# **Environment and Natural Resources Trust Fund 2019 Request for Proposals (RFP)**

| Project Title:  | <b>ENRTF ID:</b>    | 145-CH      |
|---|---------------------|-------------|
| Slow the Flow in the Minnesota River Basin  |                     |             |
| Category: H. Proposals seeking \$200,000 or less in funding   |                     |             |
| Sub-Category: C. Environmental Education  |                     |             |
| Total Project Budget: \$ 160,318  |                     |             |
| Proposed Project Time Period for the Funding Requested: June 30   | , 2022 (3 yrs)      |             |
| Summary:  |                     |             |
| A "Slow the Flow in the Minnesota River" media campaign and website wi<br>storage practices and programs that reduce water flow and improve water |                     | about water |
| <del>-</del>  |                     |             |
| Name: Kimberly Musser   |                     |             |
| Sponsoring Organization: Minnesota State University - Mankato - Water   | er Bosouroos Contor |             |
| Title: Associate Director   | i Nesources Center  |             |
| Department: Minnesota State University, Mankato   |                     |             |
| Address: 135 Trafton Science Center S   |                     |             |
| Mankato MN 56001  |                     |             |
| <b>Telephone Number:</b> (507) 389-5492   |                     |             |
| Email kimberly.musser@mnsu.edu  |                     |             |
| Web Address http://cset.mnsu.edu/wrc/   |                     |             |
| Location  |                     |             |
| Region: Southwest, Southeast  |                     |             |
| County Name: Statewide  |                     |             |
|   |                     |             |
|   |                     |             |
| City / Township:  |                     |             |
| Alternate Text for Visual:  |                     |             |
| A "Slow the Flow in the Minnesota River" media campaign and website wi<br>storage practices and programs that reduce water flow and improve water |                     | about water |
| Funding Priorities Multiple Benefits Outcomes   | Knowledge Base      |             |
| Extent of Impact Innovation Scientific/Tech Basis   | Urgency             |             |
| Capacity Readiness Leverage   | TOTAL               | _%          |
| If under \$200,000, waive presentation?   |                     |             |

Page 1 of 6 05/06/2018 ENRTF ID: 145-CH

#### PROJECT TITLE: Slow the Flow in the Minnesota River Basin

#### I. PROJECT STATEMENT:

Increasing water flow is a major problem in the Minnesota River Basin (MRB) accelerating erosion of river banks, reducing water quality and threatening infrastructure. The top theme among thousands of public comments received at statewide Water Quality Town Hall meetings was the need for "increasing education about water quality issues and solutions" (25 by 25 Report). This is especially true in the Minnesota River Basin, one of the most impaired river basins in the state, where cleanup solutions require individual action by thousands of urban and rural residents across the 15,000 square mile basin. The Minnesota River Congress endorsed a resolution to update and expand the Minnesota River Basin Data Center (MRBDC). This expansion will improve access to information and support decision-making that will help drive public engagement and partnerships to improve water quality in the MRB.

Many opportunities exist to improve information flow and simplify the complex maze of water governance and planning for citizens and water professionals alike. The MRBDC was developed in 1997 to serve as data clearinghouse for education and natural resource decision-making within the 37 counties of the Minnesota River Basin (LCCMR Grants 1997, 2010). However, there has been no subsequent allocation of funding to maintain or update this clearinghouse. Since the initial creation of the MRBDC, the amount of data about the basin has dramatically increased but it is housed on many diverse websites. The "Web of connections, program, and permit requirements can be difficult to navigate for many Minnesotans" (25 by 25 Report). This project will support staff time to develop information campaign and improve public access to key solution strategies to drive water quality improvements.

#### II. PROJECT ACTIVITIES AND OUTCOMES

#### Activity 1: Improve water quality by promoting water storage strategies that "Slow the Flow"

Finding water storage opportunities that reduce runoff is a major solution strategy to improve water quality in the MRB. Staff will develop informational materials and website to highlight the practices and programs that result in effective, economical water storage in both agricultural and urban areas. A central strategy is supporting more peer-to-peer learning and mentoring. This will be accomplished by highlighting local early adopters and innovators who share their honest assessment of benefits and challenges of implementing these practices as well as connecting landowners to local conservation partners and financial resources.

We will develop a "Slow the Flow" media campaign to highlight the benefits of water storage for pollution reduction, habitat enhancement, improved watershed health and quality of life. A steering committee will determine key water storage leverage points such as:

- Soil Health Promoting cover crops and low till farming;
- Multipurpose Drainage Management Identifying opportunities for water storage on drainage improvement projects; and
- Marginal lands Clarifying opportunity areas for restored wetlands and perennial vegetation.

For each topic, we will (1) create summary information to explain how these practices can help to reduce flow; (2) provide local case study examples and video links; and (3) summarize incentives and programs that support the practices for use by landowners and local partners.

