

Grant Progress Report

Projects and Practices 2018

Grant Title: Targeted Mississippi River Bank Stabilization Focused On	Grant Award (\$): \$236,000.00	Grant Execution Date: 03/28/2018
Bioengineering – Round 2		
Grant ID: C18-2864	Required Match (%): 25	Grant End Date: 12/31/2022
Grantee: Anoka CD	Required Match (\$): \$59,000.00	
Fiscal Agent: Anoka CD		
Grant Day-to-Day Contact: Chris Lord		

	Total Budgeted	Total Spent	Balance Remaining*
Grant Funds	\$236,000.00	\$236,000.00	\$0.00
Match Funds	\$118,000.00	\$125,034.50	(\$7,034.50)
Other Funds	\$2,023,000.00	\$2,195,337.32	(\$172,337.32)
Total	\$2,377,000.00	\$2,556,371.82	(\$179,371.82)

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

Activity Name	Category	Source Type	Source Description	Budgeted	Spent	Balance	Match
						Remaining	Fund?
Grant Administration and Reporting	Administration/Coordination	Current State Grant	Targeted Mississippi River Bank Stabilization Focused On Bio	\$5,000.00	\$4,991.06	\$8.94	Ν
Mississippi Riverbank Stabilization Project	Project Development	Current State Grant	Targeted Mississippi River Bank Stabilization Focused On Bio	\$15,000.00	\$11,130.50	\$3,869.50	N

Activity Name	Category	Source Type	Source Description	Budgeted	Spent	Balance Remaining	Match Fund?
Development							
Mississippi Riverbank Stabilization Construction 2018	Streambank or Shoreline Protection	Current State Grant	Targeted Mississippi River Bank Stabilization Focused On Bio	\$120,383.30	\$143,651.24	(\$23,267.94)	N
Mississippi Riverbank stabilization construction 2017	Streambank or Shoreline Protection	Current State Grant	Targeted Mississippi River Bank Stabilization with a Focus o	\$141,000.00	\$147,000.00	(\$6,000.00)	N
Mississippi Riverbank stabilization construction 2017	Streambank or Shoreline Protection	Current State Grant	C17-3029 - Targeted Mississippi River Bank Stabilization Focused On Bio	\$20,616.70	\$18,356.70	\$2,260.00	N
Mississippi Riverbank Stabilization Construction 2018 - Talle 1329	Streambank or Shoreline Protection	Current State Grant	Targeted Mississippi River Bank Stabilization Focused On Bio	\$0.00	\$9,015.68	(\$9,015.68)	Ν
Mississippi Riverbank Stabilization Construction 2018 - Talle 1329	Streambank or Shoreline Protection	Current State Grant	2020 - SWCD Local Capacity Services (Anoka CD)	\$0.00	\$3,199.97	(\$3,199.97)	Ν
Mississippi Riverbank Stabilization Construction 2018 - Talle 1329	Streambank or Shoreline Protection	Current State Grant	2021 - SWCD Local Capacity Services (Anoka CD)	\$0.00	\$2,158.58	(\$2,158.58)	Ν
Mississippi Riverbank Stabilization Construction 2018 -	Streambank or Shoreline Protection	Current State Grant	2019 - SWCD Local Capacity Services (Anoka CD)	\$0.00	\$16,941.50	(\$16,941.50)	N

Activity Name	Category	Source Type	Source Description	Budgeted	Spent	Balance Remaining	Match Fund?
Talle 1329							
Mississippi Riverbank Stabilization Construction 2018	Streambank or Shoreline Protection	Landowner Fund	Landowner Match	\$48,735.70	\$56,025.20	(\$7,289.50)	Υ
Mississippi Riverbank stabilization construction 2017	Streambank or Shoreline Protection	Landowner Fund	Landowner Match	\$59,000.00	\$61,142.14	(\$2,142.14)	Υ
Mississippi Riverbank stabilization construction 2017	Streambank or Shoreline Protection	Landowner Fund	C17-3029 - Landowner Match	\$10,264.30	\$7,867.16	\$2,397.14	Y
Technical and Engineering Assistance for Mississippi Riverbank Stabilization	Technical/Engineering Assistance	Current State Grant	Targeted Mississippi River Bank Stabilization Focused On Bio	\$75,000.00	\$48,854.82	\$26,145.18	Ν

