

**Environment and Natural Resources Trust Fund
2012-2013 Request for Proposals (RFP)**

Project Title:

ENRTF ID: 098-E2

Tracking Private Landowner Motivations for Water Resource Conservation

Topic Area: E2. NR Info Collection/Analysis

Total Project Budget: \$ 194,914

Proposed Project Time Period for the Funding Requested: 3 yrs. July 2013 - June 2016

Other Non-State Funds: \$ 10,000

Summary:

The value of precision conservation tools is limited unless landowners are willing to implement targeted conservation. This project assesses the effectiveness of promotional efforts on BMP adoption and voluntary stewardship.

Name: Paul Nelson

Sponsoring Organization: Scott County/ Scott WMO

Address: 200 Fourth Ave W
Shakopee MN 55379

Telephone Number: (952) 496-8054

Email: pnelson@co.scott.mn.us

Web Address: www.co.scott.mn.us

Location

Region: Metro, SE

County Name: Carver, Dakota, Goodhue, Hennepin, Le Sueur, Rice, Scott

City / Township:

_____ Funding Priorities	_____ Multiple Benefits	_____ Outcomes	_____ Knowledge Base
_____ Extent of Impact	_____ Innovation	_____ Scientific/Tech Basis	_____ Urgency
_____ Capacity Readiness	_____ Leverage	_____ Employment	_____ TOTAL _____%



Environment and Natural Resources Trust Fund (ENRTF) 2012-2013 Main Proposal

PROJECT TITLE: Tracking Private Landowner Motivations for Water Resource Conservation

I. PROJECT STATEMENT

Tens of millions of dollars are spent annually on conservation programs in Minnesota. Significant progress has been made developing precision conservation tools to identify where conservation will provide the most return. However, these investments are at risk unless landowners are willing to implement and maintain conservation where these tools suggest implementation is most effective. One critical question is whether incentives to landowners for conservation are sustainable over the long run, or if they instead create a dependency on or an expectation for future payment. Despite this, surprisingly little information exists on private landowner beliefs and motivations regarding conservation, particularly with respect to streamside buffers. This project will improve understanding of landowner motivations by tracking and assessing the effectiveness of public outreach and best management practice (BMP) promotional efforts for shoreland buffer adoption and maintenance across 4 watershed organizations. These organizations use different approaches and represent different private landowner demographics spanning urban to rural land uses. For two of the organizations a baseline assessment of landowner beliefs and attitudes was completed in 2011 providing an opportunity for a follow-up assessment of the effectiveness of program adaptations. For the other two organizations new assessments will expand the available information. Finally, this project will create a state-wide assessment tool and guidance for assessing the social aspects of promoting BMPs.

Project Goal: To assess the effectiveness of various education and outreach efforts in promoting landowner adoption and maintenance of BMPs, particularly shoreland buffers. The resulting assessments will be used to improve programs of the project partners and to develop an assessment tool and guidance that can be used state-wide for evaluating and improving BMP adoption and promotion programs.

II. DESCRIPTION OF PROJECT ACTIVITIES

Activity 1. Minnehaha Creek Watershed District (MCWD) urban shoreline buffer assessment aimed at increasing BMP maintenance. Budget: \$29,953

We will assess opportunities and constraints to shoreland buffer installation in urban areas and monitor the effectiveness of a *BMP compliance initiative* in promoting buffer maintenance. In this assessment the effect of interventions aimed at increasing BMP maintenance (e.g., notification mailing, educational mailing, onsite visits) will be tracked. Landowners who are early adopters, late adopters, and non-adopters will be interviewed to identify and compare motivations and barriers to behavior change.

Outcome	Completion Date
1. Up to 30 interviews and 3 focus groups with targeted landowners completed	December 2013
2. Interview data analyzed for social (e.g., motivation) impacts of program	December 2014
3. Final report of identifying opportunities, constraints and program effectiveness	June 2016

Activity 2. Cannon River Watershed Partnership (CRWP) assessment of rural watershed councils. Budget: \$64,998

We will assess opportunities and constraints to shoreland buffer installation in rural areas and monitor the effectiveness of a citizen-based *watershed council initiative* in promoting shoreland buffer installation. We will conduct interviews and focus groups with resource professionals, local decision-makers and watershed council members to identify opportunities and constraints associated with buffer

installation. We will then conduct a streamside landowner survey in watersheds with and without watershed councils to examine the social impacts of watershed councils.

