



## Grant All-Detail Report Multipurpose Drainage Management 2017

**Grant Title** - Multipurpose Drainage Management - Greater Blue Earth River Basin Alliance

**Grant ID** - C17-3714

**Organization** - Greater Blue Earth River Basin Alliance

<b>Grant Awarded Amount</b>	<b>\$301,200.00</b>	<b>Grant Execution Date</b>	
<b>Required Match Amount</b>	<b>\$75,300.00</b>	<b>Grant End Date</b>	12/31/2019
<b>Required Match %</b>	25%	<b>Grant Day To Day Contact</b>	Kay Gross

### Budget Summary

	Budgeted	Spent	Balance Remaining*
Total Grant Amount	\$301,200.00	\$3,870.00	\$297,330.00
Total Match Amount	\$75,306.00	\$0.00	\$75,306.00
Total Other Funds	\$0.00	\$0.00	\$0.00
<b>Total</b>	<b>\$376,506.00</b>	<b>\$3,870.00</b>	<b>\$372,636.00</b>

\*Grant balance remaining is the difference between the Awarded Amount and the Spent Amount. Other values compare budgeted and spent amounts.

### Budget Details

Activity Name	Activity Category	Source Type	Source Description	Budgeted	Spent	Last Transaction Date	Matching Fund
Administration and Coordination	Administration /Coordination	Current State Grant	Multipurpose Drainage Management - Greater Blue Earth River ..	\$30,000.00	\$3,870.00	12/31/2017	N
Agriculture Structural Practices	Agricultural Practices	Current State Grant	Multipurpose Drainage Management - Greater Blue Earth River ..	\$105,000.00			N
Agriculture Structural Practices	Agricultural Practices	Federal Funds	Federal Funding Sources	\$11,662.00			Y

Activity Name	Activity Category	Source Type	Source Description	Budgeted	Spent	Last Transaction Date	Matching Fund
Agriculture Structural Practices	Agricultural Practices	Landowner Fund	Landowner Cash Contribution	\$11,662.00			Y
Agriculture Structural Practices	Agricultural Practices	Local Fund	Local Funding Sources	\$11,662.00			Y
Conservation Drainage Practices	Conservation Drainage	Current State Grant	Multipurpose Drainage Management - Greater Blue Earth River ..	\$121,000.00			N
Conservation Drainage Practices	Conservation Drainage	Federal Funds	Federal Funding Sources	\$13,440.00			Y
Conservation Drainage Practices	Conservation Drainage	Landowner Fund	Landowner Cash Contribution	\$13,440.00			Y
Conservation Drainage Practices	Conservation Drainage	Local Fund	Local Funding Sources	\$13,440.00			Y
Technical and Engineering	Technical/Engineering Assistance	Current State Grant	Multipurpose Drainage Management - Greater Blue Earth River ..	\$45,200.00			N

### Activity Details Summary

Activity Details	Total Action Count	Total Activity Mapped	Proposed Size / Unit	Actual Size / Unit
410 - Grade Stabilization Structure	15	1	15 COUNT	0 COUNT
605 - Denitrifying Bioreactor	1	1	1 COUNT	0 COUNT

### Proposed Activity Indicators

Activity Name	Indicator Name	Value & Units	Waterbody	Calculation Tool	Comments
<b>Bioreactors - Anticipated</b>	PHOSPHORUS (EST. REDUCTION)	15 LBS/YR	10 County Drainage Ditch Authority Boundaries	Literature Value	
<b>Grade Stabilization Structures - Anticipated</b>	PHOSPHORUS (EST. REDUCTION)	12 LBS/YR	10 County Drainage Ditch	BWSR CALC (GULLY STABILIZATION)	

