

Interstate Valley Creek (IVC) Prioritized Stabilization & Stormwater BMP Projects



Site 1 – Eroding banks up to 14 feet in height



Site 3 – Eroding banks near Valley Park playground

Interstate Valley Creek Prioritized Stabilization Project Pollutant Reductions

Map #	Location	TSS Reduction (ton/yr)	TP Reduction (lbs/yr)
1	Valley Park RTR to Wentworth	158.7	135.0
2	Valley Park Wetland	74.9	85.2
3	Valley Park Playground	48.3	41.1

Interstate Valley Creek Prioritized BMP Project Pollutant Reductions

Map #	Location	Rate Reduction (CFS - 2 yr)	Rate Reduction (CFS - 2 yr)	TSS Reduction (ton/yr)	TP Reduction (lbs/yr)
4	Valley Park RTR to Wentworth	10.9	12.6	1.2	4.7
5	Valley Park Wetland	3.4	5.7	0.9	3.5
6	Valley Park Playground	10.4	12.4	0.2	0.8





Grant Application

Grant Name - Interstate Valley Creek Streambank Stabilization and Stormwater BMP Project

Grant ID - C24-0045

Organization - Dakota SWCD

Allocation	Projects and Practices 2024	Grant Contact	Curt Coudron
Total Grant Amount Requested	\$585,000.00	County(s)	Dakota
Grant Match Amount	\$160,000.00	12 Digit HUC(s)	070102060805
Required Match %	10%	Fiscal Agent	Dakota SWCD
Other Amount		Application Submitted Date	
Project Abstract	<p>This project will install streambank stabilization practices as well as stormwater BMPs to reduce stormwater volume along Interstate Valley Creek (IVC) in Mendota Heights to benefit both IVC and the Mississippi River. The projects have been identified and prioritized through the watershed-wide IVC Stabilization and Volume Reduction Study and are clearly targeted in the Lower Mississippi River Watershed Management Organization's (LMRWMO) Watershed Management Plan. Interstate Valley Creek drains through a steep ravine with a highly urbanized watershed that was developed without stormwater management and volume control practices. The area has limited access and has substantial active bank erosion, carrying sediment to the Mississippi River, which is impaired for total suspended solids (TSS). The project will also reduce E-coli from reaching IVC, addressing that impairment. The project includes three large scale streambank stabilization practices using rock toe stabilization and native vegetation bioengineering. It also includes three large scale stormwater bioretention and weir creation projects to reduce in-stream erosion and address the root causes of erosion: excess stormwater volume and peak flows. The six projects (shown in the attached graphic) will reduce total suspended solids (TSS) by 284 tons/year and phosphorus (TP) by 270 lbs/year.</p> <p>Interstate Valley Creek runs through Valley Park in Mendota Heights which is a regional amenity and signature natural area</p>		

within the watershed. The Park is receiving significant investment from both the City and Dakota County in separate adjacent natural areas restoration projects as well as upgrading of the trail along the stream corridor to be part of the new Dakota County River to River Greenway. The project will be completed in partnership with the City of Mendota Heights, Dakota County, and the Lower Mississippi River Watershed Management Organization.

Proposed Measurable Outcomes

3 streambank stabilization projects and 3 large scale stormwater best management practices will be installed along Interstate Valley Creek to reduce total suspended solids (TSS) by 284 tons/year and phosphorus (TP) by 270 lbs/year.

Narrative

Does your organization have any active CWF competitive grants? If so, specify FY and percentage spent. Also, explain your organization's capacity (including available FTEs or contracted resources) to effectively implement additional Clean Water Fund grant dollars.

The Dakota County SWCD has an FY22 Drinking Water Protection Grant that is 50% spent (including 50% of funds encumbered for practice installation). That CWF competitive grant is focused on groundwater protection practices in rural portions of Dakota County. This application specifically addresses different conservation needs for streambank stabilization and stormwater BMP installation.

