

## Environment and Natural Resources Trust Fund 2009 Phase 2 Request for Proposals (RFP)

---

**LCCMR ID: 059-B2**

---

**Project Title:** Municipal Stormwater Management Assessment Tool (MSMAT)

**Total Project Budget:** \$ \$34,271

**Proposed Project Time Period for the Funding Requested:** 1 year (July 2009 to June 2010)

**Other Non-State Funds:** \$ \$23,000.00

**Priority:** B1. Reduce Soil Erosion

---

**First Name:** Trevor

**Last Name:** Russell

**Sponsoring Organization:** Friends of the Mississippi River

**Address:** 360 Robert St N, Suite 400  
St. Paul MN 55101

**Telephone Number:** 651-222-2193 x18

**Email:** trussell@fmr.org

**Fax:** 651-222-6005

**Web Address:** www.fmr.org

---

**Region:**

Metro

**County Name:**

Anoka, Carver, Dakota, Hennepin,  
Scott, Washington

**City / Township:**

metro area

**Summary:** This project will develop the Municipal Stormwater Management Assessment Tool (MSMAT) to help cities maximize water quality through enhanced city development codes, stormwater management standards, housekeeping procedures and BMP requirements.

---

**Main Proposal:** 1008-2-061-proposal-Main Proposal.doc

**Project Budget:** 1008-2-061-budget-Budget.doc

**Qualifications:** 1008-2-061-qualifications-Qualifications.doc

**Map:**

**Letter of Resolution:** 1008-2-061-resolution-Resolution.doc

---

# PROJECT TITLE: Municipal Stormwater Management Assessment Tool

## I. PROJECT STATEMENT

This project aims to reduce erosion and pollution through the reduction of municipal stormwater runoff. This will be achieved by assisting municipalities in reducing stormwater runoff through amendments to comprehensive plans, ordinances, codes and city practices that will result in a reduction of peak flow runoff and suspended sediments entering receiving waters.

While many municipalities may wish to implement advanced stormwater management policies and practices, assessing a municipality's comprehensive plans, codes, ordinances and practices aimed at protecting local water resources can be a difficult proposition for elected officials and municipal staff.

Many existing local codes, zoning regulations, parking requirements and street standards were developed prior to the emergence of storm water management concerns, and may inhibit the implementation of low-impact developments and advanced stormwater management.

This project will research, design, test and implement the Municipal Stormwater Management Assessment Tool (MSMAT) - a comprehensive tool for assessing municipal stormwater management practices. The modeling protocol will rate key community indicators such as city development codes, stormwater management standards and housekeeping procedures.

By using this tool as an audit of municipal performance, policy makers will be positioned to identify priority measures that municipalities can take to enhance stormwater management and volume control. This will enable communities to more efficiently and effectively enhance development guidelines to encourage low-impact development and advanced stormwater management planning.

## II. DESCRIPTION OF PROJECT RESULTS

**Result 1:** Identify measures of stormwater management performance for inclusion in the MSMAT

**Budget:** \$5,660.00

**Description:** Result 1 will be the identification of practices, codes, ordinances and other BMP's for inclusion in the MSMAT.

### Deliverable

1. Identify municipal codes, ordinances and BMPs that impact municipal stormwater management performance.

### Completion Date

August 1<sup>st</sup> 2009

2. Select, from the list developed as deliverable 1, the municipal codes, ordinances and BMPs that will be included in the MSMAT as measures of municipal stormwater management performance.

August 31<sup>st</sup> 2009

**Result 2:** Draft the Municipal Stormwater Management Assessment Tool (MSMAT)

**Budget:** \$31,049.00

**Description:** Result 2 will be the drafting of the MSMAT. This result will include three deliverables: the drafting of the tool itself, drafting of an implementation procedure manual for municipal staff and officials to use in administering the MSMAT, and a scoring methodology to assess individual stormwater management practices or ordinances within a municipality and assign a weighted score for each.

