

PROJECT REQUEST FORM
Lower St. Croix Partnership – Watershed Based Implementation Funding

To: LSC Steering & Policy Committees

Date: March 13, 2024

From: Washington County & South Washington WD

Subject: WBIF Project Request: **St. Croix Bluffs Regional Park Ravine Stabilization Phase 1**

Table of Acronyms

CWMP: Comprehensive Watershed Management Plan	LSC: Lower St. Croix
SWCD: Soil & Water Conservation District	WD: Watershed District
WBIF: Watershed Based Implementation Funding	WMO: Watershed Management Organization

Eligible Project Sponsors

A sponsoring agency is required for each submitted project. The sponsor fills out this request. That agency must be a party to the Joint Powers Agreement for the implementation of the Lower St. Croix Comprehensive Watershed Management Plan. The sponsor, if the project is selected for funding, will enter into a subcontract with the Chisago Soil and Water Conservation District (SWCD) for project funding.

Description of Project (brief paragraph)

Washington County and the South Washington Watershed District have identified a group of actively eroding ravines within St. Croix Bluffs Regional Park and are prioritizing them for stabilization and restoration to reduce sediment and phosphorus loading to Lake St. Croix. Due to funding limitations and timelines, the project has been split into two phases.

This first phase of work targets embankment stabilization at the shoreline of Lake St. Croix and slip-lining of a failing culvert at the downstream extent of the southern ravine where it is transected by an abandoned railroad grade. WBIF funding is being requested only for construction activities. An alternatives analysis was completed by Houston Engineering in March 2023. The project plan set is now substantially complete.

Phase 2 of this project will include establishment of four upland native prairie bioretention basins, reducing flow rates and volumes into the ravine, and stabilization of the most actively eroding upper ravine section using canopy clearing, channel riprap, check dams, drop structures, and native understory revegetation.

Benefitted Waterbody Information (add rows for additional waterbodies if necessary)

Target waterbody	Lake St. Croix
Waterbody area (acres)	8,723 acres
Watershed area (acres)	4,966,400 acres
DNR shoreline classification	Natural Environment
Description of the watershed and near-shore land uses	Forest, Prairie, Cropland, Campground (within immediate project area)
Impairment status	Impaired (Total Phosphorus)
Protection or restoration	Restoration

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Project Details

Project Name	St. Croix Bluffs Regional Park Ravine Stabilization - Phase 1
Project Sponsor	Washington County
Additional Project Partner(s) (other than sponsor)	South Washington WD
Project Location (lat/long, address, or description)	St. Croix Bluffs Regional Park Denmark Township, MN 44.806497, -92.786590
DNR Level 8 Subwatershed	3706800
Applicable WBIF Work Plan Activity	A2 Urban Structural BMPs
Funding Specifically Allocated to this Project in Work Plan (if applicable)	N/A
Estimated Construction Timeline	Fall 2024
Total Project Cost	\$150,000
Estimated Lifetime Project Cost (incl. O&M)	\$15,000
Requested Grant Funding	\$120,000
Match provided, match source (cannot be state funds)	\$30,000; SWWD Stormwater Utility Fee
Target Waterbody (from CWMP Table 5-2, 5-3, 5-4)	Lake St. Croix
Est. Phosphorus Load Reduction @ Target Waterbody	4.6 lbs/yr
Est. TSS Load Reduction @ Target Waterbody	5.4 tons/yr
Calculation Tool Used	BWSR Water Erosion Pollution Estimator
Project Lifespan	25+ Years
Lifetime Cost-Benefit (\$/lb phosphorus removed)	\$1,435/lb TP

Pre-Project Identification

Total phosphorus load entering target waterbody	1144.5 lbs/day (MN only)
Total suspended solids load entering target waterbody	N/A
Major sources of nutrient loading	Complex & Various
P reduction required to achieve water quality goal	4,140 lbs/yr (27% TP load reduction – LSC)
Completed projects, load reduction	1,661 lbs/yr (basin-wide)
Alternative projects, load reduction	Phase 2: 15.5 tons TSS/yr, 18.2 lbs TP/yr

List of Informational Attachments/Templates Included With Form:

1. WBIF Project Request Process Flow Chart
2. CWMP Priority Waterbody Maps
3. CWMP Appendix C – Project Targeting Criteria and Scoring Matrix (for [Activities 2, 4, 5, 9](#))
4. Wetland Restoration Scoring Matrix (for [Activity 6](#))
5. Internal Analysis Request for Funding (for [Activity 7](#); filled out by applicant)
6. Internal Analysis Selection Criteria (for [Activity 7](#); filled out by subcommittee)
7. Targeting Analysis Scoring Matrix (for [Activity 8](#))

Required Attachments for Requesting Partner to Complete (check all that apply):

- Project Plans/Visual/Map (for all requests)
- Completed Appendix C Project Scoring Matrix (for [Activities 2, 4, 5, 9](#))
- Completed Wetland Restoration Scoring Matrix (for [Activity 6](#))
- Completed Internal Analysis Request for Funding (for [Activity 7](#))
- Completed Internal Analysis Selection Criteria (for [Activity 7](#))
- Completed Targeting Analysis Scoring Matrix (for [Activity 8](#))

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WBIF Work Plan Activity Color Coding
Implementation - BMPs/Restoration Activities
Implementation - Shared Services
Prioritization & Analysis
Administration

Submit this form and attachments to Angie Hong at (ahong@mnwcd.org) one week prior to the Steering Committee meeting.

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Steering Committee Roll Call Vote

Steering Committee roll call vote to recommend Washington County’s project for Lower St. Croix Watershed Based Implementation Funding in the amount of \$ _____ for Phase 1 of the St. Croix Bluffs Regional Park Ravine Stabilization Project.

Organization	Aye	Nay	Absent
Anoka SWCD	x		
Brown's Creek WD	x		
Carnelian Marine St Croix WD	x		
Chisago County			x
Chisago Lakes LID			x
Chisago SWCD	x		
Comfort Lake Forest Lake WD	x		
Isanti County			x
Isanti SWCD	x		
Middle St. Croix WMO	x		
Pine County			x
Pine SWCD			x
South Washington WD	x		
Valley Branch WD	x		
Washington CD	x		
Washington County	x		
TOTAL (need majority vote to pass)	11		5