



# Grant All-Detail Report Projects and Practices 2017

**Grant Title** - Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering

**Grant ID** - C17-3029

**Organization** - Anoka CD

<b>Original Awarded Amount</b>	<b>\$236,000.00</b>	<b>Grant Execution Date</b>	<b>4/5/2017</b>
<b>Required Match Amount</b>	\$59,000.00	<b>Original Grant End Date</b>	12/31/2019
<b>Required Match %</b>	25%	<b>Grant Day To Day Contact</b>	Mitch Haustein
<b>Current Awarded Amount</b>	\$236,000.00	<b>Current End Date</b>	12/31/2019

## Budget Summary

	Budgeted	Spent	Balance Remaining*
Total Grant Amount	\$236,000.00	\$236,000.00	\$0.00
Total Match Amount	\$59,000.00	\$61,142.14	\$-2,142.14
Total Other Funds	\$30,881.00	\$26,223.86	\$4,657.14
<b>Total</b>	<b>\$325,881.00</b>	<b>\$323,366.00</b>	<b>\$2,515.00</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
Grant Administration and Reporting	Administration /Coordination	Current State Grant	Targeted Mississippi River Bank Stabilization with a Focus o..	\$5,000.00	\$6,454.01	11/29/2019	N
Mississippi Riverbank Stabilization Project Development	Project Development	Current State Grant	Targeted Mississippi River Bank Stabilization with a Focus o..	\$15,000.00	\$14,612.41	2/20/2019	N

Activity Name	Activity Category	Source Type	Source Description	Budgeted	Spent	Last Transaction Date	Matching Fund
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	12/16/2019	N
Mississippi Riverbank stabilization construction 2017	Streambank or Shoreline Protection	Landowner Fund	Landowner Match	\$59,000.00	\$61,142.14	12/16/2019	Y
Mississippi Riverbank stabilization construction 2017	Streambank or Shoreline Protection	Other Funds	C17-3029 - Landowner Match	\$10,264.30	\$7,867.16	12/16/2019	Y
Mississippi Riverbank stabilization construction 2017	Streambank or Shoreline Protection	Other Funds	C17-3029 - Targeted Mississippi River Bank Stabilization Focused On Bio..	\$20,616.70	\$18,356.70	12/31/2019	N
Technical and Engineering Assistance for Mississippi Riverbank Stabilization	Technical/Engineering Assistance	Current State Grant	Targeted Mississippi River Bank Stabilization with a Focus o..	\$75,000.00	\$67,933.58	12/16/2019	N

### Activity Details Summary

Activity Details	Total Action Count	Total Activity Mapped	Proposed Size / Unit	Actual Size / Unit
580 - Streambank and Shoreline Protection	1		175 LINEAR FEET	175 LINEAR FEET
580 - Streambank and Shoreline Protection	1		130 LINEAR FEET	130 LINEAR FEET

### Proposed Activity Indicators

Activity Name	Indicator Name	Value & Units	Waterbody	Calculation Tool	Comments
<b>Mississippi Riverbank stabilization construction</b>	PHOSPHORUS (EST. REDUCTION)	125 LBS/YR	Mississippi River	BWSR CALC (STREAM & DITCH STABILIZATION)	
<b>Mississippi Riverbank</b>	SEDIMENT (TSS)	125 TONS/YR	Mississippi River	Other	WI NRCS Direct Volume

Activity Name	Indicator Name	Value & Units	Waterbody	Calculation Tool	Comments
stabilization construction					Method

### Final Indicators Summary

Indicator Name	Total Value	Unit
<b>SEDIMENT (TSS)</b>	193.30	TONS/YR
<b>PHOSPHORUS (EST. REDUCTION)</b>	193.44	LBS/YR

### Grant Activity

#### Grant Activity - Grant Administration and Reporting

<b>Description</b>	<p>Staff time for grant administration and reporting. Tasks include eLINK reporting (e.g. activity progress updates and budget updates), coordination of expense reports and payments, and project hours tracking.</p> <p>Credentials of Anticipated Staff Involved:</p> <p>Chris Lord – Dist. Mgr. – BS Nat. Res. &amp; 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.</p> <p>Kathy Berkness – Office Admin. – 30+ yrs managing finances, administering programs, completing progress and final project reports, website development and management, and general office administration</p>		
<b>Category</b>	ADMINISTRATION/COORDINATION		
<b>Start Date</b>	10-Apr-17	<b>End Date</b>	31-Dec-19
<b>Has Rates and Hours?</b>	Yes		
<b>Actual Results</b>	<p>2017 Grant administration and updating in eLINK</p> <p>2018 1st and 2nd Qtr Grant reporting in eLINK, budget management, and bookkeeping.</p> <p>2018 2nd and 3rd Qtr Grant reporting in eLINK, budget management, and bookkeeping.</p> <p>2019</p> <p>Grant reporting in eLINK, Paperwork, budgets, general administration of grant.</p>		



## Description

Initial engagement with landowners, site visits, project ranking and selection. Project coordination meetings with project partners to discuss preliminary information gathering, concept designs, project schedule, and progress updates.

