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

Subd: 04r Project Title: Southeast Minnesota Stream Restoration **Category:** C1+2. Protection, Restoration, and Enhancement **Total Project Budget: \$** \$250,000 Proposed Project Time Period for the Funding Requested: 3 yrs, July 2011 - June 2014 Other Non-State Funds (secured): \$ 300,000 Summary: This project will restore 4.2 miles of riparian corridor for trout and nongame species in Southeast Minnesota and increase the capacity of professional conservationists to implement integrated stream restoration projects. Hastings Name: Jeff **Sponsoring Organization:** Trout Unlimited, Inc. Address: E7740 Hastings Ln WI 54667 Westby **Telephone Number:** 608-606-4158 **Email** jhastings@tu.org Web Ad www.tu.org/driftless Location: Region: Metro, SE **Ecological Section:** Paleozoic Plateau (222L) County Name: Dakota, Fillmore, Goodhue, Houston, Olmsted, Wabasha, Winona

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City / Township:

# PROJECT TITLE: Phase II Southeast Minnesota Showcase Stream Restoration Projects I. PROJECT STATEMENT

The primary outcome of this project is to increase the quality and quantity of trout and nongame species habitat in Southeast Minnesota by restoring 4.2 miles of habitat along 12 streams. In addition we plan to sustain these efforts by increasing professional conservation staff capacity for implementing integrated restoration projects.

Early European settlement and agricultural practices from the 1850's to the 1930's led to wide scale erosion, flooding, and altering of streams and valleys in Southeast Minnesota. Hundreds of miles of clean coldwater spring creeks were inundated with tons of fine sediment as a result. Although land-use practices, erosion control, and stream health have improved tremendously since the 1930s, the legacy of the past continues to haunt Southeast Minnesota coldwater streams. Many of the streams today still have steep eroding banks, incised channels, and poor in-stream habitat. Annual sedimentation coming off streambank ranges from 250 to 1000 tons per mile and is responsible for as much as 85% of the total sediment load that enters the stream.

Nevertheless, future prospects for Minnesota's coldwater streams are potentially good. The rivers and fisheries have responded well to techniques to control erosion such as stabilizing streambanks, reconnecting streams to the floodplain, and improving instream habitat for wildlife. One example is Trout Run Creek near Chatfield, Minnesota: Eighteen months after a 2005 project was completed, MNDNR shocking data showed trout populations had nearly doubled, increasing by 3,300 trout per mile.

Southeast Minnesota streams are also a high priority area for the Minnesota State Wildlife Action Plan because of the concentration of species with high conservation needs in the region, habitat loss being the primary culprit of their decline. Many of the species are dependent on habitat in riparian areas and could benefit from additional restoration efforts tailored to their specific needs.

Through this project, Trout Unlimited (TU) will educate and train private citizens and federal, state, and county agency employees on doing effective stream restoration while collaboratively working with on stream restoration projects. Project participants will build their capacities for implementing effective stream restoration projects in the future through the knowledge and experience gained and the partnerships established. Proposed target areas for restoration include parts of the Cannon River in Dakota County, Hay Creek in Goodhue County, Zumbro River in Wabasha County, Mill Creek in Olmsted County, Whitewater River in Winona County, Root River in Fillmore County, and Winnebago River in Houston County.

### II. DESCRIPTION OF PROJECT ACTIVITIES

Activity 1: <u>Southeast Minnesota Showcase Stream Restoration Projects</u> **Budget:** \$194,250 Working with private citizens and federal, county, and state agency employees, TU will collaborate to restore 4.2 miles of habitat along 12 streams with at least one project in each of the targeted counties (i.e. Dakota, Goodhue, Wabasha, Olmstead, Winona, Fillmore, and Houston). TU's Driftless proposal for NRCS' Cooperative Conservation Partnership Initiative, the Driftless Area Fish Habitat Partnership, and other non-state funding will provide an additional \$500,000 in funding to complete the 4.2 miles.

Outcome Completion Date

7,400 feet stabilized with the incorporation of fish and nongame habitat.
 7,400 feet stabilized with the incorporation of fish and nongame habitat.
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 Oct. 2011
 Oct. 2012
 Oct. 2013

Activity 2: <u>Promote locally-led, broad-based partnership restoration projects</u>. Budget:\$33,000

The project manager will take the lead in organizing training sessions for professional conservation partners, especially county conservation and local NRCS staffs, which will increase the knowledge and skills necessary to effectively implement stream restoration. Restoration guides which include standard designs and instructions for stream bank stabilization and habitat for both game and rare or nongame species will be distributed. Ultimately, this will greatly increase our ability to tap into the significant funding available in federal Farm Bill conservation programs and make significant strides in improving the fishery and wildlife health in southeast Minnesota.

