

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

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**Project Title:**

**ENRTF ID: 097-E2**

Minnesota River Basin Report Card

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**Topic Area:** E2. NR Info Collection/Analysis

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**Total Project Budget:** \$ 182,951

**Proposed Project Time Period for the Funding Requested:** 2 yrs. July 2013 - June 2015

**Other Non-State Funds:** \$ 0

**Summary:**

The Minnesota River Basin Report Card clarifies water quality improvement efforts by synthesizing the latest river research and conservation measures and converting it into an image-rich, widely accessible format.

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**Location**

**Region:** Metro, SW, SE

**County Name:** rns, Steele, Stevens, Swift, Traverse, Waseca, Watonman, Yellow Medicine

**City / Township:**

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_____ 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: Minnesota River Basin Report Card

**I. PROJECT STATEMENT** The Minnesota River Basin has been cited as one of the most polluted rivers in the state and nation. As research has clarified pollution sources, the Minnesota River has increasingly been identified as a major contributor of sediment and nutrients to the Mississippi River and Lake Pepin as well as impacting the Gulf of Mexico further downstream. Considerable public funding and effort has gone into better understanding and restoring the Minnesota River. However, this data is housed primarily in technical reports from an array of different agencies and research institutions. Numerous basin-wide stakeholder meetings have come to the same conclusion: there is a need to bridge the information gap between researchers and the public and generally improve environmental education about the river. Significant pollution reduction in this river basin will be required in order to meet water quality goals. To help achieve this, there is a need to effectively summarize and communicate complex scientific findings for the general public. The Minnesota State University, Mankato Water Resources Center (WRC) will provide a report card that summarizes 1) watershed health (water quality and biotic indicators) and 2) clean up efforts (conservation measure indicators) for each of the 12 major watersheds in the basin. Report cards synthesize data from scientists and convert it into an image-rich format that is easily accessible to a wide audience. The report card format has proven a useful tool to improve water quality in other regions, notably the Chesapeake Bay.

### Overall Goals:

- To provide the public with the latest data about the overall health of the Minnesota River Basin by summarizing the latest water quality and biotic data and conservation efforts.
- To help get the latest information into the hands of decision makers at an appropriate technical level for general citizens.
- To provide an innovative educational tool – an easy to understand report card format – that will enrich and update the Minnesota River Basin Data Center web site (<http://mrbdc.mnsu.edu>)
- Broadly, to increase public awareness of environmental issues and promote environmental stewardship.

### Direct Impacts:

- Civic leaders and community members within the basin can compare their “grades” with neighbors. Research has shown that these comparisons can motivate and lead to better environmental outcomes.
- Clarify water quality status, impacts and solutions for citizens within the 37 county Minnesota River Basin (~700,000); downstream Metro (~2.8 million); and other downstream stakeholders.

## II. DESCRIPTION OF PROJECT ACTIVITIES

This report card will provide a geographically detailed assessment of the Minnesota River Basin’s overall health. It will rate each of the 12 major watersheds of the basin using numerous indicators that would be combined into one index of health and one index of conservation measures. A website will be developed that enables citizens to explore the report card via the major watersheds, the basin as a whole, or by the indicators.

### Activity 1: *Develop Indicators*

**Budget: \$55,025**

An interagency team will develop a list of water quality and biotic indicators to broadly characterize watershed health and indicators for conservation measures. The best available indicator data will be collected, compiled, and summarized from a variety of different sources (e.g. water quality monitoring data, modeled estimates of sediment, nitrogen and phosphorus loading (MPCA, USGS), Watershed Assessment Tool (MDNR), conservation practices (BWSR) etc.

Outcome	Completion Date
1. An interagency team identifies and prioritizes key water quality and biotic, and conservation measures indicators	June 30, 2014
2. Indicator data is collected, compiled, and summarized	June 30, 2014

**Activity 2: Develop Report Card**

**Budget: \$95,745**

A report card will be developed that summarizes indicators by watershed and basin. Maps and graphics will be developed to simply explain key watershed parameters.

Outcome	Completion Date
1. Indicator data is summarized by watersheds and basin	June 30, 2015
2. GIS analysis, maps, and graphics are developed	June 30, 2015
3. Focus Groups with citizens are conducted to assess report card clarity & effectiveness	January 30, 2015
4. Report card is finalized based on advisory team and focus group feedback	June 30, 2015

**Activity 3: Education & Outreach**

**Budget: \$32,180**

The Report Card will be disseminated via traditional and social media venues. A website will be developed and integrated into the Minnesota River Basin Data Center website. Presentations will be given to the public and watershed organizations already working on improving water quality and the environment.

Outcome	Completion Date
1. Report Card website designed and developed	June 30, 2015
2. Report Card is publicized via traditional & social media venues & presentations	June 30, 2015

**III. PROJECT STRATEGY**

**A. Project Team/Partners**

**Project Team:** *The following team would be receiving funds from ENRTF*

Kimberly Musser, Assistant Director, WRC. Tasks: Manage project; collect and compile inventory data; summarize data; create graphs, charts, maps, website; and outreach.

Rick Moore, GIS Specialist, WRC. Tasks: Collect, compile, and summarize data; create maps, graphics, and website; outreach.

Diane Wiley, Office Manager, WRC. Tasks: Indicator development, graphics, and outreach.

**Advisory Team:** The following list of potential partners would be contributing in-kind support to serve as advisors developing criteria for indicators, contributing data, and reviewing materials: MPCA, MDA, MDNR, BWSR, SWCD, USACOE, County Staff, Citizen Groups (e.g. CURE, etc), and others.

