

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

**LCCMR ID: 136-E1**

**Project Title:**

Saint Croix Blue/Greenprint: Watershed Strategy/Local Action

**LCCMR 2010 Funding Priority:**

E. Natural Resource Conservation Planning and Implementation

**Total Project Budget: \$** \$634,000

**Proposed Project Time Period for the Funding Requested:** 2 years, 2010 - 2012

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

**Summary:**

The framework/plan identifies key land use implementation strategies/opportunities to conserve, protect, and sustain local, regional, and state ecological, cultural, economic, and outdoor recreational assets of Minnesota's Saint Croix Watershed.

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**Sponsoring Organization:** U of MN

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**Web Address:** http://ccl.design.umn.edu/

**Location:**

**Region:** Central, Metro

**County Name:** Aitkin, Carlton, Chisago, Kanabec, Pine, Washington

**City / Township:** Askov, Bruno, Cambridge, Sturgeon Lake, Kerrick, Finlayson, Rutledge, North Branch, S

_____ Knowledge Base	_____ Broad App.	_____ Innovation
_____ Leverage	_____ Outcomes	
_____ Partnerships	_____ Urgency	_____ TOTAL

## PROJECT TITLE: Saint Croix Blue/Greenprint: Watershed Strategy/Local Action

### I. PROJECT STATEMENT

The Blue/Greenprint focuses on land use watershed issues to improve and protect the environmental quality of the Saint Croix Watershed by:

- Identifying problems,
- Developing implementable local strategies as solutions to problems, and
- Creating a publicly engaged process that supports implementation of strategies.

Although a wild and scenic river, the Saint Croix River is being degraded by pressure from changing land uses in its watershed. There have been many separate studies of *parts* of the Saint Croix River; declining water quality, rising land values, development pressures, struggling economies, growing tourism/recreation initiatives, and a variety of jurisdictions have slowed action and confused direction. This complex situation calls for a *watershed-wide* framework that builds alliances for specific *local action*. There are many groups concerned about the St Croix, but a unifying framework/plan is essential for truly effective action.

Building on the many previous Saint Croix River studies and the *Minnesota Statewide Conservation and Preservation Plan's* recommendations, the project will:

- Identify key land use areas of concern and opportunities to conserve, protect, and sustain local, regional, and state ecological, cultural, economic, and outdoor recreational assets of Minnesota's Saint Croix Watershed within and beyond the National Park Service's limited jurisdiction. Ecological and watershed structures and functions, sensitive areas, lands vulnerable to development, lands for renewable resource management, habitat areas, areas for enhanced recreational use, lands for development, and land uses that are contributing to environmental degradation will be identified.
- Develop and examine alternative strategies to address specific issues for adoption at the watershed to local levels. Specific coordination, management practices, ordinances, site designs, trail alignments, etc. will be identified
- Use a publicly engaged process to critique problem identification and the alternative strategy scenarios and practices in order to inform the work and build alliances, understanding, and agreement within and among local, state, and federal non-profit groups and governmental units and citizens that will create consensus on the implementation of specific strategies.

### II. DESCRIPTION OF PROJECT RESULTS

Saint Croix Blue/Greenprint will be an understandable, accessible, and useful tool for by citizen, landowner, business, environmental and governmental individuals and groups for consensus building, implementation, and funding efforts. Previous studies and new data will be collected and analyzed, issues/problems identified, and action strategies created. A publicly engaged process will inform the work and create consensus for implementation of the strategies.

#### **Result One Deliverables: Updated Inventory & Assessment    Budget: \$210,000**

1. A comprehensive, updated inventory of the Saint Croix River Watershed that identifies problems and sensitive areas in need of protection, i.e., streams and lakes, habitats, shorelines, lakes, lands not suitable for development, etc; **Date:** December 2010
2. A synthesis of previous data collection and plans, research questions, methods for study and analysis, and key findings (three public meetings for input); **Date:** December 2010
3. Databases and a data directory to retain and make available the above inventory and research synthesis to watershed organizations; **Date:** June 2011

**Result Two Deliverables: Strategies & Public Engagement      Budget: \$424,000**

4. A synthesis of applicable site specific practices for the upland and lowland situations common to the watershed to reduce site specific runoff, foster increased infiltration, habitat retention, i.e. setbacks, buffering, access road and trail designs and standards, erosion control, and storm water handling.

