Environment and Natural Resources Trust Fund 2009 Phase 2 Request for Proposals (RFP)

LCCMR ID: 058-B2		
Total Project Budget: \$	Period for the Funding Requested:	
Address: 339 9th Street	Last Name: a: Greater Blue Earth River Basin A	
Windom Telephone Number: 50 Email: david.bucklin@mn Fax: 507 831 2928 Web Address:		
Region: SW, SE	County Name: Blue Earth, Cottonwood, Faribault, Freeborn, Jacks	City / Township:

Summary: This project will develop and implement a replicable process to reduce peak water flows using revitalized urban forests. This process can then be used throughout Minnesota.

Main Proposal:	0908-2-014-proposal-2009LCCMR_main_Peak Flowdoc		
Project Budget:	0908-2-014-budget-RFP_2009_Project Budget Peak Flows.xls		
Qualifications:	0908-2-014-qualifications-2009 LCCMR project manager qualifications Peak FI		
Map: 0908-2-014-maps-GBERBA - MAP -Peak Flows LCCMRdoc.doc			
Letter of Resolut	tion: 0908-2-014-resolution-Letter of Res. GBERBA Peak Flows.pdf		

MAIN PROPOSAL

PROJECT TITLE: Reducing Peak Water Flows with the Urban Forest

I. PROJECT STATEMENT

This project will reduce urban storm water runoff by 540 million gallons in the Greater Blue Earth Watershed. This is 20% reduction in urban runoff in nine communities. This projection is based on "Identified Benefits of Community Trees and Forests" by Dr. Kim D. Coder University of Georgia 1996, and other similar studies. The stated benefit is "for every 5% of tree cover area added to a community, run off is reduced by approximately 2%". This run off reduction will also provide a similar reduction in multiple impairments now entering the Greater Blue Earth Basin through storm water runoff.

Our urban forests are a neglected resource. With this funding we will we will revitalize the green infrastructure in at least nine communities. Most urban forest plans were last updated when the Dutch elm disease came through in the 1960s. The nine communities will be one each in the counties of Blue Earth, Cottonwood, Faribault, Freeborn, Jackson, Le Sueur, Martin, Waseca, and Watonwan, all members of the Greater Blue Earth River Basin Alliance.

The DNR Forestry will provide technical assistance and up to \$100,000.00 in cash to communities. The DNR will also document the project for replication in other watersheds.

What makes this proposal more critical is the impending arrival of the Emerald Ash Borer which will destroy up to 40% of our urban forests, our ash trees. A 40% reduction in urban trees will result in a sixteen percent increase in storm water runoff.

This grant proposal is based on a very successful LCCMR-funded tree program in Mountain Lake, Minnesota. After five years in Mountain Lake we have accomplished a 25%, 500 tree increase in the urban trees. This will result in a 10% decrease in storm water run off.

II. DESCRIPTION OF PROJECT RESULTS

Result 1 Choose communities and establish tree commissions.Budget \$ 32,700.00DeliverableCompletion Date Winter 2009

1 The SWCDs in each County overseen by GBERBA will select a community with a population of less than five thousand residents. A community of that size will have limited budgets to deal with the urban forest issues. The SWCD will contact the larger communities first by approaching the city council members. We will be open to the option of working with multiple towns in a county as funds allow. The City will agree in an official council resolution to participate in the program and commit the \$3,000.00 match per year for a minimum of three years. This is a 75% match to the LCCMR funds by each community. Each town will also designate a certified tree inspector. A volunteer citizen committee will be established to advise the City Councils and rewrite the City tree ordinance as needed to bring up to current standards.

Result 2: Community Tree SurveysBudget: \$ 9,000.00DeliverableCompletion Date Winter 2009

1 Each Community will conduct a public tree survey. The survey will be done by Community Volunteers, SWCDs, DNR foresters, and the Minnesota Conservation Corps. if needed. The MCC staff will be hired with each communities match dollars. All public street trees will be surveyed. The survey will be a starting point that will give us tree specie populations in the urban forest and assist with tree selection. The survey will also identify tree openings, and hazard trees for removal.

Result 3 Plant trees in the CommunitiesBudget \$ 99,000.00DeliverableCompletion Date Summer 2010-11

1. Using the tree survey the tree commissions of each community will select species of trees to plant using the 10-20-30 rule. No more than 10% of any one specie of tree, no more than 20% of any one genus and no more than 30% of any one family of trees. The survey will also assist with identifying openings where trees can be planted. Landowners will be contacted about potential removals and plantings by the tree commissions.

Result 4 Reduce Peak Flows and Replicate Project for Statewide Use
DeliverableBudget \$ NoneCompletion Date Summer 2012

- 1. After three years of the project we hope to plant trees to reduce urban runoff by 10% in the nine communities. With the anticipated continued funding from the communities and DNR we expect a 20% run off reduction potential within 6-10 years.
- 2. This project will serve as a prototype to be replicated. The DNR staff will create brochures and video to be distributed to communities throughout Minnesota.