**Contracts:** Website programming, development & design - \$5,000

University of Maryland, Center for Environmental Science Integration and Application Network, Report Card consultant - \$6,000

**B. Timeline Requirements – An anticipated 2-year process.**

*Year One: Activity 1 (June 30, 2014)*

*Year Two: Activity 2 & 3 (June 30, 2015)*

**C. Long-Term Strategy and Future Funding Needs**

This project is part of a larger strategy to increase public awareness about the health of the Minnesota River, part of the mission of many agencies and organizations. We will seek future funding from state and federal sources and private foundations to continue the effort.

## 2012-2013 Detailed Project Budget

### MINNESOTA RIVER REPORT CARD

#### IV. TOTAL ENRTF REQUEST BUDGET: 2 years

BUDGET ITEM	AMOUNT	
<b>Personnel:</b>		<b>\$ 166,633</b>
Staff - Kimberly Musser- 27% employment/yr (salary 100% soft money)- 2 yr period. Project Manager: indicator analysis and development, website, graphics, outreach. 35% benefits	90,720	
Staff- Richard Moore -11% employment/yr (salary 100% soft money) - 2 yr period. GIS Specialist: research indicators, create maps and graphics, outreach. 50% benefits.	43,725	
Staff: Diane Wiley - 7 % employment/yr (salary 10 % soft money) 2 yr period. Indicator development, data analysis, graphics, outreach. 76% salary - 30% benefits	12,870	
Students - 2 - 16% employment/yr (salary 100% soft money)- 2 yr period. Report Card development; maps, graphics and website development, outreach. 2% benefits (FICA paid during summer)	19,318	
<b>Contracts</b>		<b>\$ 11,000</b>
Website programming, development & design assistance	\$ 5,000	
University of Maryland Center for Environmental Science Integration and Application Network - Project consultants: experienced report card developers	\$ 6,000	
<b>Equipment/Tools/Supplies:</b> Printing 2,000 copies of Report Card	\$ 3,000	
<b>Travel:</b> Meetings with advisory team to develop indicators and outreach	\$ 2,318	
<b>TOTAL ENVIRONMENT AND NATURAL RESOURCES TRUST FUND \$ REQUEST =</b>	<b>\$</b>	<b>182,951</b>

#### V. OTHER FUNDS

SOURCE OF FUNDS	AMOUNT	Status
<b>In-kind Services During Project Period:</b> Staff time for 12 person advisory committee, 8 meetings	\$ 24,000	Pending

**Project Manager Qualifications and Organization Description**

**Kimberly Musser, Project Manager**

As Assistant Director of the Minnesota State University, Mankato Water Resources Center, Kimberly Musser has coordinated a wide variety of Minnesota River Basin projects. She has served as project manager for the State of the Minnesota River Water Quality Monitoring Reports, Minnesota River Basin Trends Report, Ask-an-Expert about the Minnesota River Project, Minnesota River Basin Data Center web site (<http://mrbdc.mnsu.edu>) update and expansion, among others. These projects have all centered on summarizing data and providing information about the Minnesota River and its tributaries.

Kimberly brings over a decade of project management experience to the project. Additionally, she has developed and taught over a dozen courses Minnesota State University in the Geography and Urban and Regional Planning departments. She holds a Masters degree in Environmental Planning from University of Oregon and an undergraduate degree in Geography from the University of California at Berkeley.

**Water Resources Center, Minnesota State University, Mankato (WRC)**

The WRC is uniquely situated to disseminate the latest information about the Minnesota River due to its involvement with data collection and distribution, policy development, and communication throughout the Minnesota River Basin. Three major Minnesota River projects are housed at the WRC. The Minnesota River Basin Data Center (<http://mrbdc.mnsu.edu>) is a data clearinghouse, originally funded by LCMR (LCCMR) in 1997, with a mission to develop, interpret, and disseminate data that impact the environment, economy and communities within the Minnesota River Basin. The Minnesota River Board (<http://www.minnesotariver.org>) director and staff are also based out of the WRC and work closely with the joint powers board to build partnerships and support efforts to improve and protect water quality in the Minnesota River Basin. The WRC is also involved in the citizen-based Minnesota River Watershed Alliance (<http://watershedalliance.blogspot.com/>), a coalition that connects a diverse selection of citizens, nonprofit organizations and government agencies and provides information about water quality related issues and efforts. In addition, we have GIS staff with the capacity to create sophisticated GIS analysis and maps and 3-dimensional landscape visualization.

The Water Resources Center (WRC) of Minnesota State University, Mankato was created in 1987 to serve as a regional center for environmental research and information exchange. The mission of the WRC is to gather, interpret, and distribute data of environmental significance to help citizens enhance the quality of regional lakes, rivers, wetlands, and groundwater. This is accomplished through faculty and student applied research, educational programming, technical assistance, and water resource planning.

Since its beginning, the WRC has participated in over 100 research, educational, and planning projects involving partnerships with dozens of public and private organizations. These projects range from groundwater, lake assessment, and TMDL studies to water quality workshops to development of watershed-based plans for surface water quality protection. Our stability since 1987 stands as a testament to the objective and quality products we produce. Long-term partnerships with counties, nonprofit organizations, and state agencies have resulted in many important and far-reaching land and water resource initiatives. We have a dedicated staff and look forward to enhancing the public's connection with the Minnesota River.