**Date:** June 2011

5. A description and examination of key scenarios developed for the overall watershed, i.e., examining the effects of spatial and temporal incorporation and implementation of design, management and protection strategies on the resources to be protected, managed and developed on a sustainable basis. (three public meetings);

**Date:** June 2012

6. A final synthesis of the most instructive and best land use, management, and protection strategies at the watershed, county, community and site levels in the form of action steps, guidelines, designs, and practices for sustaining the ecological, economic and social values of the watershed. (three public meetings)

**Date:** June 2012

7. Recreational system plans/designs that fit with the above synthesis and improve connectivity and access across the watershed, i.e., Gateway, Browns Creek, & Immigrant Trail, Scenic Byway, etc. (three public meetings)

**Date:** June 2012

8. A proposed model for further collaboration amongst/between public agencies and others working in the watershed.

**Date:** June 2012

### **III. PROJECT STRATEGY**

#### **A. Project Team:**

The experienced interdisciplinary team members from the College of Food, Agriculture and Natural Sciences and the College of Design are listed on the map along with their area of expertise. They will work cooperatively. CFANS members will lead the scientific work and CDes members will lead the design work. Mary Vogel will be the project manager; she and Alan Ek will be the principal investigators.

#### **Project Partners:**

St. Croix National Scenic Riverway will convene non-profit, governmental, and advocacy groups and citizens within the watershed to identify issues to be addressed by the project, critique project work, create alliances about groups, and inspire implementation strategies of project work. Superintendent Christopher Stein supports this proposal and will direct park staff to help with the project.

#### **Project Cooperators:**

The cooperators will advise the project team. They include:

- Scott Bradley, Landscape Architecture Chief, Office of Technical Support, MnDOT
- John Kari, Planning Analyst for Regional Planning & Growth Strategy of the Community Development Division, Metropolitan Council
- Dan Collins, & Laurie Young, Division of Parks & Trails, DNR
- Saint Croix River Association
- Gateway Trail Association
- Saint Croix Scenic Coalition
- Representatives from governmental units (federal, state, county, township, city, watershed)

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

There are no specific requirements for this project.

#### **C. Long-Term Strategy**

The Green/Blueprint will be an implementation tool for ongoing actions to protect the watershed by local, state, and federal governments, non-profits, and individuals. The collaborations created among entities by the project will serve as a vehicle for implementations into the future.

## Project Budget

### IV. TOTAL PROJECT REQUEST BUDGET (Two years)

BUDGET ITEM	AMOUNT
<b>Personnel:</b>	\$ -
Mary Vogel, Project Leader. 45% time. (\$80,263 salary; 5,619 benefits)	\$ 85,882
Alan Ek, Project Co-leader. 5% time (\$13,812 salary; \$4,466 benefits)	\$ 18,278
Senior Fellows: Designers Roger Martin, James Pettinari. \$75 hour; 13.3% ben.	\$ 17,000
Research Associates/Research Fellows (four full-time equivalents)	\$ 272,764
Graduate Research Assistants (three full-time equivalents)	\$ 183,846
Project Administrative Assistance. 20% (\$10,000 salary; \$3,230 benefits)	\$ 13,230
Contracts: National Park Service for expenses related to coordinating meetings to convene non-profit, governmental, and advocacy groups and citizens within the watershed to identify issues.	\$ 30,000
Equipment/Tools/Supplies: Duplicating and supplies for all activities	\$ 10,000
Acquisition (Fee Title or Permanent Easements):	\$ -
Travel: In state expenses.	\$ 3,000
<b>Additional Budget Items:</b> Duplicating and supplies	\$0
<b>TOTAL PROJECT BUDGET REQUEST TO LCCMR</b>	<b>\$ 634,000</b>

