# Environment and Natural Resources Trust Fund 2010 Request for Proposals (RFP)

LCCMR ID: 132-E1
Project Title:
St.Croix Targeted Natural Resource Conservation Project
LCCMR 2010 Funding Priority:
E. Natural Resource Conservation Planning and Implementation
Total Project Budget: \$ \$181,000
Proposed Project Time Period for the Funding Requested: 2 years, 2010 - 2012
Other Non-State Funds: \$ \$72,000
Summary:
The St. Croix Targeted Natural Resource Conservation Project combines innovative research, intensive citizen and public official education and on-the-ground implementation to achieve land use changes that protect water quality.
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Location:
Region: NE
County Name: Aitkin, Anoka, Carlton, Chisago, Isanti, Kanabec, Mille Lacs, Pine, Washington
City / Township: TBD
Knowledge Base Broad App Innovation
Leverage Outcomes
Partnerships Urgency TOTAL

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## **MAIN PROPOSAL**

#### PROJECT TITLE: St. Croix River Targeted Natural Resource Conservation Project

#### I. PROJECT STATEMENT

One of the nation's first "Wild and Scenic" rivers, the St. Croix is known for its clean waters that provide habitat for diverse wildlife including several species of endangered mussels. Development and poor land use are putting the river at risk, however, and its water quality is at a tipping point due primarily to runoff pollution. St. Croix River Association (SCRA) proposes to plan and implement a model for achieving measurable land use changes that improve water quality within two target subwatersheds. With guidance from an advisory team we will:

- Gather existing data on water quality (from St. Croix Watershed Research Station and others), stakeholder interest (from SCRA research to be updated and expanded in 2009) and natural resources, such as sensitive areas; analyze data; and select two target subwatersheds where there are both significant runoff pollution contributions and existing citizen and decision-maker interest in water quality improvement. (Based on data from the Research Station, the Kettle, Snake and Sunrise River subwatersheds are likely focus areas due to their high phosphorous contributions to the St. Croix River.)
- Conduct an aerial overflight in selected target subwatersheds to capture photos of water quality impacts in an extremely narrow resolution, enabling us to find pollution sources such as failing septic systems and culverts that are dumping sediment into streams.
- Use the dramatic aerial images from the overflight as a centerpiece of a multifaceted education effort aimed at citizens, public officials and landowners.
- Through the education process, stimulate projects for implementation, including local ordinance changes and on-the-ground efforts (such as stream buffers and agricultural land use changes) that address specific water quality concerns identified in the overflight.

Throughout the project we will focus on building local capacity to improve water quality.

#### **II. DESCRIPTION OF PROJECT RESULTS**

Result 1: Develop basinwide subwatershed data and identify targets Budget: \$ \_21,000\_\_\_\_

We will gather existing data on the Minnesota portion of the St. Croix River Basin and select two target subwatersheds that will become the focus of our education and implementation efforts.

Deliverable Completion Date

Winter 2011

1. Compile and analyze existing water quality data from the St. Croix Watershed Research Station, St. Croix Basin Water Resources Planning Team and MN Pollution Control Agency (MPCA); stakeholder data from SCRA assessments; and natural resource data from University of MN, MN Dept. of Natural Resources (DNR), Metropolitan Council and others.

Complete any additional needed research.
 Select two subwatersheds for project implementation based on water quality
 Spring 2011

issues and stakeholder interest.

Result 2: Conduct a flyover of target subwatersheds and analyze data Budget: \$\_20,000

An overflight of 100 miles within the targeted subwatersheds will be conducted, generating dramatic aerial images and identifying significant runoff pollution sources.

Deliverable Completion Date

1. Complete environmental assessment overflight of each subwatershed. Fall 2011

2. Complete analysis of flight data to identify specific sources of pollution; develop Fall 2011 recommendations for addressing the pollution on-the-ground.

**Result 3:** Educate and engage public officials, landowners and citizens **Budget:** \$80,000 Using the powerful aerial images and recommendations developed in result 2, we will conduct education with public officials, citizens and landowners to stimulate project implementation.

**Deliverable**1. Conduct education efforts with public officials, to include a large meeting in each

Winter 2012

1. Conduct education efforts with public officials, to include a large meeting in each subwatershed and extensive, tailored follow up. Aerial images will be key tools along with model ordinances and other recommendations specific to each area's pollution sources.