III. PROJECT STRATEGY AND TIMELINE A. Project Partners

Soil and Water Conservation Districts in each of the nine counties. The SWCDs will choose the communities based on the population and ability to complete the project. The SWCD will facilitate the forming of the tree commissions and walk the members through the start up period. The SWCD will assist with tree selection and provide the trees at wholesale cost for this project. **City Councils of the nine communities.** The councils will agree to participate in the program and commit the required match dollars to the project. If needed, they will ratify a new tree ordinance. **DNR Forestry.** Area and statewide staff will provide financial and technical assistance, training workshops and document the project for statewide replication.

Minnesota Conservation Corps. The MCC crews will assist with the tree survey and planting if available. If needed the MCC crews will be paid with the individual communities cash match. **Landowners.** The landowners will be given the choice to plant a new tree in their boulevard area. With each tree planted a \$10 co pay will be collected from the landowner.

B. Project Impact

This project will lessen the urban storm water runoff by up to 20% with or without the EAB arrival in nine small urban communities. This will lessen flood impacts downstream. The reduced runoff could be as much as 60 million gallons per community per year. The \$140,700.00 dollars requested of the LCCMR will accomplish all the project goals. The DNR Forest Health funds will allow us to further assist each community or add extra communities to the project. The approved TMDL implementation plans for the Lower Minnesota River Dissolved Oxygen TMDL and the Greater Blue Earth River Fecal TMDL call for a reduction in urban storm water run off. Storm water runoff is also identified in the Lake Pepin TMDL Plan-2. This project will address those concerns.

C. Time

July, 1 2009. Begin work with selected community's city councils. Advertise the project and have volunteer meetings and establish tree commissions in each community.

Fall of 2009. complete urban tree survey. Contact landowners with hazard trees and landowners with openings for new trees. With the survey results tree selection and ordering can proceed. Winter 2009. the tree commissions will write or rewrite tree ordinances for the nine communities. The City Councils will approve the new ordinances.

Spring 2010 Plant the trees. Remove hazard trees.

Summer 2010 Contact landowners for the next springs plantings and hazard tree removals. Spring 2011 Plant the trees. Remove hazard trees.

D. Long-Term Strategy

Each community will agree to maintain the cash funding for the three years (one year beyond the grant). We expected that the success of the project in the early years will show the long term value to each community. The project in Mountain Lake has ongoing funding by the City Council of \$12,000.00 per year. This project will also provide a template for other communities to revitalize urban forests throughout Minnesota.

Project Budget

Reducing Peak Water Flows with the Urban Forest

IV. TOTAL PROJECT REQUEST BUDGET

BUDGET ITEM	AMOUNT	<u>% FTE</u>
Personnel: SWCD/County project coordinator in 9 Counties. 5% FTE X9	27,000.00	5%
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The Greater Blue Earth River Basin Alliance Staff, over all project coordination.	3,000.00	5%
Other: Project advertising and promotion. Local newspapers, and meetings. \$300.00 per Community = \$2,700.00	2,700.00	
Other: Tree purchase, planting, tree surveys. \$6,000.00 per 2 years x 9 communities.	108,000.00	
TOTAL PROJECT BUDGET REQUEST TO LCCMR	140,700.00	

V. OTHER FUNDS

SOURCE OF FUNDS	<u>AMOUNT</u>	<u>Status</u>
Other Non-State \$ Being Leveraged During Project Period: Community cash match amounts \$3,000.00 x 3 yrs x 9 communities. = \$81,000.00 Landowner cash match, \$10 per tree x 180 trees over 3 years x 9 communities. = \$16,200.00	\$97,200.00	Partially secured
Other State \$ Being Spent During Project Period: Potentially up to \$100,000 of DNR Bonding Grant Funds to communities to cost share local implementation activities. If this LCCMR grant is sucsessful we will apply to the DNR Community Forest Health Grant.	\$100,000.00	Partially secured
In-kind Services During Project Period: Volunteers for tree commissions, 5 volunteers x 9 communities x 10 hrs per year x 2 years. = \$9,000.00 GBERBA Technical and Policy meeting up dates and discussion on project. 150 hrs over 2 years. = \$3,000.00 Minnesota DNR Forestry 5% x 5 staff = \$15,000 (25% of an FTE) Minnesota DNR \$10,000 for documenting project, including video production and printing costs.	\$37,000.00	

2009 LCCMR Grant Request Project Manager Qualifications for David Bucklin.

Cottonwood SWCD District Technician 19 years The Greater Blue Earth River Basin Alliance Technical Coordinator 2006-present Member of the Mountain Lake Tree Commission from inception. 2004-present Manager of an EQIP Forestry stand improvement Grant, Buckthorn control 2006-2010

Presentation at the Minnesota SWCD Forestry Association Conference March 26-27, 2008. Emerging Issues On Family Forestland. The Emerald Ash Borer in Cottonwood County, and presented information on the Mountain Lake urban forest project.

Presentation at the MASWCD State Employees Training Conference, June 23-25 2008. The Emerald Ash Borer in Minnesota.

GREATER BLUE EARTH RIVER BASIN ALLIANCE

This grant proposal will serve 40,000 people in nine communities within the Greater Blue Earth River Basin.

