

Workplan / Grant Application / Project Summary Report  
**2013 - Clean Water Assistance Grant - Ravines and  
 Gullies**

Submitted by: **Greater Blue Earth River Basin Alliance JPB**

Grant Fund Type: CWF Clean Water Assistance Grants

Fund Year: 2013

<i>Total Grant Amount:</i>	<b>\$425,000.00</b>	<i>Amount Budgeted for this Workplan:</i>	<b>\$425,000.00</b>	<i>Amount Spent for this workplan:</i>	<b>0.00</b>	<i>Amount Not Spent on this workplan:</i>	<b>\$425,000.00</b>
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**BMP Detail Summary**

Number of BMP's Installed	BMP Name	Shape Type	Linear Ft.	Total Acres	Total Mapped BMPs	Soil Loss Reduction Tons/Yr	Sediment Reduction Tons/Yr	Phosphorus Reduction Lbs/Yr
1	Grade Stabilization Structure - 410	BMP Point	0	0.00	0	0.00	0.00	0.00
Total # installed BMPs: 1						0.00	0.00	0.00 Lbs/Yr
Total # mapped BMPs: 0						Tons/Yr	Tons/Yr	

Initiative Name: **2013 - Clean Water Assistance Grant - Ravines and Gullies - Administration and Coordination**

Initiative Type: Admin/Coordination

Year: 2013

Description

The Clean Water Assistance Grant - Ravines and Gullies Project will implement targeted BMPs to reduce sedimentation and increase infiltration in the riparian areas of the Greater Blue Earth River Watershed.

Administration and Coordination of this project will be provided by the GBERBA Coordinators and Bookkeeper. The Administrative Coordinator will administer the 2013 CWA Grant. Administration will include all E-link, website and reporting documents as required by BWSR. The fiscal management will be completed by the GBERBA Bookkeeper and include all reporting documents as required by BWSR.

Administrative Funds:

Total: \$21,250.00 (5%)

GBERBA: \$21,250.00

In-Kind Matching Funds:

Total: \$5,325.00

GBERBA: \$5,325.00

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2013 - Clean Water Assistance Grant - Greater Blue Earth River Basin Alliance (JPB)	21,250.00	21,250.00	0.00		
2. 2013 - Clean Water Assistance - Ravines and Gullies - GBERBA, SWCD, County - In-Kind	5,325.00	5,325.00	0.00		
<b>Totals:</b>	<b>26,575.00</b>	<b>26,575.00</b>	<b>0.00</b>		

List of Attached Files (click to view)

Document Description

Date Added

- |                                                              |                                                 |        |
|--------------------------------------------------------------|-------------------------------------------------|--------|
| 1. <a href="#">GBERBA - CWF - 2013 - Targeting and Addre</a> | Policy Guidelines for Ravine and Gully Projects | 2/1/13 |
|--------------------------------------------------------------|-------------------------------------------------|--------|

Initiative Name:

**2013 - Clean Water Assistance Grant - Ravines and Gullies - Project Development**

Initiative Name: **2013 - Clean Water Assistance Grant - Ravines and Gullies - Project Development**

Initiative Type: Project Development

Year: 2013

Description

The Project Development Initiative will paid to GBERBA members who complete projects in their county. Tasks will include landowner meetings and project investigation; design or engineer consultation and cost-share paperwork.

Project Development:  
 Total: \$10,625.00 (2%)  
 SWCDs/Counties: \$10,625.00

In-Kind Matching Funds:  
 Total: \$2,700.00  
 SWCDs/Counties: \$2,700.00

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2013 - Clean Water Assistance - Ravines and Gullies - GBERBA, SWCD, County - In-Kind	2,700.00	2,700.00	0.00		
2. 2013 - Clean Water Assistance Grant - Greater Blue Earth River Basin Alliance (JPB)	10,625.00	10,625.00	0.00		
<b>Totals:</b>	<b>13,325.00</b>	<b>13,325.00</b>	<b>0.00</b>		

Initiative Name: **2013 - Clean Water Assistance Grant - Ravines and Gullies - Technical and Engineering**

Initiative Type: Technical and Engineering

Year: 2013

Description

Engineering assistance for this project could be completed by several entities and are as follows:  
 South Central TSA located in Blue Earth County; Southwest Prairie TSA in Murray County and qualified District Staff and eligible Technical Service Providers. Providers will complete project estimates, certified final designs, and supervise the installation of qualifying BMPs.

GBERBA Technical Coordinator will be working with participating SWCDs to ensure qualified technical staff are being utilized throughout the project.

Technical and Engineering Funds:

Total: \$53,125.00 (13%)

Qualifying TSA, SWCD or TSP: \$53,125.00

In-Kind Matching Funds:

Total: \$13,300.00

SWCDs and Counties: \$13,300.00

<u>FUND(s)</u>	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2013 - Clean Water Assistance - Ravines and Gullies - GBERBA, SWCD, County - In-Kind	13,300.00	13,300.00	0.00		
2. 2013 - Clean Water Assistance Grant - Greater Blue Earth River Basin Alliance (JPB)	53,125.00	53,125.00	0.00		
<b>Totals:</b>	<b>66,425.00</b>	<b>66,425.00</b>	<b>0.00</b>		

Initiative Name: **2013 - Clean Water Assistance Grant - Ravines and Gullies - Land and Water Treatment**

Initiative Type: Land Water Treatment

Year: 2013

Description

GBERBA Technical Committee and Policy Board have approved the Targeting and Addressing Ravines in the Greater Blue Earth River Grant.

The funds will target the installation of 15+ BMPs to stabilize severely eroding ravines in the Greater Blue Earth River Watershed.