### Deliverable

1. Design the draft MSMAT, including layout and functionality of the tool and a matrix that compares existing municipal practices with identified codes, ordinances and best management practices from result 1.

### Completion Date

November 1<sup>st</sup> 2009

2. Develop implementation procedure manual for municipal staff and officials to use in administering the MSMAT that ensures consistent implementation across multiple users.

November 15<sup>th</sup> 2009

3. Develop comprehensive MSMAT scoring system that compares existing municipal codes and practices with identified BMPs and assigns each a weighted score to assess a municipality's overall performance.

November 30<sup>th</sup> 2009

**Result 3: Test Implementation**

**Budget:** \$9,640.00

**Description:** Result 3 will be the test implementation, evaluation and revision of the MSMAT prior to its final release. This step will allow project partners to assess the MSMAT and make adjustments that enhance its overall effectiveness prior to its release and distribution.

**Deliverable**

**Completion Date**

- |  |                                  |
|--|----------------------------------|
| 1. Test-implement the Draft MSMAT in two target communities.   | January 1 <sup>st</sup> , 2010   |
| 2. Evaluate the effectiveness of the draft MSMAT for accuracy, ease of use for municipal staff, clarity of results and consistency of scoring methods. | February 1 <sup>st</sup> , 2010  |
| 3. Revise draft MSMAT as needed based on test implementation results.  | February 28 <sup>th</sup> , 2010 |

**Result 4: Broadcast Implementation**

**Budget:** \$11,372.00

**Description:** Result 4 will be the wide scale broadcast distribution of the MSMAT to municipalities and interested parties state-wide. This tool will be made available, free of charge, to any interested municipality or MS4.

**Deliverable**

**Completion Date**

- |   |                             |
|---|-----------------------------|
| 1. State wide distribution of the MSMAT through online & media resources, community listserves, Minnesota Stormwater Cities Coalition and other networks. | June 1 <sup>st</sup> , 2010 |
| 2. Deliver MSMAT presentations to appropriate audiences upon request.   | June 1 <sup>st</sup> , 2010 |

**III. PROJECT STRATEGY AND TIMELINE**

**A. Project Partners**

Friends of the Mississippi River  
Whitney Clark – Project Oversight (results 1 - 4)  
Trevor Russell – Project Manager (results 1 - 4)

Emmons and Olivier Resources, Inc  
Brett Emmons – Project Oversight (results 1 - 4)  
Jennifer Olsen & Carl Almer - Project Assistants (results 1 - 4)  
Kristen Larson – Project Assistant (results 3 - 4)

**B. Project Impact**

This project will reduce peak flow erosion and stormwater pollution by assisting municipalities in assessing comprehensive plan codes & ordinances, along with other municipal practices, that can be amended to reduce the impacts of stormwater runoff. This tool is targeted for developed or developing municipalities, and will serve communities throughout the seven-county metro area and MS4 communities throughout the state.

**C. Time**

Funding is requested for design and implementation of the MSMAT from June 2008 through June 2010.

**D. Long-Term Strategy (if applicable)**

The development and distribution of the MSMAT is achievable with the funds requested in the 2009 LCCMR application. No additional funds, past the completion date for this project, will be required.

## Project Budget

### IV. TOTAL PROJECT REQUEST BUDGET

<b>BUDGET ITEM</b>	<b>AMOUNT</b>	<b>% FTE</b>
<b>Personnel</b>		
Trevor Russell - FMR Watershed Program Director (for work on results 1-4)	\$24,150	17%
Whitney Clark - FMR Executive Director (for work on results 1-4)	\$1,600	1%
Brett Emmons - EOR Inc (for work on results 1-4)	\$5,425.00	2%
Jennifer Olsen - EOR Inc (for work on results 1-4)	\$19,000.00	8%
Carl Almer - EOR Inc (for work on results 1-4)	\$4,794.00	3%
Kristen Larson - EOR Inc (for work on results 3-4)	\$2,752.00	2%
<b>TOTAL PROJECT BUDGET</b>	<b>\$ 57,721</b>	
<b>TOTAL PROJECT BUDGET REQUEST TO LCCMR</b>	<b>\$ 34,721</b>	