This project will stabilize approximately 500 linear feet of Mississippi River bank using bioengineering approaches wherever possible, improving water quality and nearshore habitat. Site will be prioritized based on severity of erosion, accessibility to site, and proximity to other stabilization projects. Up to five properties will be selected for stabilization.

Cities and WMOs will be engaged in project review and permitting to streamline project approvals and broaden support. Project purpose and progress will be highlighted in newspaper articles, emails to elected officials, website content, and written project profiles. This project will 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.

### 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 11 yrs in monitoring plan development and implementation, GIS intensive inventories, watershed and site analysis, and BMP modeling, planning and construction management.

Leah Hall – Cons. Tech. – BS Env. Sci./Geog., MS Nat. Res. Sci. and Management with 5 yrs conducting streambank erosion research, coordinating restoration projects, managing volunteer and public outreach operations, and utilizing GIS and modeling software to complete watershed analyses and BMP selection and modeling.

<b>Category</b>	PROJECT DEVELOPMENT		
<b>Start Date</b>	10-Apr-17	<b>End Date</b>	31-Dec-18
<b>Has Rates and Hours?</b>	Yes		
<b>Actual Results</b>	<p>2017 1st and 2nd Qtr Landowners experiencing erosion on the Mississippi River were identified on two recently completed streambank inventories. Sixty letters were sent out informing landowners about this program. These went to landowners along the Mississippi River, within the streambank inventoried areas, that were experiencing the most severe erosion. Interest was gathered from these landowners and site visits were conducted on 28 properties. These site visits assessed the streambank conditions, noting the average height, width, and recession rate. Also, noted was the accessibility of the site, near-bank water depth, and whether any structures were threatened.</p> <p>2017 3rd and 4th Qtr Selected WSB as project engineer through RFQ and interview process. Progress updates to landowners. Developed detailed work plan for WSB. Conducted on-site review of highest priority properties with WSB. Meetings with landowners and WSB.</p> <p>2018 1st and 2nd Qtr developed agreements with consulting firm and landowner in coordination with Anoka County Attorney's Office and BWSR. Executed agreement with landowner.</p> <p>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</p>		

**Grant Activity - Mississippi Riverbank stabilization construction 2017**

<p><b>Description</b></p>	<p>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.</p> <p>Project construction will be completed by qualified contractors hired by the landowners with oversight by ACD staff.</p> <p>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.</p>		
<p><b>Category</b></p>	<p>STREAMBANK OR SHORELINE PROTECTION</p>		
<p><b>Start Date</b></p>	<p>1-Jul-19</p>	<p><b>End Date</b></p>	<p>19-Aug-19</p>
<p><b>Has Rates and Hours?</b></p>	<p>No</p>		
<p><b>Actual Results</b></p>	<p>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 create 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.</p>		

Activity Action - Rainbow Streambank Stabilization			
<b>Practice</b>	580 - Streambank and Shoreline Protection	<b>Count of Activities</b>	1
<b>Description</b>	Stabilizing Mississippi River streambank using bioengineering techniques		
	Rainbow Site		
<b>Proposed Size / Units</b>	175.00 LINEAR FEET	<b>Lifespan</b>	10 Years
<b>Actual Size/Units</b>	175.00 LINEAR FEET	<b>Installed Date</b>	12-Jul-19
<b>Mapped Activities</b>	No		

Final Indicator for Rainbow Streambank Stabilization			
<b>Indicator Name</b>	PHOSPHORUS (EST. REDUCTION)	<b>Value</b>	59
<b>Indicator Subcategory/Units</b>	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	<b>Calculation Tool</b>	BWSR CALC (STREAM & DITCH STABILIZATION)
<b>Waterbody</b>	Mississippi River		
Final Indicator for Rainbow Streambank Stabilization			
<b>Indicator Name</b>	SEDIMENT (TSS)	<b>Value</b>	58.859
<b>Indicator Subcategory/Units</b>	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	<b>Calculation Tool</b>	BWSR CALC (STREAM & DITCH STABILIZATION)
<b>Waterbody</b>	Mississippi River		

Activity Action - Stem Streambank Stabilization			
<b>Practice</b>	580 - Streambank and Shoreline Protection	<b>Count of Activities</b>	1
<b>Description</b>	Stabilizing Mississippi River streambank using bioengineering techniques		
	Stem Site		
<b>Proposed Size / Units</b>	130.00 LINEAR FEET	<b>Lifespan</b>	10 Years
<b>Actual Size/Units</b>	130.00 LINEAR FEET	<b>Installed Date</b>	12-Jul-19
<b>Mapped Activities</b>	No		

Final Indicator for Stem Streambank Stabilization			
<b>Indicator Name</b>	PHOSPHORUS (EST. REDUCTION)	<b>Value</b>	134.44
<b>Indicator Subcategory/Units</b>	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	<b>Calculation Tool</b>	BWSR CALC (STREAM & DITCH STABILIZATION)
<b>Waterbody</b>	Mississippi River		



Final Indicator for Stem Streambank Stabilization			
<b>Indicator Name</b>	SEDIMENT (TSS)	<b>Value</b>	134.44
<b>Indicator Subcategory/Units</b>	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	<b>Calculation Tool</b>	BWSR CALC (STREAM & DITCH STABILIZATION)
<b>Waterbody</b>	Mississippi River		



## Description

Engineered construction plans including site assessment 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 2,500,000 lbs-TSS and 1,250 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 11 yrs in monitoring plan development and implementation, GIS intensive inventories, watershed and site analysis, and BMP modeling, planning and construction management.