### V. OTHER FUNDS

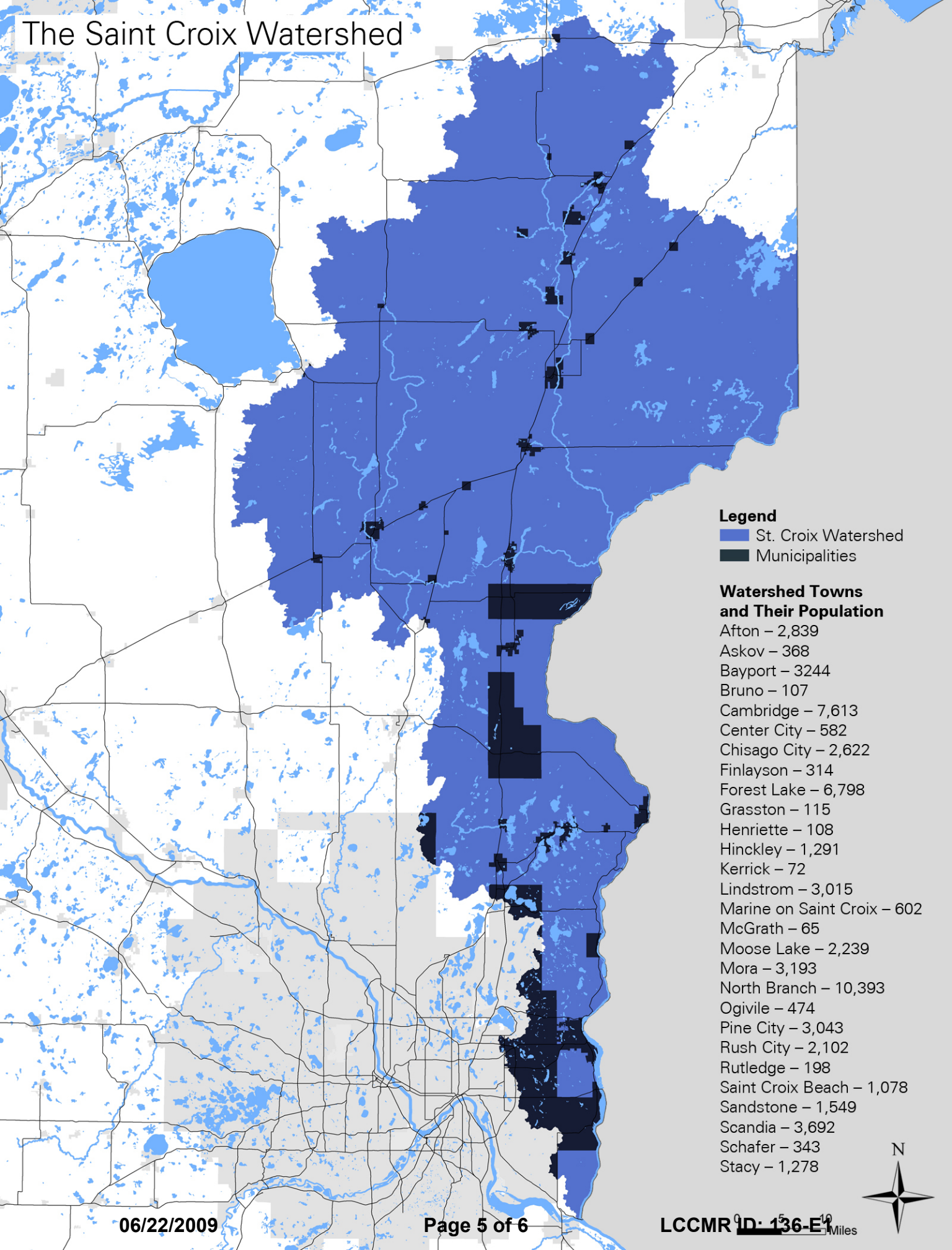
SOURCE OF FUNDS	AMOUNT	Status
<b>Other Non-State</b>	\$ -	
<b>Other State \$</b>	\$ -	
<b>In-kind Services During Project Period:</b>	\$ -	
<b>Remaining \$ from Current Trust Fund Appropriation (if applicable):</b>		/
<b>Funding History:</b>	\$ -	

FR Faculty working on Results 1 & 2 (their research associates, fellows, and graduate assistants would do most of the work) would include:

- Paul Bolstad - geospatial analysis of large scale ecological systems CFANS
- Ken Brooks - hydrology and watershed management CFANS
- Tom Burk - statistical analysis and modeling CFANS
- Alan Ek -forest and landscape change CFANS
- Lee Frelich - wildlife and wildlife habitat change CFANS
- Michael Kilgore - forest parcelization and regional economic analysis CFANS
- Kristen Nelson - human dimensions of natural resources and environment CFANS
- Peter Reich\* - forest ecology; climate change impacts CFANS
- Ingrid Schneider\* - tourism and economic development CFANS