Outcome	Completion Date
1. Gap exercise with local stakeholders completed	December 2013
2. Survey of landowners in targeted watersheds completed	August 2014
3. Survey data analyzed for social (e.g., motivation) impacts of program and focus groups conducted	August 2015
4. Final report identifying the social impacts of watershed councils	June 2016

Activity 3. Scott WMO and Vermillion River JPO urban-rural fringe BMP adoption program assessments.

Budget: \$74,963

We will monitor the effectiveness of integrated approaches used by two watershed organizations in promoting shoreland buffer installation and maintenance. Approaches include development incentives, cost share and incentives, positive messaging and success stories paired with landowner relationship-building techniques, a buffer maintenance compliance initiative, Watershed Restoration and Protection planning, and a voluntary conservation easement program. Streamside landowners will be surveyed about their values, beliefs and behaviors associated with streamside buffers. Comparing 2011 survey findings with 2015 survey findings will reveal any changes in landowner beliefs and behaviors.

Outcome	Completion Date
1. Surveys targeting 2,000 landowners in two watersheds completed	December 2015
2. Survey data analyzed for social (e.g., motivation) impacts and compared to 2011 survey data	March 2016
3. Final report prioritizing the effectiveness of various outreach efforts	June 2016

Activity 4. Statewide program assessment tool and guidance development.

Budget: \$25,000

We will develop a statewide water resource program assessment tool for monitoring social outcomes. The tool will guide resource managers in inventorying existing information and gathering new information using interviews, focus groups and surveys. The finished tool and guidance will be promoted using state-wide resources of the Association of (Watershed) District Administrators, and training sponsored by the Water Resources Center and the Board of Water and Soil Resources.

Outcome	Completion Date
1. Stakeholder inventory completed	December 2013
2. Project advisory team assembled and project findings presented	December 2014
3. Project advisory team review statewide assessment tool	December 2015
4. Final report and guidance completed	June 2016

III. PROJECT STRATEGY

A. Project Team/Partners. The project is a partnership between four watershed organizations and the University of Minnesota Water Resources Center and Department of Forest Resources. The University will conduct the surveys, focus group meetings, evaluations and reports. Co-Principal Investigators are Dr. Mae Davenport and Dr. Karlyn Eckman. The watershed organizations will help develop the surveys, host meetings, provide mailing/participant lists, help interpret results, and review reports. Scott County (acting as the Scott WMO) will be the fiscal agent and will provide project management. The University of Minnesota and the Cannon River Watershed Partnership will receive Trust Funds to complete their efforts.

B. Timeline Requirements. The project will require three years to implement.

C. Long-Term Strategy and Future Funding Needs. This project is not part of a longer-term project.

2012-2013 Detailed Project Budget

Tracking Private Landowner Motivations for Water Resource Conservation

Overall Budget

IV. TOTAL ENRTF REQUEST BUDGET 3years

<u>BUDGET ITEM</u>	<u>AMOUNT</u>
Personnel: None - Scott County Management provided as In-Kind under Other Funds	\$ -
Contracts: University of Minnesota (Water Resources Center and Department of Forest Resources). <u>Personnel:</u> Davenport (Co-PI), 1.25 mo. faculty salary and fringe (0.36) (Davenport, Co-PI; 0.1 FTE); Eckman (Co-PI) 5.5 mo. researcher salary and fringe (0.36) at 50%; Research Associate, 24 mos. Salary and fringe (0.36) at 50%. <u>Other:</u> Audio recording and transcription equipment, survey printing and mailing, data storage; travel, and participant reimbursements (incentives at \$50 x 30 participants).	\$ 189,914
Contract: Cannon River Watershed Partnership: CRWP Staff to set up focus groups and mailing lists, meeting space rental, GIS work. Supplies and travel.	\$ 5,000
TOTAL ENVIRONMENT AND NATURAL RESOURCES TRUST FUND \$ REQUEST =	\$ 194,914