Activity Name	Indicator Name	Value & Units	Waterbody	Calculation Tool	Comments
			Authority Boundaries		
<b>Storage and Treatment Wetland Restoration - Anticipated</b>	PHOSPHORUS (EST. REDUCTION)	2 LBS/YR	10 County Drainage Ditch Authority Boundaries	BWSR CALC (GULLY STABILIZATION)	
<b>Open Tile Inlet Replacements - Anticipated</b>	PHOSPHORUS (EST. REDUCTION)	20 LBS/YR	10 County Drainage Ditch Authority Boundaries	BWSR CALC (GULLY STABILIZATION)	
<b>Water and Sediment Control Basins - Anticipated</b>	PHOSPHORUS (EST. REDUCTION)	25 LBS/YR	10 County Drainage Ditch Authority Boundaries	BWSR CALC (GULLY STABILIZATION)	
<b>Grass Waterways - Anticipated</b>	PHOSPHORUS (EST. REDUCTION)	10 LBS/YR	10 County Drainage Ditch Authority Boundaries	BWSR CALC (GULLY STABILIZATION)	
<b>Bioreactors - Anticipated</b>	NITROGEN	1480 LBS/YR	10 County Drainage Ditch Authority Boundaries	Literature Value	
<b>Saturated Buffers - Anticipated</b>	NITROGEN	240 LBS/YR	10 County Drainage Ditch Authority Boundaries	Literature Value	
<b>Storage and Treatment Wetland Restoration - Anticipated</b>	NITROGEN	100 LBS/YR	10 County Drainage Ditch Authority Boundaries	Literature Value	
<b>Grade Stabilization Structures - Anticipated</b>	SEDIMENT (TSS)	12 TONS/YR	10 County Drainage Ditch Authority Boundaries	BWSR CALC (GULLY STABILIZATION)	
<b>Storage and Treatment Wetland Restoration - Anticipated</b>	SEDIMENT (TSS)	2 TONS/YR	10 County Drainage Ditch Authority	BWSR CALC (GULLY STABILIZATION)	

Activity Name	Indicator Name	Value & Units	Waterbody	Calculation Tool	Comments
<b>Open Tile Inlet Replacements - Anticipated</b>	SEDIMENT (TSS)	20 TONS/YR	10 County Drainage Ditch Authority Boundaries	BWSR CALC (GULLY STABILIZATION)	
<b>Water and Sediment Control Basins - Anticipated</b>	SEDIMENT (TSS)	25 TONS/YR	10 County Drainage Ditch Authority Boundaries	BWSR CALC (GULLY STABILIZATION)	
<b>Grass Waterways - Anticipated</b>	SEDIMENT (TSS)	10 TONS/YR	10 County Drainage Ditch Authority Boundaries	BWSR CALC (GULLY STABILIZATION)	

### Final Indicators Summary

Indicator Name	Total Value	Unit
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## Grant Activity

Grant Activity - Administration and Coordination	
Description	<p>Administration and Coordination of this project will be provided by the GBERBA Coordinators (Administrative, Technical and Financial). Administrative Coordinator will administer the FY2017 CWF Grant with duties to include E-link reporting, website updating and reporting documents as required by BWSR. Financial reporting will be completed by the Financial Coordinator using QuickBooks. Technical Coordinator will oversee the pollution reduction estimates needed for associated projects and help with technical assistance as requested. The Technical Coordinator will also work to develop a grant policy by which projects will be targeted and prioritized for funding.</p> <p>GBERBA staff are contracted employees so the grant will reflect the contracted hourly rates for the Coordinators which in 2017 is \$30.00 per hour.</p> <p>TOTAL GRANT FUNDING: \$30,000.00 TOTAL MATCH FUNDING: \$0.00</p>
Category	ADMINISTRATION/COORDINATION
Start Date	3-Apr-17 <span style="float: right;">End Date</span>
Has Rates and Hours?	Yes
Actual Results	<p>April - December 2017</p> <p>Total Admin Hours - 129.0 GBERBA contracted hourly rate - \$30.00/hour Total 2017 Admin - \$3,870.00</p>

**Grant Activity - Agriculture Structural Practices**

<p><b>Description</b></p>	<p>Funds will be used to implement WASCOBs, grassed waterways, and grade stabilization structures adjacent to, on, or within watersheds of priority 103E public drainage systems within the whole 10 GBERBA-member County extent (excluding areas within a watershed district). Public Drainage Systems must have a documented sediment and/or water quality concern. Documented concerns include, but are not limited to, an analysis, study, strategy, plan, engineer's report, engineer's preliminary survey report for a drainage system improvement, or other water quality analysis.</p> <p>Two examples of 103E systems with documented concerns:                      -Faribault County Ditch #7. The CD7 Improvement Project Plan has identified 24 drainage manipulation practices that could be implemented to benefit water quality.                      -The Martin County Multipurpose Drainage Management Plan (2014) call for drainage management on four priority 103E drainage systems and includes descriptions of appropriate drainage practices and identifies specific targeted sites where these practices would be the most effective.</p> <p>Anticipated number of practices to be installed:                      -12 Grade Stabilization Structures                      -2 Grassed Waterways                      -5 WASCOBs</p> <p>TOTAL GRANT FUNDS: \$105,000.00                      Grant funds will be disbursed at a maximum cost-share rate not to exceed 100%.</p> <p>TOTAL MATCH FUNDS: \$34,986.00                      Matching funds will be contributed from various sources including EQIP, Federal Section 319 grant funds, landowner cash, local funds, and local drainage system funds.                      Federal Funding: \$11,662.00                      Local Funding: \$11,662.00                      Landowner Funding: \$11,662.00</p>		
<p><b>Category</b></p>	<p>AGRICULTURAL PRACTICES</p>		
<p><b>Start Date</b></p>	<p>3-Apr-17</p>	<p><b>End Date</b></p>	
<p><b>Has Rates and Hours?</b></p>	<p>No</p>		

**Actual Results**

APRIL - DECEMBER 2017

No funds expended.

Encumbered funds for Blue Earth County Drainage Authority, contract #CWF-MDM-17-07-01: 15 alternative side inlet structures. Estimated Cost \$43,500, encumbered \$32,625.00. County Ditch 56 was a focus of a targeted ditch inventory project and outlets to Lake Crystal, an impaired water of the State.

Activity Action - CWF-MDM-17-07-01 Blue Earth DA			
<b>Practice</b>	410 - Grade Stabilization Structure	<b>Count of Activities</b>	15
<b>Description</b>	Repair and install alternative side inlets on CD 56 in Blue Earth County, Garden City and Lincoln Townships		
<b>Proposed Size / Units</b>	15.00 COUNT	<b>Lifespan</b>	10 Years
<b>Actual Size/Units</b>	COUNT	<b>Installed Date</b>	
<b>Mapped Activities</b>	1 Point(s)		

Grant Activity - Conservation Drainage Practices

Description

Funds will be used to replace open tile intakes, and install saturated buffers, denitrifying bioreactors, and storage & treatment wetlands adjacent to, on, or within watersheds of priority 103E public drainage systems within the whole 10 GBERBA-member County extent (excluding areas within a watershed district). Public Drainage Systems must have a documented sediment or water quality concern. Documented concerns include, but are not limited to, an analysis, study, strategy, plan, engineer's report, engineer's preliminary survey report for a drainage system improvement, or other water quality analysis.

Two examples of 103E systems with documented concerns:

- Faribault County Ditch #7. The CD7 Improvement Project Plan has identified 24 drainage manipulation practices that could be implemented to benefit water quality.
- The Martin County Multipurpose Drainage Management Plan (2014) call for drainage management on four priority 103E drainage systems and includes descriptions of appropriate drainage practices and identifies specific targeted sites where these practices would be the most effective.

Anticipated number of practices to be installed:

- 20 Alternative Tile Intakes
- 1 Storage & Treatment Wetland
- 2 Saturated Buffers
- 10 Denitrifying Bioreactors

TOTAL GRANT FUNDS: \$121,000.00

Grant funds will be disbursed at a maximum cost-share rate not to exceed 100%.