Leah Hall – Cons. Tech. – BS Env. Sci./Geog., MS Nat. Res. Sci. and Management with 5 yrs conducting streambank erosion research, coordinating restoration projects, managing volunteer and public outreach operations, and utilizing GIS and modeling software to complete watershed analyses and BMP selection and modeling.

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

<b>Category</b>	TECHNICAL/ENGINEERING ASSISTANCE		
<b>Start Date</b>	17-Apr-17	<b>End Date</b>	
<b>Has Rates and Hours?</b>	Yes		
<b>Actual Results</b>	<p>2017 1st and 2nd Qtr Following the site visits, the properties interested in streambank stabilization were ranked based on severity of erosion and accessibility of the site. Possible stabilization approaches were explored.</p> <p>2017 3rd and 4th Qtr WSB assisted with final site selection and developed 30% designs for two adjacent properties. The stabilization approach includes riprap at the toe of the slope, a reinforced soil slope system above the riprap to the top of the bank, and native vegetation throughout. ACD reviewed designs and communicated stabilization concepts to landowners. ACD also attended meetings with WSB and landowners.</p> <p>2018 1st and 2nd Qtr Coordinated 35' soil boring at property to determine feasibility of proposed stabilization approach.</p> <p>2018 Q3/Q4 Design completion, bid packet preparation, and bid advertisement for two properties by project engineer.</p> <p>2019 Q1/Q2 Development of Designs and final plans, cost estimates, specifications documents and bidding documents for the Rainbow and Stem properties</p> <p>2019 Q3/Q4 Construction management for the Rainbow and Stem projects.</p>		

### Grant Attachments

Document Name	Document Type	Description
<b>0122019_Engineering Payment WSB</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>02192019_Eng_Payment_WSB</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>02192019_Eng_Payment_WSB</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>08192019_Const_Pymt_doc_MNL_NorthStarFence_Sunram</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>09162019_Const_Pymt_Sunram</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>11182019_Const_Pymt_MNL</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>2017 Competitive Grant</b>	Grant Agreement	2017 Competitive Grant - Anoka CD

Document Name	Document Type	Description
<b>2017 Competitive Grant executed</b>	Grant Agreement	2017 Competitive Grant - Anoka CD
<b>2019_08_Construction Payments</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>ACD Payment 10</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>ACD Payment 5 Documentation</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>ACD Payment 6 Documentation_Signed_10/23/2018</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>ACD Payment 7 Documentation 11192018</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>ACD Payment 9</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>ACD QuickBooks Report</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 01/29/2018
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 08/25/2017
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 08/10/2017
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 05/24/2018
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 08/28/2019
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 01/24/2019
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 09/09/2019
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 09/09/2019
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 08/28/2019
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 01/28/2020
<b>Answer to Question on C17-3029 Stair Replacement</b>	Journal	Journal Dated - 10/26/2017
<b>Application</b>	Workflow Generated	Workflow Generated - Application - 08/08/2016
<b>BWSR Final Financial Report - Signed</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>DNR Permit - Rainbow</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering

Document Name	Document Type	Description
<b>DNR Permit - Stem</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>Deed Restriction and Easement Agreement Signed (Stem)</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>Deed restriction &amp; Easement agreement signed (Rainbow)</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>ECM_Bid_publication_Exp_Rainbow_122018</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>ECM_Bid_publication_Exp_Stem 122018</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>Engineering Payments - All</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>Final ACD Rainbow Agreement_signed</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>Final ACD Rainbow Agreement_signed</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>Final ACD Stem Agreement_signed</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>Financial Report needed for 40%</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>Landowner Contract</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>Other Payments - All</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>Payment 1 documentation</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>Payment 2 documentation</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>Payment 3 documentation</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>Payment 8 Documentation</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering

Document Name	Document Type	Description
<b>Payment 9 Documentation</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>Project Picture Compilation - Rainbow and Stem</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>Rainbow Construction Closeout Documents - All</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>Rainbow Construction Payments - All</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>Rainbow Landowner Agreements - All</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>Stem Construction Closeout Documents - All</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>Stem Construction Payments - All</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>Stem Landowner Agreements - All</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>Targeted Mississippi River Stabilization with a Focus on Bioengineering - Application Image</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>WSB Engineering Payment11</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering
<b>Work Plan</b>	Workflow Generated	Workflow Generated - Work Plan - 12/14/2016
<b>grantmap_17060_2016-08-05_12-20-48-PM.jpg</b>	Grant	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering