Lower St. Croix Partnership – Watershed Based Implementation Funding

To: Activity #7 Technical Engineering **Date:** 2/8/2023

From: Carnelian Marine St. Croix Watershed District

Subject: WBIF Project Request: Mears Basin Design/Engineering Assistance

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

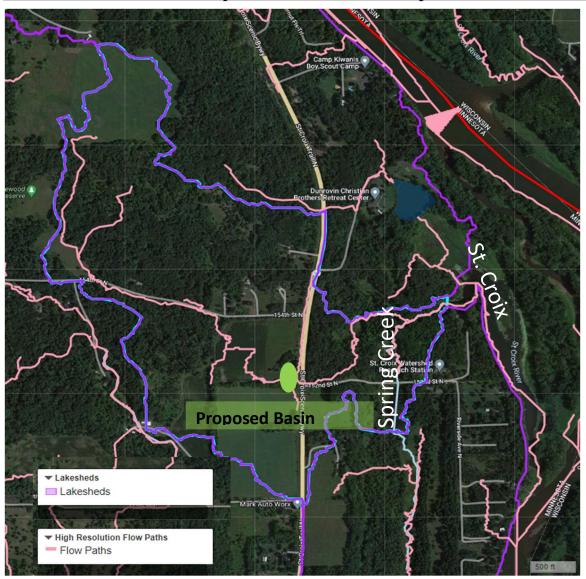
Eligible Project Sponsors

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)

This request is for survey, engineering, and soil borings to develop 30% plans for permitting and easements to install a basin to capture and treat 66 acres of runoff from rural lands and HWY 95 discharging to Spring Creek and the St. Croix River. The Spring Creek Management Plan identifies stormwater from the catchment as one of the primary driver of Spring Creek's has a poor water quality rating of 'C.' Spring creek is a perennial stream that flow to the St. Croix. The proposed project is located 1,300 feet from Spring Creek and 2,000 feet from the St. Croix River.

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

Target waterbody	Spring Creek and the St. Croix River		
Waterbody area (acres)	NA		
Watershed area (acres)	~ 66 acres/ 7,700 sq.mi.		
DNR shoreline classification	Lower St. Croix Riverway		
Description of the watershed and near-shore land uses	Rural		
Impairment status	Not Impaired/Impaired Aquatic Life		
	Nutrients		
Protection or restoration	Restoration		

Project Details

Project Name	Mears Water Quality Improvement Basin		
Project Sponsor	Carnelian Marine St. Croix Watershed		
	District		

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Additional Project Partner(s) (other than sponsor)	Washington Conservation District & private		
	landowner		
Project Location (lat/long, address, or description)	45.171001, 92.766985		
DNR Level 8 Subwatershed	03706000		
Applicable WBIF Work Plan Activity	Activity #7 Technical/Engineering		
	Subcommittee		
Funding Specifically Allocated to this Project in Work	NA		
Plan (if applicable)			
Estimated Construction Timeline	Construction in Summer 2024		
Total Project Cost	N/A		
Estimated Lifetime Project Cost (incl. O&M)	N/A		
Requested Grant Funding	\$10,000		
Match provided, match source (cannot be state funds)	CMSCWD Funding		
Target Waterbody (from CWMP Table 5-2, 5-3, 5-4)	Spring Creek and the St. Croix River		
Est. Phosphorus Load Reduction @ Target Waterbody	6.5 to 8.8 lbs./yr.		
Est. TSS Load Reduction @ Target Waterbody	4.8 to 15.4 tons/yr.		
Calculation Tool Used	CMSCWD Pollutant Delivery Assessment		
Project Lifespan	25 years		
Lifetime Cost-Benefit (\$/lb phosphorus removed)	N/A		

Pre-Project Identification

Total phosphorus load entering target waterbody	between 5.27 t/y and 17.1 t/y
Total suspended solids load entering target waterbody	between 8.1 lbs/yr and 11.5 lbs/yr
Major sources of nutrient loading	Landuse
P reduction required to achieve water quality goal	37,143 lbs./yr. (Table 5.2)
Completed projects, load reduction	N/A
Alternative projects, load reduction	Alternatives were considered

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)

WBIF Work Plan Activity Color Coding

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Implementation - BMPs/Restoration Activities
Implementation - Shared Services
Prioritization & Analysis
Administration

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

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Steering Committee Roll Call Vote

Steering Committee roll call vote to recommend <u>Carnelian Marine St. Croix Watershed District</u> project for Lower St. Croix Watershed Based Implementation Funding in the amount of <u>\$45,000</u> for the <u>Oak Street Bioretention Basins on Marine on St. Croix</u>

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