Activity Category	Proposed Indicator	Total Value	Unit	Activity Category	Proposed Indicator	Total Value	Unit
Streambank or	Water Pollution (Reduction	100	Phosphorus	Streambank or	Water Pollution (Reduction	59	Phosphorus
Shoreline Protection	Estimates)		(Est.	Shoreline Protection	Estimates)		(Est.
			Reduction)				Reduction)
Streambank or	Water Pollution (Reduction	100	Sediment (Tss)	Streambank or	Water Pollution (Reduction	58.859	Sediment (Tss)
Shoreline Protection	Estimates)			Shoreline Protection	Estimates)		
				Streambank or	Water Pollution (Reduction	112	Phosphorus
				Shoreline Protection	Estimates)		(Est.
							Reduction)

Indicator Summary

Activity Category	Proposed Indicator	Total Value	Unit
Streambank or Shoreline Protection	Water Pollution (Reduction Estimates)	112.05	Sediment (Tss)
Streambank or Shoreline Protection	Water Pollution (Reduction Estimates)	134.44	Sediment (Tss)
Streambank or Shoreline Protection	Water Pollution (Reduction Estimates)	134.44	Phosphorus (Est. Reduction)
Streambank or Shoreline Protection	Water Pollution (Reduction Estimates)	9.83	Phosphorus (Est. Reduction)
Streambank or Shoreline Protection	Water Pollution (Reduction Estimates)	6.95	Sediment (Tss)
Streambank or Shoreline Protection	Water Pollution (Reduction Estimates)	11.56	Sediment (Tss)
Streambank or Shoreline Protection	Water Pollution (Reduction Estimates)	9.83	Phosphorus (Est. Reduction)
Streambank or Shoreline Protection	Water Pollution (Reduction Estimates)	4.41	Phosphorus (Est. Reduction)
Streambank or Shoreline Protection	Water Pollution (Reduction Estimates)	5.19	Sediment (Tss)
Streambank or Shoreline Protection	Water Pollution (Reduction Estimates)	5.91	Phosphorus (Est. Reduction)

Activity Category	Proposed Indicator	Total Value	Unit
Streambank or	Water Pollution (Reduction	11.56	Sediment (Tss)
Shoreline Protection	Estimates)		

Has Rates and Hours?: Yes

Grant Activities

Activity Name: Grant Administration and Reporting

Activity Category:	Administration/	'Coordination
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Description: Staff time for grant administration and reporting. Tasks include annual eLINK reporting (e.g. activity progress and budget updates), coordination of expense reports and payments, and project financial management.

Credentials of Anticipated Staff Involved:

Chris Lord – Dist. Mgr. – BS Nat. Res. & Env. Sci. with 25+ yrs in project and grant management, workload and budget planning, contract management, BMP design and installation, resource monitoring and inventory, data analysis.

Kathy Berkness – Office Admin. – 30+ yrs managing finances, administering programs, completing progress and final project reports, website development and management, and general office administration

Source Type	Source Description	Budgeted	Spent	Balance Remaining	Last Transaction Date	Match Fund?
Current State Grant	Targeted Mississippi River Bank Stabilization	\$5,000.00	\$4,991.06	\$8.94	12/31/2022	Ν
	Focused On Bio					

2018 Time spent on administration and reporting
2018 1st and 2nd Qtr Budget management and bookkeeping. 2018 3rd and 4th Qtr Budget management, bookkeeping and reporting.
2019 - budget management, bookkeeping, reporting in eLINK

2020 - budget management, bookkeeping, reporting in eLINK2021 Budget, Management, bookkeeping reporting in elink2022 Budget, Management, bookkeeping reporting in elink

Activity Name: Mississippi Riverbank Stabilization Construction 2018

Activity Category: Streambank or Shoreline Protection

Description: Project construction costs for riverbank stabilization including all necessary labor, materials, and fees including but not limited to; permitting, mobilization, clearing and grubbing, ingress and egress, grading, excavation and disposal, aggregate/media, temporary erosion and sediment control, plant materials, site restoration, and labor.

Project construction will be completed by qualified contractors hired by the landowners with oversight by ACD staff.