The Dakota County SWCD has the expertise of 11 full time staff. Staff are knowledgeable in conservation planning, engineering principles, and ecological practices. Staff will be able to implement this grant to coordinate and install streambank stabilization and stormwater BMP installations along Interstate Valley Creek and will be assisted by City of Mendota Heights and Dakota County staff as well as consultant engineers for design and engineering services.

Water Resource: Identify the water resource the application is targeting for water quality protection or restoration.

The Mississippi River and Interstate Valley Creek.

Prioritization (Relationship to Plan): Question 1. (18 points): (A) Describe why the water resource was identified in the plan as a priority resource., identify the specific water management plan reference by plan organization (if different from the applicant), plan title, section, and page number.

Both the Mississippi River and Interstate Valley Creek are listed as Priority 1A Waterbodies in the 2023 LMRWMO Watershed Management Plan. This prioritization is based on the multi-variable framework developed by the LMRWMO that includes impairment status, water quality trends, intercommunity drainage, public access, and ecosystem value, among other criteria. IVC is a priority resource because of its direct discharge to a TSS impaired reach of the Mississippi River, it is impaired itself for E-coli, it is a major and publicly accessible stream with over half of the 2.5 mile creek within public property/parkland, it has high ecosystem value, and it is an intercommunity waterbody. The creek was identified as a high priority for implementing future projects due to the presence of existing severe bank erosion. The LMRWMO Plan implementation table includes “ ...Implementing streambank stabilization and improvement projects along Interstate Valley Creek” and ranks it as a “High

Priority” project compared to other implementation projects. See LMRWMO Plan, Table 5-1 (page 125 of PDF) at the below link. The project is also prioritized in the 2018 Mendota Heights Local Surface Water Mgmt. Plan in the implementation section, Table 6.1, item 4 (page 50 of PDF) at the below link.

Prioritization (Relationship to Plan): Question 1, continued: (B) In addition to the plan citation, provide a brief narrative description that explains whether this application fully or partially accomplishes the referenced activity.

This project partially accomplishes the referenced activity. It represents the most cost effective practices to implement that also have a limited window of opportunity to construct due to their location along the portion of the trail that is planned for reconstruction. There are additional identified practices that are on other sections of IVC and the regional trail that will be pursued in the future.

Prioritization (Relationship to Plan): Question 1, continued: (C) Provide weblinks to all referenced plans.

LMRWMO Plan: https://lmrwmo.org/wp-content/uploads/2023/04/2023-LMRWMO-Watershed-Management-Plan_Final.pdf

Mendota Heights Local Surface Water Mgmt. Plan: <https://mn-mendotaheights.civicplus.com/DocumentCenter/View/203/Surface-Water-Management-Plan-PDF?bidId=>

IVC-SVRS: <https://lmrwmo.org/wp-content/uploads/2023/06/FINAL-Interstate-Valley-Creek-Study-20230130-RED.pdf>

Prioritization (Relationship to Plan): Question 2. (2 points): (A) Describe how the resource of concern aligns with at least one of the statewide priorities referenced in the Nonpoint Priority Funding Plan (also referenced in the “Projects and Practices” section of the RFP). (B) Describe the public benefits resulting from this proposal from both a local and state perspective.

(A) Both the Mississippi River and Interstate Valley Creek are resources of concern that meet high-level state priority 3: Restore and protect water resources for public use and public health. This project will protect water resources by reducing pollutants (TSS and TP) that are a direct result of streambank erosion. This reach of Interstate Valley Creek is also impaired for excess bacteria (E. coli). The stormwater best management practices described in Question 3, below, will filter and infiltrate stormwater runoff, thus reducing bacteria levels. The project will also have public benefits by reducing TSS in the Mississippi River.

(B) From a local perspective, Interstate Valley Creek is accessible via a regional trail that runs alongside much of the creek. The creek is accessible to the public and this project will help improve the water quality of the creek by reducing erosion and sediment transport within the creek. The reduced TP, TSS, and E. coli levels are a benefit to both the kids and adults who walk and wade in the water of IVC through Valley Park. Utilizing bioengineering stabilization methods and native plants where appropriate will also improve local pollinator habitat, species diversity, and promote the establishment of native species along the creek corridor. From a state perspective, the Interstate Valley Creek discharges to the Mississippi River. The Mississippi River from the south metro to Lake Pepin is a significant recreational resource that is impaired for excess sediment/suspended solids. This project will help reduce TSS in the Mississippi River leading to a healthier river and improved recreational experience for river users.