Outcome Completion Date

 Stream restoration symposium (1), workshops (3), volunteer workdays (5), Partnership signs (6), stream tours (2), Stream Restoration Project Planning Workshop for volunteers (2), presentations to partners (12)
 June 2014

Activity 3. <u>Survey, monitor & create ed. materials for nongame species</u> Budget: <u>\$25,500</u>
Land use and water quality conditions have improved somewhat over the decades, but brook trout and other native nongame species occupy only a fraction of their original habitat range. "Maintain and enhance riparian areas along priority stream reaches" is one of the "Priority Conservation Actions" that has been identified in Minnesota's State Wildlife Action Plan. Southeast MN, the Driftless Area has also been identified as having one of the highest concentrations of "Species of Greatest Conservation Need". Past stream restoration projects have not incorporated nongame species habitat because of a lack of funding and lack of knowledge about those species' habitat needs. This is a missed opportunity, as developing habitat for other species at the same time that construction equipment is being used for stream projects is efficient and cost-effective.

Outcome Completion Date

- 1. Rewrite "Driftless Riparian Habitat Guide" June 2013
  - 2. Distribute 50 copies of Habitat Guide. June 2014
  - 3. Conduct pre and post surveys to determine species presence/absence. June 2014

### III. PROJECT STRATEGY

Project Team/Partners - Name, affiliation, contribution	Trust Fund	Contributing	
Jeff Hastings, Trout Unlimited - administration, outreach, training & technical assistance. Over a three year period (\$13,200/yr.)	\$ 49,000	\$ 4,000	
Biology Dept., Winona State-pre-& post- nongame surveys	\$ 2,000	\$ 2,000	
Winona State Students - pre & post surveys of nongame restoration	\$ -	\$ 4,500	
Professional Herpetologists, to review & edit handbook	\$ 2,000	\$ 1,000	
Licensed Engineer to design federal Farm Bill projects	\$ 21,000	\$ 3,000	
MNDNR Nongame specialists, & Fisheries technical assistance	\$ -	\$ 2,500	
County Field Office Staff, workshop participants & designing projects	\$ -	\$ 8,500	
Twin Cities, Hiawatha & Win-Cres Trout Unlimited Chapters - volunteers	\$ -	\$ 4,500	
U.S. Fish & Wildlife Service staff - technical assistance & funding	\$ -	\$ 45,000	
NRCS technical assistance & federal Farm Bill dollars for restoration	\$ -	\$ 430,000	
Landowner labor and contributions	\$ -	\$ 25,000	
Total	\$ 74,000	\$ 485,200	

- **B. Timeline Requirements:** 3 years to conduct surveys, build capacity & implement projects.
- **C. Long-Term Strategy and Future Funding Needs:** If we are able to build local capacity (1 staff per county office) it is unlikely that we will need funding in the future.

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## 2011-2012 Detailed Project Budget

### IV. TOTAL TRUST FUND REQUEST BUDGET 3 years

BUDGET ITEM		<u>AMOUNT</u>
<b>Personnel:</b> Jeff Hastings, Project Manager, Trout Unlimited (grant funded position) - Grant administration, outreach, technical assistance, education; Salary \$39,000 (\$13,000/yr) .20 FTE; Fringe \$10,000 (\$3,333/yr) .20 FTE;	\$	49,000
Contracts: Professional Engineer Assistance - \$21,000 (\$7,000/yr) design federal	Ť	12,000
Farm Bill projects; Herpetologist \$2,000 (review habitat guide) (donate \$1,000 in-kind)		
Winona State Professor, Biology (spring through fall) \$2,000, (in-kind contribution \$2,000); coordinate student monitoring,	\$	25,000
<b>Equipment/Tools/Supplies:</b> Large Equipment & Operator for earth moving and installation of habitat \$80,000 5.5 miles of earth shaping; installation of in-stream and riparian habitat; (bulldozer \$100/hr 340 hrs; Track hoe \$140/hr 300 hrs. mobilization \$4,000); Supplies for restoration projects \$80,000; (\$15,000 for lumber & re-rod, to build habitat for fish & nongame; \$50,000 for rip-rap & flat rock to stabilize bank and structures; \$20,000 for erosion control blanket, straw mulch and seed) Supplies for conducting surveys \$2,000 (15 traps @ \$24/trap; 9 hoop nets & 30	·	
cover boards \$1,640; )	\$	162,000
Acquisition N/A	\$	-
Travel: Mileage for workshops, surveys, restoration projects, meetings.	\$	4,000
Additional Budget Items: 100 copies of Habitat Guide for every MN county field office & DNR fisheries (Printing \$1,500, layout \$1,500, mailing \$500); Five Volunteer Workdays (65 volunteers) \$1,500 (food, portable toilet); Stream Restoration Symposium \$1,000 (room & materials); Partnership signs \$1,000 (6 signs); Stream Restoration Project Planning Workshop \$1,000 (materials, room rental); Three Contractor & Conservationist workshops (60 contractors & conservationists) \$2,000 (food, materials, portable toilet).	6	10.000
2,000 (1004, materials, portubio tellot).	\$	10,000
TOTAL ENVIRONMENT & NATURAL RESOURCES TRUST FUND \$ REQUEST	\$	250,000