#### **ENRTF BUDGET: \$57,442.00**

| Outcome | Completion Date |
|---------|-----------------|
|---------|-----------------|

| Assemble a steering team and create a "Slow the Flow" information campaign and  | June 2022 |
|---|-----------|
| website, develop web pages about soil health, drainage management, wetlands and |           |
| others TBD.   |           |

#### Activity 2: Improve water quality outreach, education and communication across the Minnesota River Basin

- Clarify major water quality challenges and solution strategies and make resources readily accessible to all stakeholders by aggregating information and developing materials.
- Create, update and maintain new searchable "Events" and "Contacts" and "Research" web pages. Develop a new searchable interface to foster improved communication about events, activities, and research.
- Support K-12 and watershed education. Integrate new teacher-developed watershed curriculum with the "Ask-An-Expert About the Minnesota River" website (LCCMR 2010), coordinate a "Speaker's Bureau" network to connect teachers and students with local experts to foster watershed-based in-class and field experiences, and develop watershed-based educational materials.

#### **ENRTF BUDGET: \$52,000.00**

| Outcome   | Completion Date |  |
|---|-----------------|--|
| Create, update and maintain events, contacts and research web pages; strengthen and | June 2022       |  |
| support K-12 watershed initiatives; and develop watershed summary information       |                 |  |

# Activity 3: Perform research and develop policy maps to support conservation targeting and regional problem solving

The Steering team and local policy makers will help to identify geographic resources that would support basin-wide analysis and decision making. Staff will collect and compile existing data layers and develop new ones as necessary. Using a basin-wide lens, staff will apply landscape-level GIS analysis to help answer key questions across the vast MRB. Data-driven policy maps will help policy makers frame issues and make decisions (e.g., coupling marginal lands with wetland opportunity or wellhead protection areas). Overall, we will use a basin-wide lens to support the capacity of the public, agency professionals, academics and elected officials to make more targeted, collaborative, and data-driven decisions.

#### **ENRTF BUDGET: \$50,875.00**

| Outcome  | <b>Completion Date</b> |
|--|------------------------|
| Aggregate data and create 50 data driven policy maps at basin and watershed scales | June 2022              |

#### **III. PROJECT PARTNERS:**

#### A. Partners receiving ENRTF funding - None

#### **B. Partners NOT receiving ENRTF funding**

| Name               | Title    | Affiliation                      | Role                  |
|--------------------|----------|----------------------------------|-----------------------|
| Steering Committee | Managers | SWCD, County, State Agency, NGOs | Data Inventory,       |
| Members            |          | (MPCA, MDNR, MDA, MDH)           | Issues Identification |

#### IV. LONG-TERM- IMPLEMENTATION AND FUNDING

We will work with a steering team comprised of citizens and local conservation partners to secure long term funding to support ongoing MRBDC updates and expansions.

#### V. TIME LINE REQUIREMENTS:

This project will take place over 36 months from July 2019-June 2022.

Page 3 of 6 05/06/2018 ENRTF ID: 145-CH

## 2019 Proposal Budget Spreadsheet

Project Title: Slow the Flow in the Minnesota River Basin

IV. TOTAL ENRTF REQUEST BUDGET [3] years

| BUDGET ITEM (See "Guidance on Allowable Expenses")   | - 1             | AMOUNT  |
|--|-----------------|---------|
| Personnel:   | \$              | 112,000 |
| Associate Director: \$34,000 (36% Salary and 13% Fringe); .15% FTE for years 1 ,and 11% FTE for 2nd/3rd year |                 |         |
| Project Manager: \$24,000 (31% Salary and 39% Fringe); 12% FTE each year of the 3 years                      |                 |         |
| GIS Specialist: \$36,000 (48% salary and 36% Fringe); 18% FTE for 3 years                                    |                 |         |
| Student Intern: \$18,000 @ \$6,000/academic year (3 yrs); 100% Salary and 0% Fringe; 45.5% FTE               |                 |         |
| Professional/Technical/Service Contracts:  | \$              | 40,000  |
| Web Programming and Support Services - \$30,000  |                 |         |
| Support of K12 Outreach and Education- \$10,000  |                 |         |
| Equipment/Tools/Supplies:  | \$              | 5,192   |
| Steering Committee Meetings - Meeting refreshments, rental and associated expenses \$3,650                   |                 |         |
| Printing of promotional and meeting materials - \$1,542  |                 |         |
| Acquisition (Fee Title or Permanent Easements):  | \$              | -       |
| Travel:  | \$              | 3,126   |
| Using IRS mileage rate of \$.46/mile and   |                 |         |
| using MSU, Mankato vehicle rate of \$60/day and \$35/half day  |                 |         |
| Driving to interviews, steering committee meetings and events across the Basin. TBD                          |                 |         |
| Additional Budget Items:   | \$              | -       |
| TOTAL ENVIRONMENT AND NATURAL RESOURCES TRUST FUND \$ REQU   | <b>EST =</b> \$ | 160,318 |

