

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

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**Project Title:**

**ENRTF ID: 115-F**

Master Water Stewards: Community Leadership for Cleaner Water

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**Topic Area:** F. Outreach/Education/Training

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**Total Project Budget:** \$ 322,000

**Proposed Project Time Period for the Funding Requested:** 3 yrs. July 2013 - June 2016

**Other Non-State Funds:** \$ 70,000

**Summary:**

Train, certify and support community-based "Master Water Stewards" to assess watersheds, educate communities, reduce pollutants and coordinate action in neighborhoods to reduce urban runoff volume and nutrient loads.

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**Sponsoring Organization:** Freshwater Society

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**Location**

**Region:** Metro

**County Name:** Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, Sherburne, Washington, Wright

**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: Master Water Stewards: Community Leadership For Cleaner Water

### I. PROJECT STATEMENT

Non-point source pollution is the single greatest threat to the health of Minnesota’s waters. Everything found on city streets flows to our water- bacteria, salt, litter, sediment, nitrogen, and phosphorus. Increasingly large volumes of polluted runoff reach our lakes and rivers faster, causing flooding downstream. Pollutants are not being filtered or broken down by passing through the soil, making water dirtier. The widespread nature of the problem requires local leadership, and localized solutions.

The program will identify, train, certify and support community leaders, called “Master Water Stewards,” to work with members of their communities to install pollution prevention projects on residential and commercial properties, and educate community members, to reduce pollutants from urban runoff, and allow more water to soak into the ground before running into storm sewer systems. Modeled after successful Master Gardener programs, volunteer community leaders will participate in a minimum of 50 hours of hands-on courses and projects. Certified Master Water Stewards will volunteer 50 hours of community service in the initial year of certification, up to 25 hours each subsequent year, and ongoing continuing education in order to maintain their certification. An interactive web site will consolidate resources to support Stewards, connect Stewards to technical expertise, continuing education opportunities, and other community members.

The first year of the three-year pilot phase will focus on the Lower Minnehaha Creek watershed, where impervious surfaces cover more than 50% of the surface area, directing stormwater runoff and pollution into Minnehaha Creek and eventually, into the Mississippi River. In years two and three, the program will expand, and Stewards will be recruited from the greater 10-county Metro area. Each class of 25 Stewards will complete approximately 50 hours of training, install a minimum of 12 pollution prevention projects on residential or commercial properties in their communities, conduct 25 community workshops on strategies to reduce runoff from urban areas, and conduct 25 information and behavior change campaigns in their neighborhoods and communities. As an example, each raingarden project will capture 85-99% of runoff volume. A 1000-square foot raingarden on a one-acre parking lot will capture 573 pounds of sediment, .6 pounds of Phosphorus and 2 pounds of Nitrogen.

The Master Water Stewards program creates a new program model of community engagement and leadership, and develops a new community-based education, outreach and action resource team that natural resource agencies, watershed districts and municipalities can deploy to meet water quality, education and outreach goals.

### II. DESCRIPTION OF PROJECT ACTIVITIES

**Activity 1:** Developing the foundation

**Budget:** \$186,999

<b>Outcome- Create the foundation of knowledge, skills and resources needed to become a Master Water Steward</b>	<b>Completion Date</b>
1. Identify advisory team of 12-15 water quality experts to create training program	August 2013
2. Develop support network of 50-80 organizations, businesses and consultants to provide services and technical support to Master Water Stewards	November 2013
3. Develop curriculum and training courses. Course instructors will write course with learning outcomes, evaluation measures and course activities. Materials are reviewed, refined and approved by advisory team	February 2014
4. Develop web portal to consolidate resources to support Stewards	July 2014