Targeting: Question 3. (15 points): Describe the methods used to identify, inventory, and target the root cause (most critical pollution source(s) or threat(s)). Describe any related additional targeting efforts that will be completed prior to installing the projects or practices identified in this proposal.

The entire Interstate Valley Creek watershed was evaluated through the 2022 Stabilization and Volume Reduction Study (SVRS). This was a comprehensive assessment of the 4,300 acre IVC watershed to document the extent and severity of streambank erosion and identify volume reduction BMPs to address the root cause of erosion. The root cause is increased stormwater flows from pre-development conditions due to legacy development in the urbanized watershed prior to stormwater regulations.

The SVRS included field survey along all reaches to document erosion and field verify potential BMP sites. The study developed concept plans and cost estimates for proposed practices, ranked them based on pollutant reduction cost-benefit, and identified 10 streambank stabilization projects and 6 stormwater BMPs. The proposed practices include the top ranked 3 stabilization practices and 3 of the top 5 stormwater BMPs from the comprehensive SVRS. Additionally, the projects have been prioritized to achieve the greatest water quality benefit per dollar spent. No additional targeting efforts are needed prior to installing the projects.

Following the completed study, discussions with Dakota County led to further practice prioritization based on compatibility with a separate planned trail upgrade and completion of the River to River Greenway project. The regional trail that runs along much of Interstate Valley Creek is planned to be reconstructed in 2024/2025. Due to the terrain of Interstate Valley, the trail corridor is the major access route for construction of the streambank stabilization and best management practices. Once reconstructed, access with heavy equipment and materials would damage the trail, and severely limit future constructability of these projects. All six projects are prioritized considering cost benefit of pollutant reduction and time sensitivity as they are necessary to complete prior to the planned trail project.

Targeting: Question 4. (10 points): How does this proposal fit with complementary work that you and your partners are implementing to achieve the goal(s) for the priority water resource(s) of concern? Describe the comprehensive management approach to this water resource(s) with examples such as: other financial assistance or incentive programs, easements, regulatory enforcement, or community engagement activities that are directly or indirectly related to this proposal.

This project represents a comprehensive approach to local and regional water resources and natural resource planning, agency cross coordination, and merging of recreation and water quality goals. It is only possible with the partnership between the City of Mendota Heights, the Lower Mississippi River Watershed Management Organization, Dakota County, and the Dakota SWCD. Each of the partners is contributing a financial or in-kind contribution to the project.

A major driver of this project is the opportunity to install the streambank stabilization and best management practices in conjunction with the trail reconstruction through Valley Park. The trail will be constructed using Dakota County's Greenway Design Guidelines which seek to create greenways that link larger hubs providing plants and animals a functioning ecosystem and incorporate practices such as buffer strips, native vegetation, and land management practices that improve water quality and ecosystem management.

Other natural resources restoration projects in Valley Park include:

Valley Creek Pollinator Corridor

This project is part of the larger Metro Big Rivers Phase 8 Project, to restore and enhance natural systems associated with Mississippi, Minnesota, and St. Croix Rivers in the metropolitan area, and is funded in part by the Clean Water Land and Legacy Amendment. The project entails creating approximately 9 acres of pollinator habitat within Valley Park along the Xcel Energy Corridor. This project is in-process.

City-County Collaborative Forest Enhancement

The City is in the planning phase with Dakota County to restore approximately 6 acres in the northwest portion of Valley Park through the County's City-County Conservation Collaborative Program.

Valley Park Forest Enhancement

The City was awarded a Conservation partners Legacy (CPL) grant from the State of MN to enhance and restore approximately 16 acres immediately adjacent to Interstate Valley Creek on both banks.