An example landowner agreement is attached that addresses partner responsibilities for grant administration, project design engineering, construction bidding and contract management (inspections, payments, as-built verifications), cost overruns, long term project operations and maintenance, 150% state payback liability, and property access and assurances. Landowner agreements will be attached when fully executed.

Budget Details

Source Type	Source Description	Budgeted	Spent	Balance Remaining	Last Transaction Date	Match Fund?
Current State Grant	Targeted Mississippi River Bank Stabilization Focused On Bio	\$120,383.30	\$143,651.24	(\$23,267.94)	10/17/2022	Ν
Landowner Fund	Landowner Match	\$48,735.70	\$56,025.20	(\$7,289.50)	10/12/2022	Y

Has Rates and Hours?: Yes

2020 - Veit and company completed construction on the Warzala Property. Documents uploaded and project is complete. Pollutant Reductions (100 linear feet stabilized, 25 foot tall bank)

A Mississippi River bank stabilization project was completed at the Rainbow property in 2019.

2020 Unprecedented high water and ice in early 2020 caused damage to a section of the project (~40 LF), and it was previously determined by BWSR that grant funds (C18-2864) could be used for the repair to ensure the project's long-term success. The repair will consist of placing additional riprap within the damaged section.

The original grant agreement expiration date was 12/31/2020. An additional 1-year extension is needed due to low water levels in 2021 that limited the ability for riverbank stabilization work via barge.

Revisited the possibility of completing the work from shore, but the access path for the original project has been fully restored and trees have been planted. We explored whether the work could be completed by hand with wheelbarrows, but the size of the riprap necessary for this large of a river system cannot feasibly be placed by hand. Accessing the bank through the property would require substantial disturbance, including fence removal and replacement, turf replacement, and tree removal and replacement, thereby making it cost prohibitive.

BWSR granted a 1-year extension for CWF grant #C18-2864 that modifies the expiration date to December 31st, 2022. The goal is to install the additional riprap at the Rainbow property via barge

2022 - Three additional sites were stabilized. One of the sites was the Rainbow property repair described above, and the two other sites were new installations.

Final Indicators				
Indicator	Total Value	Unit		
METALS (MERCURY IN WATER COLUMN) - PPB	112	Ррb		
BOD 5 - LBS/YR	112.05	Lbs/Yr		
BOD 5 - LBS/YR	5.19	Lbs/Yr		
METALS (MERCURY IN WATER COLUMN) - PPB	4.41	Ppb		
METALS (MERCURY IN WATER COLUMN) - PPB	9.83	Ррb		
BOD 5 - LBS/YR	6.95	Lbs/Yr		
METALS (MERCURY IN WATER COLUMN) - PPB	5.91	Ррb		
BOD 5 - LBS/YR	11.56	Lbs/Yr		
Activity Action Name: Streambank S	tabilization - 1335			Activity Count: 1
Practice Type: 580 - Streamb	oank and Shoreline Pro	tection		Size/Units: 103 - Cfu
TA Provider/JAA: SWCD				Lifespan: 20 Years
Practice Description: Riprap toe pro	otection on eroding st	reambank.		Install Date: 09/27/2022
				Mapped: Yes
Indicator Name/Units	Value	Calculation Tool	Waterbody	
METALS (MERCURY IN WATER COLUMN) - PPB	4.41	Bwsr Calc (Stream & Ditch Stabilization)	Mississippi River	
BOD 5 - LBS/YR	5.19	Bwsr Calc (Stream & Ditch Stabilization)	Mississippi River	