V. OTHER FUNDS (This entire section must be filled out. Do not delete rows. Indicate "N/A" if row is not applicable.

| SOURCE OF FUNDS   | AMOUNT |         | <u>Status</u>         |
|---|--------|---------|-----------------------|
| Other Non-State \$ To Be Applied To Project During Project Period: Water Quality Success Story Case Studies   | \$     | 100,000 | Pending               |
| Other State \$ To Be Applied To Project During Project Period: Minnesota State University, Mankato New Servers  | \$     | 20,000  | Secured               |
| In-kind Services To Be Applied To Project During Project Period: Steering Team State Agency and Local Partner Staff Time  | \$     | 10,000  | Secured               |
| Past and Current ENRTF Appropriation: Integrating Targeted Watershed Planning Tools with Citizen Involvement (2016). Educational Field Trip Online: Ask an Expert Minnesota River (2010); Minnesota River Basin Data Center Creation (1997) | \$     | 417,000 | Historic -<br>Secured |
| Other Funding History:  | \$     | -       |                       |

Page 4 of 6 05/06/2018 ENRTF ID: 145-CH

# SLOW THE FLOW IN THE MINNESOTA RIVER BASIN

### **DISSEMINATION**

Create a media campaign and outreach strategy to disseminate information about the benefits of reduced flow for water quality improvements to diverse stakeholder groups in the Minnesota River Basin.

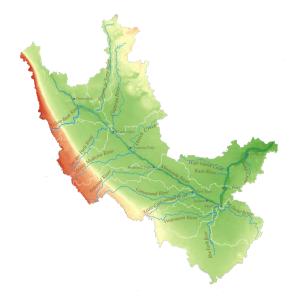


#### **EVENT SUPPORT**

Support and publicize events across the basin that promote water storage (e.g. soil health, retention basins, wetland restoration, perennialization). Improve outreach, education and communication on the basinwide data clearinghouse.

#### **RESEARCH & MAPPING**

Support conservation targeting and facilitate decision making through research and policy map development.



# MINNESOTA RIVER BASIN DATA CENTER



#### MINNESOTA RIVER BASIN DATA CENTER

The mission of the Minnesota River Basin Data Center is to inventory, develop, retrieve, interpret and disseminate pedigreed data and information on topics that impact the environment, economy and communities within the Minnesota River Basin. The data center functions to simplify the task of identifying and acquiring information and data necessary to facilitate natural resource decision making and education within the 37 counties of the Minnesota River Basin.

05/06/2018 ENRTF ID: 145-CH

#### PROJECT TITLE: Slow the Flow in the Minnesota River Basin

# Project Manager Qualifications and Organization Description Kimberly Musser, Project Manager

As Associate Director of the Water Resources Center, Minnesota State University, Mankato, Kimberly Musser brings over two decades of project management experience and has coordinated a wide variety of Minnesota River Basin centered projects. She has served as project manager for *Integrating Targeted* Watershed Planning Tools with Citizen Involvement (LCCMR, 2016) and Minnesota River Experts: An Educational Field Trip Online (LCCMR, 2010). She works with teams to distil and disseminate basin-wide information via reports (Minnesota River Basin Trends Report, State of the Minnesota River Water Quality Monitoring Reports, Cannon River Trends Report) and coordinates development of websites (Minnesota River Basin Data Center Update and Expansion, Minnesota Nutrient Planning Portal). Musser has a long history of working with citizens and local conservation partners to support locally-led watershed planning efforts (Le Sueur River Watershed Network, Watonwan Civic Engagement Project, East Fork Des Moines River Watershed PMZ, Southwest Minnesota Civic Engagement Cohort on Water Quality). She enjoys the challenge of taking complex technical and scientific information and making it understandable to broader audiences to help inform planning and decision making. She serves on the board of the Friends of the Minnesota Valley, Friends of Minneopa State Park and the Minnesota River Congress. Additionally, she has developed and taught a dozen courses at Minnesota State University, Mankato in the Geography and Urban and Regional Planning departments. She holds a Master's degree in Community and Regional Planning from the University of Oregon and a Bachelor's degree in Geography from the University of California at Berkeley.

#### Water Resources Center, Minnesota State University, Mankato (WRC-MSU, Mankato)

In 1987 the WRC-MSU, Mankato was created to serve as a regional center for gathering, interpreting, and distributing data of environmental significance. Faculty and students accomplish these tasks through applied research, educational programming, technical assistance, and water resource planning. In addition, we have GIS staff with the capacity to create sophisticated GIS analysis and maps and 3-dimensional landscape visualization. Using the latest data, the WRC-MSU, Mankato works with citizens within the Minnesota River Basin to enhance the quality of regional lakes, rivers, wetlands, and groundwater.

Since its beginning, the WRC-MSU, Mankato 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 citizen engagement and water quality workshops, to the 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 understanding and connection with water resources in the region.