**Activity 2: Train, Evaluate, Expand Sustain the Program****Budget: \$322,001**

<b>Outcome- Certify 75 Master Water Stewards, 25 from the Lower Minnehaha Creek Watershed District, and 50 from the Greater Metro area.</b>	<b>Completion Date</b>
1. Conduct the first round of approximately 6 required courses. Successfully certify at least 90% of the 25 students in first recruited class.	June 2014
2. Install a minimum of 12 pollution prevention projects in neighborhoods in the Lower Minnehaha Creek Watershed District, reducing runoff volumes, sediments and nutrient loads. Conduct 25 community workshops on strategies to reduce runoff from urban areas. Conduct 25 information and behavior change campaigns in their neighborhoods and communities	December 2014
3. Evaluate program model based on amount of pollution prevented, runoff volume reduction achieved, and effectiveness of coursework	February 2015
4. Develop an expansion model to include the entire 10-county Metro area.	March 2015
5. Conduct second and third rounds of approximately 6 courses required for certification with at least 90% of recruited class successfully completing all courses. Certify 50 community leaders in greater Twin Cities Metro Area as Master Water Stewards	June 2016
6. Install a minimum of 25 pollution prevention projects in the 10-county Metro area, reducing runoff volumes, sediments and nutrient loads. Conduct 50 community workshops on strategies to reduce runoff from urban areas Conduct 50 information and behavior change campaigns in Stewards' neighborhoods and communities. Evaluate program model based on amount of pollution prevented, volume reduction achieved, and effectiveness of coursework. Seek sustaining funding	July 2016

**III. PROJECT STRATEGY****A. Project Team/Partners**

Freshwater Society- Dr. Peggy Knapp, will provide overall project management, organize the advisory team, oversee curriculum development and course offerings, and recruit members of the support network. Deirdre Coleman will coordinate logistics, manage the web site, and oversee ongoing communications with Stewards. Minnehaha Creek Watershed District- Leslie Yetka will provide technical support for curriculum development and pollution prevention projects. Contract consultants, such as rainscaping experts and water quality technicians, will develop and teach courses. The Freshwater Society will receive money from the Environment and Natural Resources Trust Fund. Minnehaha Creek Watershed District will be contributing funds from general operating funds and education grant funds.

**B. Timeline Requirements**

The first year of the program will establish the foundation of the program, and begin training Stewards. The project requires sufficient lead time to organize an advisory team, create or identify training opportunities and identify a network of support organizations. After the first class of Stewards complete their training and install pollution prevention projects, partners will evaluate the program and develop a network of partners to expand the program throughout the Metro area.

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

This proposal seeks funding to support the development of the foundation of the project, and to launch a pilot phase. Sustaining funding will come from a network of partner organizations, and foundation funding.

## 2012-2013 Detailed Project Budget

### IV. TOTAL ENRTF REQUEST BUDGET 3 years

<b>BUDGET ITEM</b>	<b>AMOUNT</b>
<b>Personnel:</b> Dr. Peggy Knapp will oversee all aspects of the project, including recruitment and management of the advisory team, curriculum development, implementation of the Master Waters Steward Academy, and recruitment of support network. .75 FTE (annual: salary \$49,000; Fringe Benefits \$7,000) for 3 years.	\$ 168,000
<b>Personnel:</b> Project Coordinator, Deirdre Coleman will coordinate all logistics of the Master Water Steward Academy, coordinate the field intensive workshops, direct support for the Water Stewards and oversee the ongoing communication with certified water stewards. .65 FTE (annual salary \$33,000; fringe benefits \$5,000) for 3 years.	\$ 114,000
<b>Contracts:</b> Curriculum Development Specialists: 8 topical areas, including Best Management Practices Design, Site Assessments, GIS Tools, Pollution Reducing Behavior Changes, Community Engagement, etc. \$2,000/topic. Program Evaluation based on amount of pollution prevented, runoff volume reduction achieved, effectiveness of coursework. \$10,000	\$ 26,000
<b>Equipment/Tools/Supplies:</b>	NA
<b>Acquisition (Fee Title or Permanent Easements):</b>	NA
<b>Travel:</b> Meeting, site assessment, 35 trips per years; 40 miles/trip; 3 year total 4200 miles	\$ 2,000
<b>Additional Budget Items:</b> Development and maintenance of a web portal that the Master Water Stewards can access for expert advice, community education and action materials, best management practice resources, information dissemination and networking.	\$ 12,000
<b>TOTAL ENVIRONMENT AND NATURAL RESOURCES TRUST FUND \$ REQUEST =</b>	<b>\$ 322,000</b>