### V. OTHER FUNDS

<b><u>SOURCE OF FUNDS</u></b>	<b><u>AMOUNT</u></b>	<b><u>Status</u></b>
<b>Other Non-State \$ Being Leveraged During Project Period:</b>		
Ramsey-Washington Metro Watershed District	\$5,000	<i>Secured</i>
Irwin Andrew Porter Foundation	\$18,000	<i>secured</i>
<b>Other State \$ Being Spent During Project Period:</b>	na	
<b>Past Spending:</b>	na	

## **Municipal Stormwater Management Assessment Tool Project Manager Qualifications and Organization Description**

### Friends of the Mississippi River

Friends of the Mississippi River (FMR) is a leading citizen-based 501(c)(3) organization that works to protect and enhance the Mississippi River and its watershed in the Twin Cities area. FMR has a strong record of providing excellent educational programming as well as working with municipalities and watershed districts on river and watershed protection activities.

Whitney Clark is the Executive Director of Friends of the Mississippi River (FMR). For the past 22 years Whitney has worked to improve Minnesota's environment as a staff member for several local environmental organizations including Citizens for a Better Environment and the Clean Water Action Alliance. During his eleven-year tenure as Executive Director, Whitney has led FMR's growth from a start-up group with one staff to a leading conservation organization with a staff of eighteen. He has extensive experience in environmental policy, lobbying, advocacy and education campaigns, partnership building around environmental issues and grassroots fundraising.

Trevor A Russell is the Watershed Program Director with Friends of the Mississippi River. Along with a degree in environmental economic and public policy, Trevor has seven years of experience in community outreach, environmental program management and sustainable land use practices.

### Emmons & Olivier Resources, Inc.

Emmons & Olivier Resources, Inc. (EOR) is an employee-owned, multi-disciplinary environmental consulting firm providing a broad range of natural resource and stormwater management, low impact development design, groundwater and geographical information system services to a diverse group of public and private clients. The EOR team consists of engineers, hydrogeologists, landscape architects, planners, natural resource scientists, surveyors and other professionals working to protect regional environmental resources, balance social and environmental needs, and improve property values and quality of life by connecting people with the environment.

Brett Emmons, P.E. is a senior water resources engineer who has extensive experience in water resources planning and natural resources management. Brett has written several city and watershed management plans and has prepared and/or supervised over 40 studies for surface waters in Minnesota and Wisconsin. Recent work with the cities of Inver Grove Heights and Cottage Grove illustrates his ability to adapt low impact development to municipal settings.

Jennifer Olson is a water resources specialist with emphasis in watershed management and regulatory analysis. She has served both as a watershed technical advisor and administrator which allows a unique perspective in understanding the municipal role in water resource management, planning, permitting and implementation. Jennifer serves as the primary expert at EOR on stormwater management regulatory programs, statutes, and rules. She is responsible for local regulatory framework development including development and implementation of watershed rules. Jennifer recently completed the Framework for Watershed Based NPDES Permitting Study, sponsored by the BWSR and Stormwater Steering Committee. The Study evaluated the potential for watershed-based NPDES permitting in an effort to provide the framework for increasing the efficiency and effectiveness of existing stormwater regulatory programs.

Carl Almer is a water resources engineer with watershed management and municipal policy development experience. Carl recently helped the City of Inver Grove Heights develop an alternative stormwater management plan that would utilize existing natural basins within the city to infiltrate stormwater, resulting in significant savings on infrastructure cost. Carl's many years of supervising the Rice Creek Watershed District's permitting program provides him with extensive hands-on experience in private and municipal improvements.

Kristen Larson is a natural resource and urban planning specialist with experience in natural resource inventories and environmental planning. Kristen has experience using GIS to help communities visualize the impacts of land use decisions, and developing strategies to protect natural resources.