

**Environment and Natural Resources Trust Fund
2011-2012 Request for Proposals (RFP)**

LCCMR ID: 199-G

Project Title: Zumbro Watershed Comprehensive Water Literacy for Change

Category: G. Environmental Education

Total Project Budget: \$ \$229,500

Proposed Project Time Period for the Funding Requested: 2 yrs, July 2011 - June 2013

Other Non-State Funds: \$ 35,000

Summary:

Improve water protection choices by presenting local water data to decision-makers and giving citizens access to a 3-D exhibit and digital display at "Cascade Meadow Wetlands & Environmental Science Center."

Name: Lisa Eadens

Sponsoring Organization: Zumbro Watershed Partnership

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Web Address www.zumbrowatershed.org

Location

Region: SE

Ecological Section: Paleozoic Plateau (222L), Minnesota and NE Iowa Morainal (222M)

County Name: Dodge, Goodhue, Olmsted, Rice, Steele, Wabasha

City / Township:

_____ Funding Priorities	_____ Multiple Benefits	_____ Outcomes	_____ Knowledge Base
_____ Extent of Impact	_____ Innovation	_____ Scientific/Tech Basis	_____ Urgency
_____ Capacity Readiness	_____ Leverage	_____ Employment	_____ TOTAL _____%

2011-2012 MAIN PROPOSAL

PROJECT TITLE: Zumbro Watershed Comprehensive Water Literacy for Change

I. PROJECT STATEMENT

A coordinated, watershed-wide effort is needed to improve land use decisions that support protection of water quality in the Zumbro River Watershed. Over 90% of the watershed area is not regulated by Municipal Separate Storm Sewer System (MS4) permits to prevent polluted storm water runoff. Additionally, most public grants and the Total Maximum Daily Load process do not address water education. Despite an abundance of existing data about water resource uses and issues, this information has not been summarized and delivered in a cohesive, compelling and locally relevant manner to those who have the most influence on land use decisions. Similarly, most citizens lack fundamental knowledge of watershed concepts that allow them to understand how their activities impact water resources.

Situated within the Driftless Area, the nearly one million acre Zumbro Watershed has natural hydrogeologic features that allow interaction of surface and ground water, resources used for industry, recreation and drinking water. The fishing resources alone generate about \$1.1 billion annually in benefits to the local economy. The risk to these resources is driven by combined urban and rural land uses, which already have contributed to the federal listing of 26 stretches of the Zumbro River as impaired due to high turbidity and/or fecal coliform bacteria.

The goal of this project is to improve water quality in the Zumbro River Watershed by promoting decisions that benefit water resources in the 90% of the watershed area not regulated by MS4 permits. This goal will be met by increasing the knowledge of decision-makers and others about watershed principles, local water data, and water resource issues and by promoting practices that improve water quality. This project will incorporate two methods: 1) develop a Water Literacy Program based on locally relevant water data and present it to decision-makers and 2) construct a 3-D interactive watershed exhibit and digital data display at the Cascade Meadow Wetlands & Environmental Science Center to promote continuing adult education.

II. DESCRIPTION OF PROJECT ACTIVITIES

Activity 1: Develop and Present Local Water Literacy Program

Budget: \$ 62,500

The Zumbro needs an approach for improving how local water data gets to the hands of decision-makers. The first task will consolidate and integrate locally relevant natural resource data, forthcoming data on aquatic contaminants of emerging concern, and social data about local water uses (e.g., municipal and private water well appropriation amounts and uses, wastewater treatment, storm water management, recreation) and water resource issues (e.g., tourism, use conflicts, impairments). Existing delivery methods (e.g., Nonpoint Source Education for Municipal Officials) will be evaluated, modified and integrated to develop a presentation that unifies local data and presents it in a compelling and interactive manner. Finally, presentations will be made to about 520 elected and appointed officials. Surveys will be used after each presentation and again six months later to evaluate the project's effectiveness.