This initiative will work towards the goal of applying BMPs to targeted ravines and gullies in the Greater Blue Earth Watershed.

Some projects are already being identified by SWCDs.

Targeting Projects: Ravines and gullies will be targeted using the grant approved targeting methods and must be identified through one of the following methods:

-1) "Identification and Analysis of Ravines in the Minnesota River Basin with GIS". Wing, Mulla, and Nelson, UM. Using the data learned from this study Dr. David Mulla has applied the targeting methods to the GBERBA, and provided this data to GBERBA.

-2) Stream Power Index (SPI) model for targeting. Much of this information was provided to the GBERBA counties from the 2011 Clean Water Fund Project "The GBERBA Agricultural Shoreland Initiative". Through that 2011 CWF project specific locations were identified as highly vulnerable riparian areas using the LiDAR dataset to compile the Stream Power Index.

-3) Members of GBERBA also realize that the best targeting tools can miss specific local conditions that cause high sediment producing ravines and gullies. GBERBA will target these ravines and gullies contributing over ten tons per year of sediment to the river system, as identified utilizing the BWSR Pollution Reduction Estimators.

Cost-share will be disbursed to landowners up to 100% cost-share as long as all in-kind contributions for the grant can be met to comply with the CWF grant agreement.

-Maximum grant request per project is \$50,000.

Numbering system for grant - (CWF-R&G-13-Co#-Project#)

Project Costs:

Total: \$340,000.00

In-Kind Matching Funds:

Total: \$106,250.00

EQIP: \$85,000.00

Landowner: \$21,250.00

FUND(s)

	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2013 - Clean Water Assistance - Ravines and Gullies - Landowner In-Kind	21,250.00	21,250.00	0.00		
2. 2013 - Clean Water Assistance Grant - Greater Blue Earth River Basin Alliance (JPB)	0.00	0.00	0.00		
3. 2013 - Clean Water Assistance - Ravines and Gullies - EQIP Match	85,000.00	85,000.00	0.00		
<b>Totals:</b>	<b>106,250.00</b>	<b>106,250.00</b>	<b>0.00</b>		

L&W Project Name: **Anticipated CWA - Ravine and Gully Projects**

BMP(s)

1. Grade Stabilization Structure-410

*Mapped = No*

POLLUTION REDUCTION ESTIMATE(s)

None

Project Description

Placeholder Project - Work Plan

The project will facilitate targeted installation of 15+ agricultural BMP's to stabilize severely eroding ravines in the Greater Blue Earth Basin.

FUND(s)

	<u>Budgeted</u>	<u>Approved</u>	<u>Spent</u>	<u>First Spend Date</u>	<u>Last Spend Date</u>
1. 2013 - Clean Water Assistance Grant - Greater Blue Earth River Basin Alliance (JPB)	340,000.00	340,000.00	0.00		
<b>Totals:</b>	<b>340,000.00</b>	<b>340,000.00</b>	<b>0.00</b>		

**Program Specific Workplan Items**

*Needed TMDL Load Reduction (If Applicable):*

NA

*What is the estimated amount of hydrologic benefit?*

Some. Added infiltration as well as sediment basins slowing the flow.

*Water Plan Reference:*

The Comprehensive Local Water Management Plans in all GBERBA counties include protecting surface water quality as a priority.

Examples:

- Cottonwood LWMP pg 7 Priority #1 Improve Surface Water Quality;
- Blue Earth County LWMP, pg 87 Priority Concern, Surface Waters.
- Freeborn County LWMP, 7 of 13 Goals directly mention protecting surface waters.

*TMDL Reference (if applicable):*

In the Lower Minnesota River Dissolved Oxygen TMDL Implementation Plan,

- Section 2.1 Pg 13, table 5 lists Phosphorus impact coefficients for the Blue Earth, Le Sueur, and the Watonwan Rivers.

The Greater Blue Earth River Turbidity TMDL Study estimates a 7,500 Tons per day sediment loading rate during high flow conditions.  
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*Watershed Name (81 Majors)*

Greater Blue Earth River, (Watonwan, Blue Earth, and the LeSueur Rivers)

*Project Description:*

GBERBA will install best management practices to address severe ravines and gullies in targeted specific locations. GBERBA will use three targeting methods.

1) "Identification and Analysis of Ravines in the Minnesota River Basin with GIS". S. Wing, D.J. Mulla, and J. Nelson, University of Minnesota. Using the data learned from this study Dr. David Mulla has applied the targeting methods to the Greater Blue Earth River Basin, and provided this data to GBERBA.

2) Stream Power Index (SPI) model for targeting. Much of this information was provided to the GBERBA counties from the 2011 Clean Water Fund Project "The GBERBA Agricultural Shoreland Initiative". Through that 2011 CWF project specific locations were identified as highly vulnerable riparian areas using the LiDAR dataset to compile the Stream Power Index. This allows GBERBA technical staff to pinpoint the top 10% or higher potential erosive locations in the watershed.

3) Members of GBERBA also realize that the best targeting tools can miss specific local conditions that cause high sediment producing ravines and gullies. GBERBA will target these ravines and gullies contributing over ten tons per year of sediment to the river system, as identified utilizing the BWSR Pollution Reduction Estimators.

*Primary Pollutant Targeted:*

Sediment

*Estimated Amount of Primary Pollutant Reduction:*

2000 Tons Per Year

*Secondary Pollutant Targeted:*

Phosphorus

*Estimated Amount of Secondary Pollutant Reduction:*

4200 pounds per year

*LGU CWF Website*

[gberba.org](http://gberba.org)

*Full Time Equivalent Employees*

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