imagery analysis, setting up strip trials, and collecting corn stalks for lab testing.
- Iowa Soybean Association will manage all data submitted by producers through On-Farm Network®. ISA will analyze and communicate nutrient data on the level of the individual farm as well as aggregate. From the data analysis, ISA will provide guidance on nutrient management practices within the watershed to enable adaptive nutrient management farming practices as producers react to the datasets.

ii. The financial or technical commitments of each of the partner(s) and how they will be leveraged by the Federal contribution through EQIP, WHIP, CSP, or a combination of the three. Include specifically what commitments will be used toward water quality monitoring needs. If partners who do not submit the proposal intend to commit resources, a letter or other documentation from these partners confirming a commitment of specified resources is required. The Stearns SWCD intends to promote the Ag. BMP Loan in order to address septic systems that are failing or an imminent threat to public health.

(c) A description of the resources (financial and technical assistance) requested from each of the applicable NRCS programs (EQIP, WHIP, and CSP) and the non-Federal resources provided by the partner that will be leveraged by the Federal contribution. Partners need to clearly state, by project objective, how they intend to leverage Federal funds along with partner resources. The funding and time contribution by agricultural producers to implement agreed-to conservation practices and enhancements in program contracts will not be considered any part of a match from the potential partner for purposes of CCPI.

Table 2.

	EQIP Financial Assistance Total	EQIP Technical Assistance Total
<b>Objective 1: Riparian Pasture Mgmt./Streambank and Shoreline Protection</b>	<b>\$89,000</b>	<b>\$2300</b>
<b>Obejective 2: Nutrient Mgmt.</b>	<b>\$169,000</b>	<b>\$1500</b>
<b>Objective 3: on Farm Network</b>	<b>\$66,000</b>	<b>\$24,000</b>
<b>Objective 4: Reduce Feedlot Runoff</b>	<b>\$480,000</b>	<b>\$6000 (CNMP) \$28,000 (313)</b>

(d) A description of how the partner will facilitate the submission of landowner applications; Direct contact will be made with the non-compliant feedlot owners in the watershed describing funds available and practices that are applicable to bringing their feedlots into compliance. Direct contact will also be made with agricultural producers to determine interest in guided stalk sampling, and other conservation practices. The National and State Application Evaluation and Ranking Tool will be used to prioritize and rank producers. Extensive planning and discussion with the landowner will be essential to tailoring a contract that will meet their needs.

(e) A description of how the partner will provide for outreach to beginning landowners or ranchers, limited resource landowners or ranchers, socially disadvantaged landowners or ranchers, and Indian Tribes. Beginning landowners and historically underserved people will be targeted for participation through an aggressive promotional campaign, including local newspapers, radio, partners' newsletters and websites, and one-on-one personal contact.