Measurable Outcomes and Project Impact: Question 5. (5 points): (A) What is the primary pollutant(s) this application specifically addresses? (B) Has a pollutant reduction goal been set (via TMDL or other study) in relation to the pollutant(s) or the water resource that is the subject of this application? If so, please state that goal (as both an annual pollution reduction AND overall percentage reduction, not as an in-stream or in-lake concentration number). (C) If no pollutant reduction goal has been set, describe the water quality trends or risks associated with the water resource or other management goals that have been established. (D) For protection projects, indicate measurable outputs such as acres of protected land, number of potential contaminant sources removed or managed, etc.

(A) The primary pollutant that this application specifically addresses is sediment, which is a major component of the TSS impairment of the Mississippi River. The IVC-SVRS identified significant sources of sediment within IVC, which is a tributary to the Mississippi River. Reducing sediment from tributaries is an important and cost-effective step to address the TSS impairment on the Mississippi River.

(B) The South Metro Mississippi River Total Suspended Solids Total Maximum Daily Load calls for a 20% reduction from portions of the Upper Mississippi River Basin. In the metroshed, there is an estimated load of 53,678 tons/year of TSS. Based on a 20% reduction, this would equate to 10,736 tons/year of TSS reduction for the metroshed. The 2023 LMRWMO Watershed Management Plan states the following goals associated with this project; Page 4-9, Goal G12: Reduce sediment loading to the Mississippi River; Page 4-9, Goal G13: Reduce sediment loading to Priority 1A waterbodies; Page 4-6, Goal G7: Promote fish and wildlife habitat and recreational opportunities by maintaining or improving water quality and shoreline/streambank integrity, implementing 10 shoreline/streambank improvement projects over 10 years. This project

directly addresses all of these goals from the LMRWMO Plan.

(C) N/A

(D) N/A

Measurable Outcomes and Project Impact: Question 6. (10 points): (A) What portion of the water quality goal will be achieved through this application? Where applicable, identify the annual reduction in pollutant(s) that will be achieved or avoided for the water resource if this project is completed. (B) Describe the effects this application will have on the root cause of the issue it will address (most critical pollution source(s) or threat(s)).

(A) This project quantifies annual pollutant reductions for the six total practices via stormwater modeling and pollutant reduction calculations to have a combined total suspended solids (TSS) reduction of 284 tons/year and a combined phosphorus (TP) reduction of 270 lbs/year. The South Metro Mississippi River TSS TMDL is unique as it provides an aggregate or categorical load allocation. This is appropriate given the massive geographic scale of the Mississippi River. Reductions in TSS from direct tributaries to the Mississippi River are necessary to improve water quality but are not quantified by individual tributaries in the TMDL. While the reductions seem small compared to the overall reductions of the TMDL (10,736 tons/year from the metroshed), they are proportional considering the small IVC drainage area compared to the massive overall drainage area.

(B) This project will both directly address the issue (excess sediment from bank erosion), and the root cause of the issue (excess stormwater runoff from legacy development in the watershed). Excess sediment from streambank erosion exacerbated by higher stormwater flow is contributing to downstream TSS impairments. This project will address the streambank erosion by stabilizing actively eroding segments of the streambank and reducing sediment transport downstream. It will also address part of the root cause of the erosion – high flow rates and volumes within the stream due to legacy development with a lack of volume and rate control. Through the use of stormwater best management practices, water will be temporarily held/retained in the wetland weir BMP and will be infiltrated/filtrated in the two other BMPs. This will decrease erosive forces within the stream and also intercept pollutants from ever reaching the stream and Mississippi River.

Measurable Outcomes and Project Impact: Question Question 7. (5 points): If the project will have secondary benefits, specifically describe, (quantify if possible), those benefits. Examples: hydrologic benefits, climate resiliency, enhancement of aquatic and terrestrial wildlife species, groundwater protection, enhancement of pollinator populations, or protection of rare and/or native species.