Outcome	Completion Date
1. Gather and integrate local water data; assess existing delivery methods	December 2011
2. Develop Water Literacy Program	April 2012
3. Present the Water Literacy Program across five counties within the watershed (Olmsted, Dodge, Goodhue, Wabasha and Rice) during	March 2013

regularly scheduled appointed official meetings: <ul style="list-style-type: none"> • 5 annual township meetings (about 280 officials serving 53 townships), • 19 City Council and City Planning and Zoning Commission meetings to which appropriate planning, public works and public utilities staff will be invited (about 120 officials), • 5 Soil and Water Conservation District Boards of Supervisors, 5 County Planning and Zoning Commissions and 5 County Boards of Commissioners meetings (about 170 officials). 	
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Activity 2: Construct a 3-D Interactive Watershed Exhibit and Digital Data Display at the Cascade Meadow Wetlands & Environmental Science Center **Budget:** \$167,000

Cascade Meadow Wetlands & Environmental Science Center will serve as a hub for educational opportunities about water protection behaviors in the Zumbro Watershed. The Science Center is scheduled to open in winter 2010 and will serve 171,132 watershed citizens plus visitors from outside the watershed. To extend the efforts initiated in the first activity, we will contract the construction of a physical 3-D interactive exhibit of the Zumbro Watershed that will include flowing water, easily recognizable local icons, and show the impacts of various land practices on water quality. Once “grounded” to a physical location on the 3-D exhibit, visitors will then access a large monitor where they can view integrated data, maps and charts for their sub-watershed to help them comprehend the connections between land use and water issues in their area. We will evaluate changes in water literacy of visitors who view the exhibits.

Outcome	Completion Date
1. Construct 3-D interactive watershed exhibit	March 2012
2. Develop a unifying digital data display	April 2012

III. PROJECT STRATEGY

A. Project Team/Partners

The Zumbro Watershed Partnership will use ENRTF money to develop, present and evaluate the Water Literacy Program; Cascade Meadow Wetlands & Environmental Science Center will use ENRTF money to construct the 3-D interactive watershed exhibit and digital data display.

County water planners in Olmsted, Dodge, Goodhue, Wabasha and Rice counties will provide in-kind contributions to gather and package the locally relevant social water data. Cascade Meadow Wetlands & Environmental Science Center will provide a 50% match (25% in cash and 25% in-kind) towards the cost of the 3-D watershed exhibit.

B. Timeline Requirements

The first six months of this project will focus on gathering relevant local water data and evaluating existing delivery methods for the Water Literacy Program and selecting contractors through a bidding process for the creation of the 3-D exhibit and digital data display. Months 6-12 will involve developing the Water Literacy Program and installing the 3-D exhibit and digital data display at the Cascade Meadow Wetlands & Environmental Science Center. Months 12-24 will involve presenting the Water Literacy Program and evaluating the educational tools.

C. Long-Term Strategy and Future Funding Needs

Cascade Meadow Wetlands & Environmental Science Center will continue outreach efforts that target young adolescences, adults, retirees and decision-makers to participate in behaviors that support decisions to protect water quality. It will also develop programming specific to these tools, maintain the exhibit and update the data display as new information becomes available.