Winter 2012

2. Conduct outreach to develop a network of at least 50 citizens within each subwatershed. A training to engage citizens in following up on suspected problems identified by the flyover will be a key component of this work.

Spring 2012

3. Partner with Soil and Water Conservation Districts (SWCDs) and others and reach out to key interested public and private landowners to implement projects such as stream buffers, septic system repair, livestock exclusions and other projects that address identified pollution problems.

Result 4: Achieve measurable land use changes

Budget: \$110,000

Work will demonstrate how ordinance changes and on-the-ground improvement projects can combine to reduce runoff pollution.

Deliverable Completion Date

1. Achieve ordinances (such as impervious surface, buffer and shoreland protection ordinances) in 3-5 local governments that protect water quality by directing development away from sensitive areas.

July 2012

2. Complete ten on-the-ground improvement projects (such as buffers, agricultural Sp changes, etc) on public and private land; have landowners sign a 15-year maintenance agreement; partner with nonprofits to monitor.

Spring 2012

#### **III. PROJECT STRATEGY**

#### A. Project Team/Partners

- SCRA, a nonprofit community-led organization, will manage the project, coordinate data acquisition and analysis, lead multi-stakeholder education and oversee implementation.
- St. Croix Watershed Research Station, a field research station that provides ongoing ecological research at the watershed scale, will provide important water quality data on phosphorous loadings and will offer technical assistance throughout the project.
- St. Croix Basin Water Resources Planning Team, a group of leading scientists working on pollution reduction in the St. Croix River, will offer technical review and advice on the project's monitoring plans and progress reports.
- We will use existing data and seek ongoing guidance from U of MN, DNR, MPCA, Metropolitan Council, Board of Water and Soil Resources and others as appropriate.
- As target subwatersheds are selected, we will work closely with local stakeholders and strive to
  provide the assistance needed by SWCDs and watershed management organizations, citizen groups
  and others to build their capacity for expanding on this work in the future.

#### **B. Timeline Requirements**

We expect all data collection, education and installation work to be completed in two years.

# C. Long-Term Strategy

We will monitor the results of this project over the long term and will replicate the model developed through this project in other areas of the watershed.

# **Project Budget**

St. Croix River Targetted Natural Resource Conservation Project
Attach budget, in MS-EXCEL format, to your "2010 LCCMR Proposal Submit Form".

(1-page limit, single-sided, 11 pt. font minimum. Retain bold text and delete all instructions typed in italics.

Add or delete rows as necessary. If a category is not applicable you may write "N/A", leave it blank, or

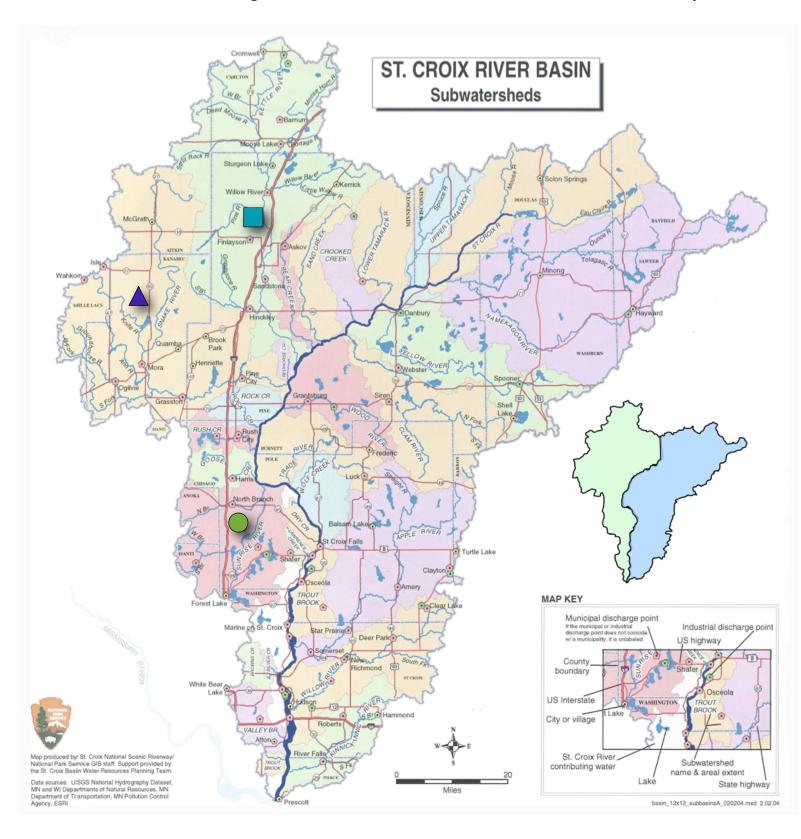
IV. TOTAL PROJECT REQUEST BUDGET ([Insert # of years for project] years)