This reach of Interstate Valley Creek is also impaired for excess bacteria (E. coli) in 2014. While exact reductions have not been determined, the stormwater best management practices will filter and infiltrate stormwater runoff, thus reducing bacteria levels in water that reaches the stream.

Another secondary benefit of the stormwater best management practices will be to reduce peak flow rates and volumes within the stream. Decreasing flow rates by temporarily holding water behind the weir and in two large-scale bioretention stormwater practices and reducing overall volume by infiltrating water in the bio-infiltration practices are important steps to address a root cause of the issue since the high flow rates and volumes are a contributor to the bank erosion.

Vegetation restoration along the stabilized streambanks will be a diverse mixture of native plants, which will enhance wildlife habitat along the stream corridor. This will have a benefit to pollinators and other terrestrial wildlife. Toe-wood stabilization may be used in the streambank stabilization (pending final design) and this would provide natural aquatic in-stream habitat.

Cost Effectiveness and Feasibility: Question 8. (15 points): (A) Describe why the proposed project(s) in this application are considered to be the most cost effective and feasible means to attain water quality improvement or protection benefits to achieve or maintain water quality goals. Has any analysis been conducted to help substantiate this determination? Discuss why alternative practices were not selected. Factors to consider include, but are not limited to: BMP effectiveness, timing, site feasibility, practicality, and public acceptance. (B) If your application is proposing to use incentives above and beyond payments for practice costs, please describe rates, duration of payments and the rationale for the incentives' cost effectiveness. Note: For in-lake projects such as alum treatments or carp management, please refer to the feasibility study or series of studies that accompanies the grant application to assess alternatives and relative cost effectiveness. Please attach feasibility study to your application in eLINK.

(A) The 2022 comprehensive Interstate Valley Creek Stabilization and Volume Reduction Study documented the extent and severity of erosion issues and evaluated them based on pollutant loading. It identified, developed concept plans for, and ranked streambank stabilization and stormwater BMP practices based on a cost-benefit analysis. To target the most critical pollution sources, existing GIS data was reviewed, field surveys were conducted to visually inspect all stream reaches for erosion, erosion rates were estimated for each actively eroding site, additional potential impacts were considered, and cost estimates were calculated. Projects were then ranked based on the cost per ton of TSS reduction. The final study included a table of 10 streambank stabilization projects and 6 stormwater best management practices.

Practices were prioritized first as described above in the study, based on cost/benefit and water quality benefit. Secondly, the project compatibility with a planned trail reconstruction project and construction access constraints was considered through coordination with project partners. The regional trail that runs along much of Interstate Valley Creek is planned to be reconstructed in 2024/25. Due to the steep terrain of Interstate Valley, the trail corridor is the only feasible access route for construction of the streambank stabilization and stormwater practices. Once reconstructed, access with heavy equipment and materials would damage the trail, which would limit future constructability of these projects.

The proposed practices include the 3 highest ranked stabilization practices and 3 of the highest ranked 5 stormwater BMPs from the comprehensive SVRS. Other projects were considered but not selected as they were less cost effective, infeasible from a construction access standpoint, or outside the trail corridor and therefore not time

sensitive.

(B) This application is not proposing to use incentives above and beyond practice costs.

Project Readiness: Question 9. (10 points): a) What steps have been taken or are expected to ensure that project implementation can begin soon after the grant award? b) Describe general environmental review and permitting needs required by the project (list if needed). c) Also, describe any discussions with landowners, status of agreements/contracts, contingency plans, and other elements essential to project implementation. d) What activities, if any proposed, will accompany your project(s) that will communicate the need, benefits, and long-term impacts to your local community? This should go above and beyond the standard newsletters, signs and press releases.

a) This project is time-sensitive as it must be installed concurrently with the trail reconstruction due to site access constraints. Preliminary design is already occurring to incorporate the stabilization and stormwater BMPs into the trail reconstruction. Preliminary design of these practices is underway to stay on track with the trail project design in hopeful anticipation of grant funding. However, these projects will not go forward to implementation without CWF grant funding.