Activity Action Name:	Streambank S	eambank Stabilization - 1707 Activ				
Practice Type:	580 - Streamb	ank and Shoreline Pro	tection		Size/Units: 184 - Cfu	
TA Provider/JAA:	SWCD			Lifespan: 20 Years		
Practice Description:	Riprap shoreli	ne protection on erod		Install Date: 10/04/2022		
				Mapped: Yes		
Indicator Name/Units	ame/Units Value Calculation Tool Waterbody					
METALS (MERCURY IN W	VATER	5.91	Bwsr Calc (Stream & Ditch Stabilization)	Mississippi River		
COLUMN) - PPB	COLUMN) - PPB					
BOD 5 - LBS/YR	BOD 5 - LBS/YR6.95Bwsr Calc (Stream & Ditch Stabilization)Mississippi River					
[[]	
Activity Action Name:	Streambank St	tabilization - 1329			Activity Count: 1	
Practice Type:	580 - Streamb	ank and Shoreline Pro	tection		Size/Units: 153 - Cfu	
TA Provider/JAA:	SWCD				Lifespan: 20 Years	
Practice Description:	Riprap toe pro	tection for eroding str	reambank.		Install Date: 09/27/2022	
					Mapped: Yes	
Indicator Name/Units		Value	Calculation Tool	Waterbody		
BOD 5 - LBS/YR		11.56	Bwsr Calc (Stream & Ditch Stabilization)	Mississippi River		
METALS (MERCURY IN W COLUMN) - PPB	VATER	9.83	Bwsr Calc (Stream & Ditch Stabilization)	Mississippi River		

Activity Action Name:	Streambank S	tabilziation		Activity Count: 1	
Practice Type:	580 - Streamb	ank and Shoreline Pro		Size/Units:	
TA Provider/JAA:	SWCD Lifespan: 10 Years				
Practice Description:	Install Date: 10/12/2020				
	Mapped: Yes				
Indicator Name/Units		Value	Calculation Tool	Waterbody	
BOD 5 - LBS/YR		112.05	Bwsr Calc (Stream & Ditch Stabilization)	Mississippi	
METALS (MERCURY IN WATER 112			Bwsr Calc (Stream & Ditch Stabilization)	Mississippi	
COLUMN) - PPB					

Activity Name: Mississippi Riverbank Stabilization Construction 2018 - Talle 1329									
Activity Category: Streambank or Shoreline Protection Has Rates and Hours?: Yes									
Description:									
Budget Details	Budget Details								
Source Type	Source Description	Budgeted	Spent	Balance Remaini	ng Last Transaction Date	Match Fund?			
Current State Grant	Targeted Mississippi River Bank Stabilization Focused On Bio	\$0.00	\$9,015.68	(\$9,015.68)	10/17/2022	Ν			
Current State Grant	2020 - SWCD Local Capacity Services (Anoka CD)	\$0.00	\$3,199.97	(\$3,199.97)	10/17/2022	Ν			
Current State Grant	2021 - SWCD Local Capacity Services (Anoka CD)	\$0.00	\$2,158.58	(\$2,158.58)	10/17/2022	Ν			
Current State Grant	2019 - SWCD Local Capacity Services (Anoka CD)	\$0.00	\$16,941.50	(\$16,941.50)	10/17/2022	Ν			

2022

Talle

riverbank stabilization - Mississippi River - rip rap toe protection - Linked C18-2864, 2019, 2020 & 2021 Dist. Cap.

153 Linear Ft., 11.56 tons TSS, 9.83 lbs. TP

Final Indicators					
Indicator		Total Value	Unit		
BOD 5 - LBS/YR		11.56	Lbs/Yr		
METALS (MERCURY IN V COLUMN) - PPB	WATER	9.83	Ppb		
Activity Action Name:	1329 (Talle) Ri	iverbank Stabilization			Activity Count: 1
Practice Type:	580 - Streamb	ank and Shoreline Pr	otection	Size/Units: 153 - Cfu	
TA Provider/JAA:	SWCD	SWCD			
Practice Description:	ion: This project stabilized 153-feet of eroding riverbank on the Rum River. The project consisted of placing granite Install Date: 09/27 riprap along the lower portion of the slope, and a small seeded and blanketed zone above the rock.				Install Date: 09/27/2022
					Mapped: Yes
Indicator Name/Units		Value	Calculation Tool	Waterbody	
BOD 5 - LBS/YR		11.56	Bwsr Calc (Stream & Ditch Stabilization)	Mississippi River	
METALS (MERCURY IN V COLUMN) - PPB	WATER	9.83	Bwsr Calc (Stream & Ditch Stabilization)	Mississippi River	

Activity Name: Mississippi Riverbank Stabilization Project Development

Activity Category: Project Development

Has Rates and Hours?: Yes

Description: Project promotion to riparian owners, project ranking based on cost-benefit analysis and performance-based criteria; completion of operations, maintenance, and access agreements with property owners; coordination meetings with all partners (i.e. ACD, project engineer, watershed management entities, and participating cities) to discuss preliminary information gathering, concept designs, project schedule, and progress updates.