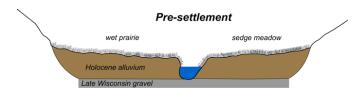
### **V. OTHER FUNDS**

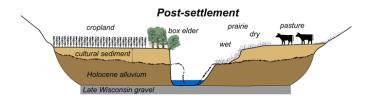
SOURCE OF FUNDS	<u>Al</u>	MOUNT	<u>Status</u>
Other Non-State: federal Cooperative Conservation Partnership Initiative Farm Bill			Secured
Dollars Secured \$300,000 (\$100,000 per year); another \$125,000 apply for			\$300,000
Applied for \$44,000 National Fish Habitat Action Plan (U.S. Fish & Wildlife			Pending
Service); \$10,000 National Fish and Wildlife Foundation and \$25,000 Landowner			\$204,000
contribution.	\$5	504,000	
Other State: Lessard-Sams Outdoor Heritage Council \$250,000			Pending
	\$	250,000	\$250,000
In-kind Services During Project Period: Donated Professional Review of Habitat			Pending
Guide \$1,000; Student volunteer hours surveying \$4,500; Professionals			\$42,275
volunteering for presentations, workshop, meetings \$6,075; Project Manager -			
volunteer hours \$4,000; Winona State Professor volunteer hours \$2,000; Licensed			
Engineer volunteer hours \$3,000; MN DNR Fish Biologists & nongame specialist			
volunteer hours \$2,700; County Field office staff volunteer hours \$8,500; Trout			
Unlimited chapter volunteer hours \$4,500; U.S. Fish & Wildlife Service Volunteer			
hours \$1,000; NRCS Technical Assistance volunteer hours \$5,000;	\$4	42,275	
Remaining: \$136,516 dollars obligated to be spent by October 2010 on stream			Obligated
restoration projects;			\$167,309
\$30,793 in staff time, mileage, workshops, signage to be spent by July 2011.	\$	167,309	
Funding History:	\$	-	_



### Southeast Minnesota Trout Streams







Top Seven Counties with Coldwater Streams in the Driftless Area of Minnesota & Wisconsin				
	MN	WI		
# of County & Federal employees with "job approval" to designs conservation practices	57	53		
# of County & Federal employees with "job approval" to design stream restoration projects	1	15		
2009 Federal Farm Bill dollars spent on stream restoration practices	0	\$650,000		
2009 Miles of streams improved	0	14 miles		

# All projects will stabilize banks, improve water quality, involve DNR fisheries, engage partners, benefit fish and nongame species, and include non-state funding as match. Additional Ranking Criteria, projects where: \* public can access the water \* lack of quality habitat is a limiting factor for the fishery \* erosion is a major contributing factor \* lack of quality habitat is a limiting factor for nongame species \* a stream restoration project has not occurred in the last 2 years \* three or more partners are involved \* there is a 50% or greater non-state dollar match

### **Project Manager Qualifications**

### **Jeff Hastings**

### Project Manager - Trout Unlimited - Driftless Area Restoration Effort

In the spring of 2006 Trout Unlimited hired a full-time project manager to work with collaborating agencies and non-governmental groups to improve the cold water streams and their watersheds in southeast Minnesota, southwest Wisconsin, Northwest Illinois and Northeast Iowa of the Driftless Area. Developing an application, strategic plan and implementing the goals and objectives of the National Fish Habitat Action Plan are part of his responsibilities as Project Manager. Jeff attended the College of Natural Resources at the University of Wisconsin – Stevens Point where he majored in Wildlife Management and Biology with a minor in soils. Jeff spent the last 25 years managing Soil and Water Conservation Departments in the Driftless Area. For the past 15 years the designing and installation of streambank stabilization and trout habitat work has been an increasingly important element of his job, along with pursuing grants and partners to implement projects.

Trout Unlimited (TU) was founded in 1959 and is an IRS designated 501(c)(3) nonprofit organization. Today TU is the nation's largest grassroots coldwater fishery organization with a mission to conserve, protect and restore North America's trout and salmon fisheries and their watersheds. TU has approximately 140,000 members organized into more than 400 local chapters who collectively volunteered 618,000 hours in 2008 organizing restoration projects, educating youth in environmental stewardship, and engaging local decision makers in proactive planning. Headquartered outside of Washington, DC, TU also has 150 professional staff members working across the country who oversee watershed restoration projects, organize hunters and anglers to advocate for improved public lands management, work to systematically improve state water policy to benefit rivers and fish, or promote youth education programs. TU's 16 chapters in and around the Driftless Area have a long history of restoration work and were a major force in initiating what is now one of TU's largest and most ambitious restoration initiatives to date.

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