### V. OTHER FUNDS

<b>SOURCE OF FUNDS</b>	<b>AMOUNT</b>	<b>Status</b>
<b>Other Non-State \$ Being Applied to Project During Project Period:</b> Minnehaha Creek Watershed District has assured \$25,000 for the project planning development and implementation. Cost share for installation of pollution prevention projects \$45,000	\$70,000	<i>Pending</i>
<b>Other State \$ Being Applied to Project During Project Period:</b>	NA	
<b>In-kind Services During Project Period:</b> Minnehaha Creek Watershed District commits \$37,000 for a .25 FTE Manager and \$16,000 for a .15FTE intern to coordinate watershed tours of areas vulnerable to polluted runoff, provide district-specific technical assistance for pollution prevention project installations, GIS training to assist with assessment of pollutant sources and strategies for pollutant reduction. Freshwater Society will provide in-kind support and operating costs directly relate to this project, \$49,000	\$ 102,000	
<b>Remaining \$ from Current ENRTF Appropriation (if applicable):</b>	NA	
<b>Funding History:</b> Minnehaha Creek Watershed District has assured a \$15,000 planning grant 1/1/13.	\$ 15,000	

## Project Manager Qualifications and Organization Description

### Peggy Knapp, Project Manager

Peggy Knapp is the Director of Programs at the Freshwater Society, where she oversees civic engagement initiatives. Prior to her work with Freshwater, Dr. Knapp was an assistant professor at Hamline University's School of Education, and the Center for Global Environmental Education, where her teaching and scholarship focused on effective strategies for science and environmental education. In her earlier work as a reporter, producer and writer with CNN's award-winning *Earth Matters*, and field reporter on PBS' nationally acclaimed science education program, *Newton's Apple*, Knapp roamed the world to bring science and environmental stories to international audiences.

### Organization Description

The Freshwater Society is a 501C3 organization formed 44 years ago that works with communities throughout the Upper Midwest. It began as the nation's first freshwater research facility to study water pollution and its causes and has transitioned into a premier citizen education, research and public outreach organization with a mission to educate and inspire people to value, conserve and protect all freshwater resources. Our goals are to increase the education, awareness and stewardship of citizens to reduce non-point pollution of our lakes, rivers and streams and to increase conservation behavior to ensure sustainable water resources for generations to come.

Last year, we launched our Work for Water Campaign that is the umbrella for a multi-year plan to research, educate and influence Minnesota citizens' knowledge, attitude and behaviors around storm water and non-point source pollution. The Work for Water Campaign includes the following programs: Community Clean-ups for Water Quality (CCWQ). Invites citizens to grab a rake and save a lake to remove leaves, grass clippings and soil that can be carried into storm sewers, dumped into lakes and rivers and result in algae growth that causes pollution. Neighborhood Micro-Challenge. Encourages citizens to create their own projects to minimize storm water runoff and challenges them to compete with their neighbors. Minnesota FarmWise. This is a pilot project to design and implement a farmer-to-farmer mentoring program to encourage farmed to engage in more sustainable farming practices. Precision Conservation Conference—Technology Redefining Local Water Quality Practices. Working with state agencies, watershed and soil and water conservation districts, a watershed association and UMN researchers, we convened a conference for over 170 policymakers and professional to explore the technical and human sides of precision conservation. Art and Design Contest. The Contest offers an opportunity for high school students to create art and graphic design messaging materials that support the winning ideas in the Neighborhood Micro-Challenges. We are working with the eight regional Minnesota Service Cooperatives to disseminate application information and coordinate publicity and marketing. Speaker Series. Internationally-known speakers are invited to share their cutting-edge ideas with Minnesotans about pressing environmental issues at free conferences at the University of Minnesota.