b) A wetland delineation has been completed and approved for the concurrent trail corridor project. However, portions of the stormwater BMPs lie outside of the corridor that was delineated. If needed, additional wetland delineation and survey will be done in fall 2023 (using local funds and not grant eligible) so permitting and plans can move forward without delay. It has been determined that DNR permitting is not needed for the project via coordination with the DNR to confirm that IVC is not on the PWI.

c) All land where projects will occur is owned by the City of Mendota Heights. This project is supported by all partners and multiple coordination meetings between partners have occurred to discuss project constraints, O&M, budget, responsibilities, and timeline. Support includes a formal letter and commitment of \$10,000 of match from the LMRWMO, a resolution from Mendota Heights noting \$100,000 in local match, and streambank and stormwater BMP project design work as described in a) by the County prior to grant award.

d) Project progress will be documented via a GIS story map website and also social media postings. The Dakota County SWCD, Mendota Heights, and Dakota County will hold a trail opening event with local leaders and the public to highlight the CWF project and greenway project completion. Interpretive signage will be incorporated to communicate the benefits of both the project and CWF programs for local water quality improvement project implementation.

Question 10. (5 points): Describe how the budget categories support the activities in your application. Please provide adequate Activity Category detail in your budget table to support your application and show project readiness (see eLINK Activity Categories).

Activity categories and associated budgets are necessary aspects of project implementation and have been outlined based on engineers' estimates of construction costs

and on past experience of consultant engineering time, construction costs, as well as staff time needed to develop the project, oversee implementation, coordinate with partners, and complete necessary grant reporting for the project.

Administration budget includes managing the grant and providing overall administration of funds and match requirements, maintaining project files and financial records, providing status reporting into eLINK system, and following all reporting requirements.

Project Development will include coordinating with project partners to determine roles and responsibilities, developing a JPA between project partners, preparing the scope of work and RFP for project construction, and coordinating with contractors and consultants.

Technical/Engineering will include activities associated with the survey/design, construction oversight, certification, and inspection of installed BMPs.

The bulk of the project budget will be used for material and labor costs for a contractor to construct/install streambank stabilization practices and stormwater best management practices.

Stream Restoration Projects Only: The Legacy Fund Restoration Evaluation Report recommends early coordination and comprehensive planning for stream projects. Describe the expertise of your team (i.e. geomorphology, hydrology, plant and animal ecology, construction site management, and engineering) and early coordination efforts you have been part of to ensure project success.

Project coordination has been occurring between project partners including the City of Mendota Heights, Dakota County, Dakota SWCD, and the Lower Mississippi River Watershed Management Organization since the IVC study was completed in late 2022. This includes project prioritization meetings, commitments of support and matching funds, early permitting and agency coordination, early and pre-grant application design, and more.

Dakota County staff are experienced in the development, design, construction, operations, and maintenance of streambank stabilization and stormwater best management practices. SWCD staff with experience, technical approval authority, training, and extensive field experience in streambank stabilization and stormwater BMP assessment, design, and installation oversight will be involved in all aspects of the project to ensure practice standards are being met and successful completion of the project. Dakota County Parks/Natural Resources staff are experienced in the plant and animal ecology of the site and have been actively managing vegetation and habitat along the trail and stream corridor.

Project design will be completed by a professional engineer (consultant) that is experienced in the design and implementation of streambank stabilization projects and stormwater best management practices. The contractor selected to construct the practices will need to meet qualifications including knowledge of streambank restoration practices and demonstration of successful completion of similar scale and type of projects.

Stream Restoration Projects Only: Describe how your organization will provide financial assurance that operations and maintenance funds are available if needed.

If awarded this grant, a Joint Powers agreement will be established between the City of Mendota Heights, Dakota County, Dakota SWCD, and the Lower Mississippi River Watershed Management Organization that outlines roles, responsibilities, financial contributions, and future operations and maintenance. The City of Mendota Heights has identified operations and maintenance funds in their budget and assurances of at least 20 percent of total project cost will be documented prior to work plan approval to ensure projects provide the proposed long-term clean water benefits.