TOTAL MATCH FUNDS: \$40,320.00

Matching funds will be contributed from various sources including EQIP, Federal Section 319 grant funds, landowner fund, local funds, and local drainage system funds.

Federal Funds: \$13,440.00

Landowner Funds: \$13,440.00

Local Funds: \$13,440.00

Category

CONSERVATION DRAINAGE



<b>Start Date</b>	3-Apr-17	<b>End Date</b>	
<b>Has Rates and Hours?</b>	No		
<b>Actual Results</b>	<p>APRIL - DECEMBER 2017</p> <p>No funds expended.</p> <p>Encumbered one project in Waseca County for Byron Properties of New Richland. Project is to install a denitrifying bioreactor on CD 8 at a cost estimate of \$43,800.00. GBERBA encumbered \$32,850.00. The Le Sueur River Watershed WRAPS document highlights identifies denitrifying bioreactors as a strategy to reduce nitrate loading to the Cobb River, of which CD 8 contributes.</p>		

Activity Action - CWF-MDM-17-81-01 Byron Properties			
<b>Practice</b>	605 - Denitrifying Bioreactor	<b>Count of Activities</b>	1
<b>Description</b>	Denitrifying Bioreactor on Waseca County CD8, Byron Twp Section 29		
<b>Proposed Size / Units</b>	1.00 COUNT	<b>Lifespan</b>	10 Years
<b>Actual Size/Units</b>	COUNT	<b>Installed Date</b>	
<b>Mapped Activities</b>	1 Point(s)		

## Grant Activity - Technical and Engineering

<b>Description</b>	<p>Engineering assistance for this grant could be completed by several entities and areas as follows: County Drainage Authority Staff, Private Engineering Firms, Technical Service Area Staff, SWCD Staff and other qualified partners.</p> <p>The GBERBA Technical Coordinator will be working with participating Drainage Authorities to ensure qualified technical staff are utilized throughout the project.</p> <p>TOTAL GRANT FUNDING: \$45,200.00 GBERBA budgeted additional 20% of project funds for technical and engineering assistance.</p> <p>TOTAL MATCH FUNDING: \$0.00</p>		
<b>Category</b>	TECHNICAL/ENGINEERING ASSISTANCE		
<b>Start Date</b>	3-Apr-17	<b>End Date</b>	
<b>Has Rates and Hours?</b>	No		
<b>Actual Results</b>	<p>APRIL - DECEMBER 2017</p> <p>No funds expended.</p> <p>Encumbered T/E funds for two projects:</p> <p>CWF-MDM-17-07-01 Blue Earth Drainage Authority- CD56: \$6,525.00 CWF-MDM-17-81-01 Byron Properties- Waseca CD8: \$6,570.00</p>		

## Grant Attachments

Document Name	Document Type	Description
<b>2017 Competitive Grant</b>	Grant Agreement	2017 Competitive Grant - Greater Blue Earth River Basin Alliance
<b>2017 Competitive Grant executed</b>	Grant Agreement	2017 Competitive Grant - Greater Blue Earth River Basin Alliance
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 12/29/2017
<b>Application</b>	Workflow Generated	Workflow Generated - Application - 08/05/2016

Document Name	Document Type	Description
<b>Application Image</b>	Grant	Multipurpose Drainage Management - Greater Blue Earth River Basin Alliance
<b>Budget Worksheet</b>	Grant	Multipurpose Drainage Management - Greater Blue Earth River Basin Alliance
<b>Work Plan</b>	Workflow Generated	Workflow Generated - Work Plan - 12/14/2016
<b>Work Plan</b>	Workflow Generated	Workflow Generated - Work Plan - 03/08/2017
<b>grantmap_16750_2016-07-22_05-45-30-AM.jpg</b>	Grant	Multipurpose Drainage Management - Greater Blue Earth River Basin Alliance