2011-2012 Detailed Project Budget

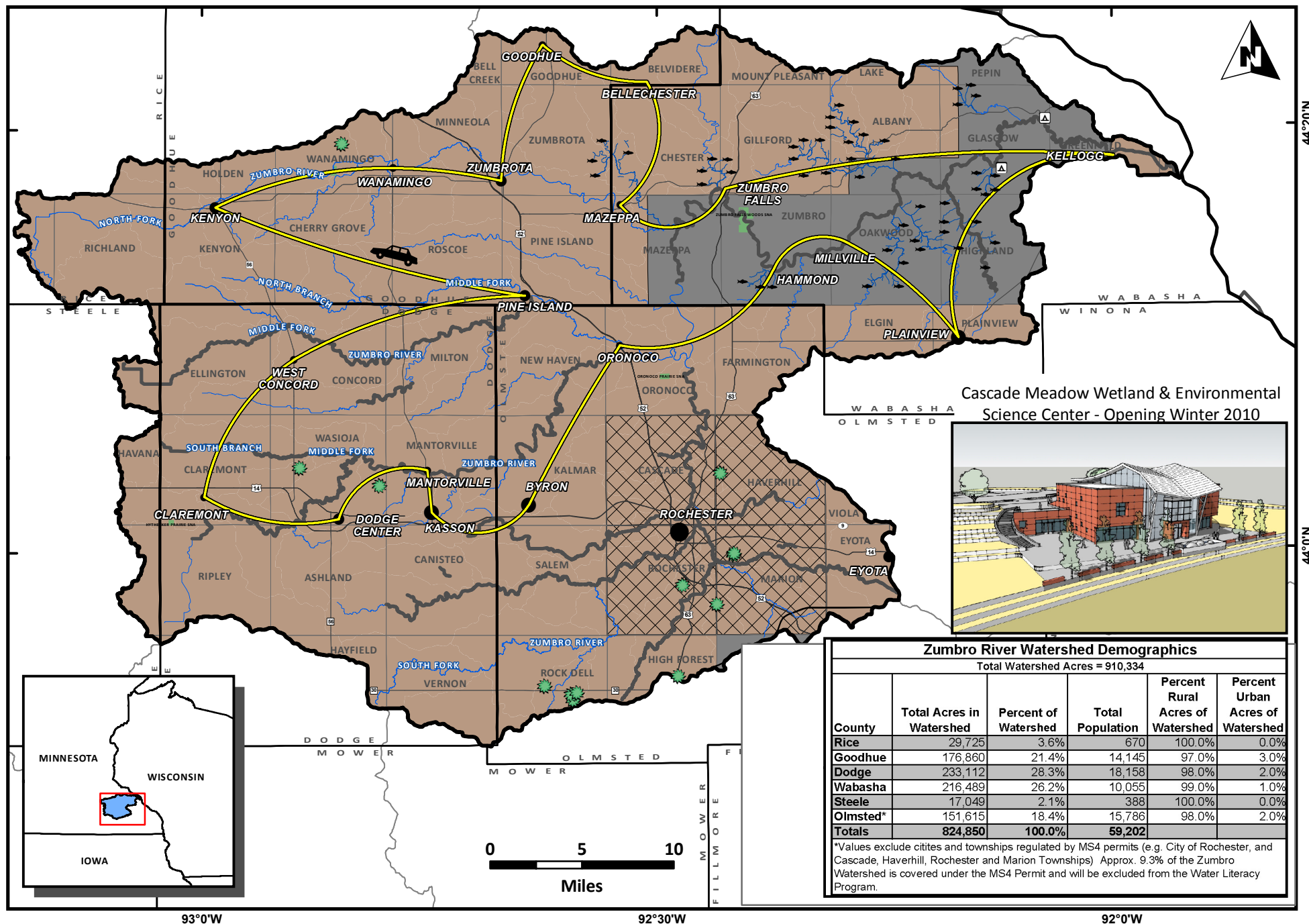
IV. TOTAL TRUST FUND REQUEST BUDGET 2 years

<u>BUDGET ITEM</u>	<u>AMOUNT</u>
Personnel:	
Project Coordination - Lisa Eadens (Zumbro Watershed Partnership), .1 FTE 70% Salary 30% Benefits for 2 years	\$12,000
Development and execution of Water Literacy Program - Zumbro Watershed Partnership, .50 FTE 70% Salary 30% Benefits for 1.5 years	\$45,000
Watershed exhibit and digital data display coordination - Cascade Meadow Wetlands & Environmental Science Center Staff, .2 FTE, 1 year	\$12,000
Contracts:	
Exhibit Design & Fabrication - a contractor will be selected through a bidding process to develop and construct the 3-D watershed exhibit. The amount for this item is based on the cost of similarly sized and types of exhibits.	\$140,000
Professional/technical - a contractor will be selected through a bidding process to develop the digital data display.	\$15,000
Equipment/Tools/Supplies: Printing of materials for Water Literacy Program	\$2,500
Travel: Cost for personnel to travel across the watershed to give the Water Literacy Program	\$3,000
TOTAL ENVIRONMENT & NATURAL RESOURCES TRUST FUND \$ REQUEST	\$ 229,500