Cities and watershed management entities will be engaged in the project review and permitting elements of the grant to streamline project approvals and develop broadbased support to continue similar efforts to address the erosion problems. Project purpose and progress will also be highlighted in newspaper articles, emails to elected officials, website content, and written project profiles. This project will also directly involve private landowners as project partners. Outreach efforts to identify willing partners will include targeted mailings, site visits, and informational meetings. Each of these efforts affords unique opportunities to engage the public and provide information regarding the benefits and long-term impacts of the project.

Credentials of Anticipated Staff Involved:

Chris Lord – Dist. Mgr. – BS Nat. Res. & Env. Sci. with 25+ yrs in project and grant management, workload and budget planning, contract management, BMP design and installation, resource monitoring and inventory, data analysis.

Mitch Haustein – Stormwater and Shoreland Spec. – BA Bio., MS Ecol., Evol. and Behavior with 12 yrs in monitoring plan development and implementation, GIS intensive inventories, watershed and site analysis, and BMP modeling, planning and construction management.

Aaron Diehl – Cons. Spec. – BA Env. Bio., MS Env Sci, MBA and 14 yrs in wetland delineation, restoration, monitoring, and permitting; native landscape identification and restoration; rare plant species surveys; GIS analysis; and, project management.

Budget Details

Source Type	Source Description	Budgeted	Spent	Balance Remaining	Last Transaction Date	Match Fund?
Current State Grant	Targeted Mississippi River Bank Stabilization	\$15,000.00	\$11,130.50	\$3,869.50	12/31/2022	Ν
	Focused On Bio					

Report created on: 03/08/2023

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2018 1st and 2nd Qtr - No activity. 2018 Q3 and Q4 - Targeted outreach to landowners at properties with severe and very severe erosion as identified in inventory. Site visits with interested landowners to view erosion severity and discuss potential participation in grant. Engaged WSB as project engineer and solicited cost estimate for engineering services.

2020 - chris review plan and advise Mitch as needed.

2022 - Project development for four additional sites.

Activity Name: Mississippi Riverbank stabilization construction 2017

Activity Category: Streambank or Shoreline Protection

Has Rates and Hours?: Yes

Description: Project construction costs for riverbank stabilization including all necessary labor, materials, and fees including but not limited to; permitting, mobilization, clearing and grubbing, ingress and egress, grading, excavation and disposal, aggregate/media, temporary erosion and sediment control, plant materials, site restoration, and labor.

Project construction will be completed by qualified contractors hired by the landowners with oversight by ACD staff.

An example landowner agreement is attached that addresses partner responsibilities for grant administration, project design engineering, construction bidding and contract management (inspections, payments, as-built verifications), cost overruns, long term project operations and maintenance, 150% state payback liability, and property access and assurances. Landowner agreements will be attached when fully executed.

Source Type	Source Description	Budgeted	Spent	Balance Remaining	Last Transaction Date	Match Fund?
Current State Grant	Targeted Mississippi River Bank Stabilization with a Focus o	\$141,000.00	\$147,000.00	(\$6,000.00)	12/16/2019	Ν
Landowner Fund	Landowner Match	\$59,000.00	\$61,142.14	(\$2,142.14)	12/16/2019	Y
Current State Grant	C17-3029 - Targeted Mississippi River Bank Stabilization Focused On Bio	\$20,616.70	\$18,356.70	\$2,260.00	12/31/2019	Ν
Landowner Fund	C17-3029 - Landowner Match	\$10,264.30	\$7,867.16	\$2,397.14	12/16/2019	Y
Report created on: 03/08/2023	Generate	ed by iTEXT (https	://itextpdf.com/).			-

2017 - No activity

2018- No Activity

2019-January 1 - August 19

Stem Property: Sunram, the Contractor completed Bank regrading, riprap installation reinforced soil slopes, erosion blanket. Overland flow continues to crate a washout challenges, which the contractor engineer and project manager are working to address. Until successfully resolved, the landowners are withholding project installation verification, and as such none of the landowners project matching funds are being expended. The ACD Board agreed to pay the expense of

\$77, 216.29 to cover work completed which does not include landowner match.