The Constitutional Amendment requires that Amendment funding must not substitute traditional state funding. Briefly describe how this project will provide water quality benefits to the State of Minnesota without substituting existing funding.

Amendment funding through this proposal would leverage local matching funds to install voluntary BMPs where they do not currently exist. The practices to be installed will provide TSS reduction to the Mississippi River and E.coli reduction within Interstate Valley Creek. Funding provided through this grant request will be used to install BMPs which will otherwise not be installed.

Please enter the dollar amount requested for CWP Loans. If you are not interested, indicate "not applicable".

Not Applicable

Please enter the dollar amount requested for Ag BMP Loan Program. If you are not interested, indicate "not applicable".

Not Applicable

Application Budget

<i>Activity Name</i>	<i>Activity Description</i>	<i>Category</i>	<i>State Grant \$ Requested</i>	<i>Activity Lifespan (yrs)</i>
Administration	Manage the grant and provide overall administration of funds and match requirements, maintain project files and financial records, provide status reporting into eLINK system, and follow all reporting requirements.	Administration/Coordination	\$15,000.00	
Project Development	Project Development will include coordinating with project partners to determine roles and responsibilities, developing a JPA between project partners, preparing the scope of work and RFP for project construction, and coordinating with contractors and consultants.	Project Development	\$20,000.00	
Stormwater Best	Material and labor costs for a contractor to	Urban Stormwater Management Practices	\$282,500.00	10

<i>Activity Name</i>	<i>Activity Description</i>	<i>Category</i>	<i>State Grant \$ Requested</i>	<i>Activity Lifespan (yrs)</i>
Management Practices	construct/install stormwater best management practices.			
Streambank and Shoreline Protection Practices	Material and labor costs for a contractor to construct/install streambank stabilization practices.	Streambank or Shoreline Protection	\$200,000.00	10
Technical and Engineering Assistance	Technical/Engineering will include activities associated with the survey/design, construction oversight, certification, and inspection of installed BMPs. Technical and engineering activities that take place prior to the execution of a grant agreement are not eligible activities.	Technical/Engineering Assistance	\$67,500.00	3

Proposed Activity Indicators

<i>Activity Name</i>	<i>Indicator Name & Units</i>	<i>Value</i>	<i>Waterbody</i>	<i>Calculation Tool</i>	<i>Comments</i>
Water Pollution (Reduction Estimates)	Sediment (Tss)	2.3	Mississippi River	P8 Urban Catchment Model	
Water Pollution (Reduction Estimates)	Phosphorus (Est. Reduction)	9	Mississippi River	P8 Urban Catchment Model	
Water Pollution (Reduction Estimates)	Sediment (Tss)	281.9	Mississippi River	Bwsr Calc (Stream & Ditch Stabilization)	
Water Pollution (Reduction Estimates)	Phosphorus (Est. Reduction)	261	Mississippi River	Bwsr Calc (Stream & Ditch Stabilization)	

Activity Details

<i>Activity Name</i>	<i>Question</i>	<i>Answer</i>
Administration	Dollar amount requested for CWP Loans:	
Administration	Dollar amount requested for Ag BMP Loan Program:	
Project Development	Dollar amount requested for CWP Loans:	
Project Development	Dollar amount requested for Ag BMP Loan Program:	
Stormwater Best Management Practices	Dollar amount requested for CWP Loans:	
Stormwater Best Management Practices	Dollar amount requested for Ag BMP Loan Program:	
Streambank and Shoreline Protection Practices	Dollar amount requested for CWP Loans:	
Streambank and Shoreline Protection Practices	Dollar amount requested for Ag BMP Loan Program:	
Technical and Engineering Assistance	Dollar amount requested for Ag BMP Loan Program:	
Technical and Engineering Assistance	Dollar amount requested for CWP Loans:	

Grant Application Attachments

<i>Document Name</i>	<i>Document Type</i>	<i>Description</i>
Feedlot Supplemental Worksheet	Spreadsheet (.xls,.xlsx)	
Feasibility Study	Word or PDF document (.doc,.docx,.pdf)	