**\*indicates they were part of the Minnesota Statewide Conservation and Preservation Plan team**

# The Saint Croix Watershed



## Legend

- St. Croix Watershed
- Municipalities

## Watershed Towns and Their Population

- Afton – 2,839
- Askov – 368
- Bayport – 3244
- Bruno – 107
- Cambridge – 7,613
- Center City – 582
- Chisago City – 2,622
- Finlayson – 314
- Forest Lake – 6,798
- Grasston – 115
- Henriette – 108
- Hinckley – 1,291
- Kerrick – 72
- Lindstrom – 3,015
- Marine on Saint Croix – 602
- McGrath – 65
- Moose Lake – 2,239
- Mora – 3,193
- North Branch – 10,393
- Ogivile – 474
- Pine City – 3,043
- Rush City – 2,102
- Rutledge – 198
- Saint Croix Beach – 1,078
- Sandstone – 1,549
- Scandia – 3,692
- Schafer – 343
- Stacy – 1,278



## **Project Manager Qualifications & Organization Description**

### **Project Manager:** Mary Vogel, Co-Director, Center for Changing Landscapes

Mary Vogel is the co-director with Alan Ek of the Center for Changing Landscapes and has led a broad range of community engaged research projects that have focused on the intersection of natural resource preservation, resource management, and sustainable development issues throughout the State of Minnesota. She has worked extensively on state and local recreational trails. She has been a leader at the University and in her college in interdisciplinary efforts to connect University expertise to applied research efforts that address important Minnesota issues. She is skilled at producing usable project work that informs public and private decision makers at the state, regional, and local levels.

She has extensive experience in engaging citizens in research efforts. Her research is community engaged and for three years she was the statewide director of the University of Minnesota's Regional Sustainable Development Partnerships, a citizen driven program that focuses on natural resources, sustainable agriculture, and natural resource based tourism. She is very familiar with both the LCMR and the LCCMR and has led many projects funded by the LCMR. Her education includes the Master of Architecture, (M Arch) University of Minnesota. She participated in the team that wrote the LCCMR's *Statewide Conservation and Preservation Plan*; she co-led the recreation efforts.

**Organization:** Center for Changing Landscapes, College of Design & College of Food, Agriculture, and Natural Sciences University of Minnesota

**Description:** The Center for Changing Landscapes is an interdisciplinary research and outreach center in two colleges. The Center's work combines design/planning expertise with natural resource expertise and knowledge to support land use decision-making at the local, regional and state levels to protect, preserve, and enhance Minnesota's landscapes and their related natural and environmental resources in the face of changing development patterns and resource use. Hallmarks of the Center's environmentally sensitive work are its quality, relevance, and publicly engaged character. Many from CCL worked on the *Minnesota Statewide Conservation and Preservation Plan*.

**Environmentally Informed & Honored Work:** The Center's recent environmentally driven work has focused on large linear regional infrastructure (state trails, transit corridors, scenic byways, and highways), their local connections, and the communities along them in rural, suburban, and urban landscapes. Its regional, district, and site scale design/plan work has received many design awards and has been used by citizens, advocacy groups, local units of government, and state agencies to plan, promote, and fund environmentally informed projects all over Minnesota. Some publications are at [ccl.design.umn.edu](http://ccl.design.umn.edu).

**Staff:** Alan Ek of Forest Resources and Mary Vogel of the College of Design co-direct the Center, and it is staffed by very skilled, experienced landscape architects, architects, urban designers, natural resource professionals/professors and talented recent graduates and graduate students.

**Community, Citizen & Government Connections:** The Center's projects are informed by working with citizens, citizen groups, and governmental units. Examples of those we have worked include: Minnesota Departments of Natural Resources and Transportation; Minnesota Forest Resources Council; Metropolitan Council and Metropolitan Transit; Arrowhead Redevelopment Commission; USDA Forest Service; Minnesota Forest Resources Partnership; Minnesota Association of County Land Commissioners; Saint Paul, Golden Valley, Saint Louis Park, Minnetonka, Thief River Falls, Crookston, Fisher, East Grand Forks, Red Lake Falls, New Ulm, Marshall, Fisher, Beaver Bay, Tofte, Grand Marais, Coleraine, Knife River, New York Mills, Duluth Township, and Lutsen; Lyon, Saint Louis, Cook, Lake, and Sherburne Counties; and trail groups, private consulting firms, and many others.