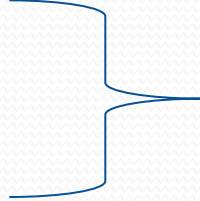
V. OTHER FUNDS

<u>SOURCE OF FUNDS</u>	<u>AMOUNT</u>	<u>Status</u>
Other Non-State \$ Being Applied to Project During Period: <i>Cash contributions toward U of M contract. \$5,000 each (MCWD, Scott WMO, VRWJPO).</i>	\$ 15,000	<i>\$10k secured, \$5k Pending</i>
Other State \$ Being Applied to Project During Project Period:	\$ -	
In-kind Services During Project Period: MCWD Intern (fringe 0.15) for Activity 1	\$ 5,000	Secured
In-kind Services During Project Period: MCWD Education Manager (fringe 0.33) for Activity 1	\$ 3,000	secured
In-kind Services During Project Period: Scott County/ Scott WMO Staff (Project Manager and Support Personnel) for project management, contracting and reporting for all Activities (fringe 0.33)	\$ 5,320	Secured
In-kind Services During Project Period: VRWJPO staff (fringe 0.33) for meetings, coordination, mailing list development for Activity 3.	\$ 2,500	Secured
In-kind Services During Project Period: Scott WMO/ Scott County staff (fringe 0.33) for meetings coordination, mailing list development for Activity 3.	\$ 2,500	Secured
Funding History: Baseline surveys were supported by funding from the United States Geological Survey under Grant/Cooperative Agreement Number 06HQGR0093. BMPS promotional activities by the 4 watershed organizations collectly exceeds \$1,000,000 annually.	\$ 1,000,000	Annually Plus

How do adopters and non-adopters differ?

Sand Creek and Vermillion Watersheds 2011 Survey Results, Dataset (n=759)

Non-adopters compared to adopters of shoreland buffers

• Perceive inability to change land use	>45%		Results suggest these areas are where adjustments should be made to BMP promotional efforts.
• Less civically engaged	>50-85%		
• Negative beliefs about buffers	>25%		
• Don't feel personally obligated to use conservation practices	>15%		
• Unlikely to use conservation practices in the future	>12%		

Using results from the baseline survey (shown above), the Scott WMO is revising its programs to use positive messaging and success stories to show that change is possible, and is increasing the number of activities where landowners can work in community with others on conservation to increase opportunities for civic engagement. Repeating the monitoring efforts in a few years and comparing to the baseline survey will allow assessment of how well these adjustments are working.



Environment and Natural Resources Trust Fund (ENRTF) 2012-2013 Main Proposal

PROJECT TITLE: Tracking Private Landowner Motivations for Water Resource Conservation

Project Manager: Paul Nelson, Natural Resources Program Manager, Scott County. Mr. Nelson will serve as the overall Project Manager with LCCMR and the partners. In this capacity he will be responsible for contract management with the LCCMR, contracting with each of the partners, schedule compliance, fiscal management, and reporting. He will also be the point of contact for coordinating Activity 3 efforts with the University within the Scott WMO.

Mr. Nelson in his capacity as the Natural Resources Program Manager for Scott County administers the Scott WMO, and oversees Scott County efforts for the Vermillion River Watershed JPO. Under these combined programs he manages an annual budget of about \$2million, and programs that are implementing 50 to 100 projects with landowners annually. He also works closely with the Scott SWCD and oversees all of the shoreland buffer program and public education efforts in the County being assessed by the project. He was involved in the baseline monitoring completed by Dr. Davenport. He is also leading the effort to revise Scott WMO programs in response to the findings of the baseline social monitoring.

Mr. Nelson has over 25 years' experience in natural resource management, project management and public involvement: mostly related to watershed management. He has managed projects ranging in size from a few thousand dollars to \$1 million with project teams up to 10 people. These include many of a similar size and complexity to the proposed project. He has an M.S. in Forestry from North Carolina State University, and a B.S. in Biology from Central Michigan University.

Organizational Description: The Scott Watershed Management Organization (Scott WMO) is a County based WMO, and is not a separate unit of government. As such Scott County is the lead organization and the full resources (i.e., accounting, human resources, contracting, and public relations) of the County are available to Mr. Nelson for managing the project. Scott County has a role in three of the four watersheds partnering in this project. Scott County acts as the Scott WMO, the County is one of two members of the Vermillion River Watershed Joint Powers Organization, and a small portion of the County drains to the Cannon River. In addition, the Scott WMO previously worked with the University of Minnesota, Department of Forest Resources on the baseline social monitoring used in the project.

The approved Comprehensive Water Resources Management Plan of the Scott WMO embraces a management vision focused around the creation of a buffered environment and the use of green infrastructure. The vision as articulated in the Plan is:

To compile a system of well buffered water courses, wetland and lakes surrounded by an upland where stormwater runoff is managed to reduce volumes, control peak flows and their timing, and minimize pollutant generation and export; and where resources meet local expectations.

The County views this project as an integral step toward meeting this vision. In particular, the Scott WMO Plan sets out a number of policies and strategies to create a buffered aquatic environment and the County levies around \$1million/year to implement. This is complemented by the County's Comprehensive Land Use Management Plan that includes a Natural Resource Corridors strategy to protect and provide buffering through the development process, and management of Regional Parks. Learning more about how Scott WMO and Scott County policies and plans affect social outcomes will help us adapt our program efforts to be more effective.