Rainbow Stabilization - Project installed

Sept 1 2019- Dec 31, 2019

Stem: ACD developed the plan to deal with the overland flow. Slope was stabilized using native seed and flexamat in area of concentrated flow.

Project complete.

Final Indicators		
Indicator	Total Value	<u>Unit</u>
BOD 5 - LBS/YR	58.859	Lbs/Yr
METALS (MERCURY IN WATER COLUMN) - PPB	134.44	Ррb
METALS (MERCURY IN WATER COLUMN) - PPB	59	Ррb
BOD 5 - LBS/YR	134.44	Lbs/Yr

Activity Action Name:	Stem Streamb	m Streambank Stabilization Activity Count: 1				
Practice Type:	580 - Streamb	ank and Shoreline Prot		Size/Units: 130 - Cfu		
TA Provider/JAA:					Lifespan: 10 Years	
Practice Description:	Stabilizing Mississippi River streambank using bioengineering techniques Install Date: 07/12/2019					
	Stem Site Mapped: Yes					
Indicator Name/Units		Value	Calculation Tool	Waterbody		
BOD 5 - LBS/YR		134.44	Bwsr Calc (Stream & Ditch Stabilization)	Mississippi River	sippi River	
METALS (MERCURY IN WATER 134.44 Bwsr Calc (Stream & Ditch Stabilization) COLUMN) - PPB COLUMN COLUMN		Bwsr Calc (Stream & Ditch Stabilization)	Mississippi River			

Activity Action Name:	Rainbow Strea	mbank Stabilization		Activity Count: 1	
Practice Type:	580 - Streamb	ank and Shoreline Prot		Size/Units: 175 - Cfu	
TA Provider/JAA:	der/JAA:				
Practice Description:	Stabilizing Mississippi River streambank using bioengineering techniques Install Date: 07/12/2019				
Rainbow Site Mapped: Yes					Mapped: Yes
Indicator Name/Units		Value	Calculation Tool	Waterbody	
METALS (MERCURY IN WATER 59 COLUMN) - PPB		59	Bwsr Calc (Stream & Ditch Stabilization)	Mississippi River	
BOD 5 - LBS/YR		58.859	Bwsr Calc (Stream & Ditch Stabilization)	Mississippi River	

Activity Name: Technical and Engineering Assistance for Mississippi Riverbank Stabilization

Activity Category: Technical/Engineering Assistance

Has Rates and Hours?: Yes

Description: Engineered construction plans including site assessments and surveys, permit applications and regulatory coordination, bidding, construction management, and final project inspection.

Up to five properties will be selected for stabilization on the Mississippi River in Anoka County. This project will stabilize approximately 500 linear feet of Mississippi River bank using bioengineering approaches wherever possible and will deliver reductions of up to 2,000,000 lbs-TSS and 1,000 lbs-TP over the ten-year lifespan of the projects.

Credentials of Anticipated Staff Involved:

Chris Lord – Dist. Mgr. – BS Nat. Res. & Env. Sci. with 25+ yrs in project and grant management, workload and budget planning, contract management, BMP design and installation, resource monitoring and inventory, data analysis.

Mitch Haustein – Cons. Spec. – BA Bio., MS Ecol., Evol. and Behavior with 12 yrs in monitoring plan development and implementation, GIS intensive inventories, watershed and site analysis, and BMP modeling, planning and construction management.

Aaron Diehl – Cons. Spec. – BA Env. Bio., MS Env Sci, MBA and 14 yrs in wetland delineation, restoration, monitoring, and permitting; native landscape identification and restoration; rare plant species surveys; GIS analysis; and, project management.

Professional engineering firm – Firm will be selected with demonstrated expertise in streambank stabilization utilizing bioengineering techniques.

Source Type	Source Description	Budgeted	Spent	Balance Remaining	Last Transaction Date	Match Fund?
Current State Grant	Targeted Mississippi River Bank Stabilization	\$75,000.00	\$48,854.82	\$26,145.18	12/31/2022	Ν
	Focused On Bio					

2019

WSB has completed 50% of the plan development and and the design specification s are at 90% development for the Warzala project.

2020

WSB completed 100% of the plan development and design specifications.

2022 - Technical assistance and engineering for four additional sites.