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BUDGET ITEM (See list of Eligible & Non-Eligible Costs, p. 13)		<u>AMOUNT</u>	
Personnel: 45% time of River Advocate	\$	36,000	
Contracts:			
AW Research for overflight: \$18,500.			
Education and Technical Assistance Consultant: \$49,000.			
Engineering firm (TBD) with proven skills in natural resource restoration, hydrology			
and erosion control to help implement identified needed land use changes: \$75,000.			
	\$	142,500	
Travel: In-state mileage costs.	\$	2,500	
TOTAL PROJECT BUDGET REQUEST TO LCCMR	\$	181,000	

# **V. OTHER FUNDS**

<b>AMOUNT</b>	<u>Status</u>
\$ 25,000	Secured
	Pending
\$ 25,000	
	Secured
\$ 22,000	
	\$ 25,000

# St. Croix River Targeted Natural Resource Conservation Project





Snake River Subwatershed



Kettle River Subwatershed



Sunrise River Subwatershed **06/22/2009** 

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The Sunrise, Kettle and Snake subwatersheds are responsible for more than 23% of the phosphorous loading from the entire St. Croix Basin. These subwatersheds will be likely focus areas for the St. Croix River Targeted Natural Resource Conservation Project.

**LCCMR ID: 132-E1** 

# St. Croix River Targeted Natural Resource Conservation Project

## **Project manager qualifications:**

Dan McGuiness has worked on the St. Croix and Mississippi Rivers for more than 40 years. He is currently serving as Interim Executive Director of the St. Croix River Association. From 1998 until May of 2008, as Audubon's Director of Conservation Policy for the Mississippi River, Dan directed a multi-faceted effort to build national awareness and advocacy for restoration of the ecological health of the 1,366-mile Upper Mississippi River and its 189,000 square mile basin. Prior to joining Audubon, Dan served for nine years as the Director of the Minnesota-Wisconsin Boundary Area Commission based in Hudson, Wisconsin. A southern Minnesota native, Dan has a Bachelor of Science degree in sociology from Winona State University. He currently is the President of the Saint Paul Audubon Society, President of the Board of the Community Design Center of Minnesota, and a board member of the St. Paul Riverfront Corporation. He is a founding board member of the Standing Cedars Community Land Conservancy based in Osceola, Wisconsin.

## **Organization Description:**

Founded in 1911, the St. Croix River Association (SCRA) is the oldest citizen organization in Minnesota and has supported citizen stewardship for more than 95 years. In 2008 SCRA significantly refocused its efforts based on an extensive stakeholder engagement project and with the support of key state leaders including former Vice President Walter Mondale.

SCRA's mission, refined through recent strategic planning, is to: protect, restore and celebrate the St. Croix River and its watershed. Our core functions are as follows:

**Land Conservation:** We work to protect and restore important natural and scenic areas along the river and throughout the watershed by partnering with land protection organizations.

Water Quality Protection: We focus on improving water quality, recognizing its interconnection with land use.

**River Corridor and Watershed Stewardship:** We engage people in educational, recreational and volunteer stewardship activities that give them an understanding and motivation to advocate at the local, state and national levels on behalf of the river's values.

**Celebration:** The St. Croix River watershed is a national treasure. We live, work and play in the watershed because we love this place, and we celebrate it at every opportunity.

SCRA is the only nonprofit citizen organization focused specifically on protecting and improving the St. Croix River watershed. Since expanding its focus, SCRA has leveraged key support from The McKnight Foundation, led the local efforts on the 2009 designation of the Lower St. Croix River as one of the United States 10 "Most Endangered Rivers," and worked to raise new investments in water monitoring and land protection in the St. Croix Watershed. Our Board of Directors includes well known leaders at the forefront of water quality research, land protection planning and citizen education and stewardship.