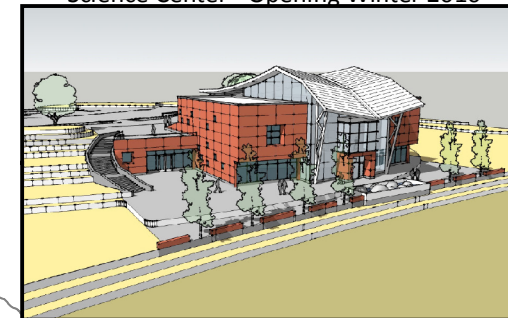
V. OTHER FUNDS

<u>SOURCE OF FUNDS</u>	<u>AMOUNT</u>	<u>Status</u>
Other Non-State \$ Being Applied to Project During Project Period: Cascade Meadow Wetlands & Environmental Science Center will contribute \$35,000 to the development and construction of the 3-D watershed exhibit.	\$ 35,000	Secured
Other State \$ Being Applied to Project During Project Period: None.	\$ -	
In-kind Services During Project Period: Olmsted, Goodhue, Wabasha, Dodge and Rice County Water Planners will contribute 20 hours each towards the collection of social data. The Cascade Meadow Wetlands & Environmental Science Center will provide \$35,000 of in-kind assistance for exhibit space, staffing, installation and maintenance.	\$ 39,000	
Remaining \$ from Current ENRTF Appropriation (if applicable): Not applicable.	\$ -	
Funding History: Planning and construction of the Cascade Meadow Wetlands & Environmental Science Center is being provided by a private donor. The Science Center will be maintained by private investments. The Zumbro Watershed Partnership was founded in 2005 and relies on private donations and grant funding for its operation, educational outreach and water quality improvement projects.	\$ -	

ZUMBRO WATERSHED COMPREHENSIVE WATER LITERACY FOR CHANGE



Cascade Meadow Wetland & Environmental Science Center - Opening Winter 2010



Zumbro Watershed Comprehensive Water Literacy for Change: Project Manager Qualifications & Organization Description

Qualifications of Project Manager

The project manager for the “Zumbro Watershed Comprehensive Water Literacy for Change” proposal will be Lisa Eadens, Watershed Coordinator for the Zumbro Watershed Partnership (ZWP). Lisa holds a Bachelor of Science in Biology from Davidson College in North Carolina and a Master of Science in Wildlife Ecology and Conservation from the University of Florida. Lisa has worked for the ZWP since September of 2009, administratively supporting the Board, conducting public outreach, coordinating member and partner activities, and administering grants. Prior to the ZWP, Lisa worked for the National Wildlife Federation as the Rocky Mountain Regional Constituent Coordinator, which also included grant administration. Her experience administering grants includes managing budgets, compiling reports, and facilitating partner and community meetings.

Description of Organization

Zumbro Watershed Partnership, Inc is a 501 (c)(3) organization created to serve as a catalyst for interaction between watershed citizens and natural resource professionals. The ZWP is a member driver organization, working across jurisdictional boundaries to achieve the goal of protecting and restoring the natural resources and social benefits of a healthy watershed. The mission of the ZWP is “To promote the protection and improvement of the Zumbro River Watershed.”

The ZWP has prepared a watershed plan for the 910,337-acre Zumbro River Watershed, which serves as the framework for prioritizing projects and seeking grants. Previous grants include: the Natural Resource Conservation Service Conservation Partnership Initiative grant for \$200,000 to launch planning activities and foster partnerships to prepare water quality and wildlife habitat work in the Zumbro Watershed and a McKnight Foundation grant of \$50,000 for operational support and outreach efforts. Current grant awards include a second McKnight Foundation grant of \$30,000 for operational support, a MPCA Surface Water Assessment Grant for \$25,000 and a Minnesota Waters Conservation Partnership grant of \$5,000 to conduct shoreland landowner outreach on buffers.