

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

To: LSC WP Steering Committee **Date:** August 23, 2023
From: Chisago SWCD
Subject: WBIF Project Request: Activity 1 Danson Ag BMPs

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 project will include the installation of multiple ag BMPs on two separate fields on the Danson property. This project will include the installation of water and sediment control basins, underground outlets, critical area plantings and lined waterways. The landowner has established a three-acre critical area planting on the most sensitive portion of his property. This producer is also enrolled in our soil health program for no-till.

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

Target waterbody	Goose Lake
Waterbody area (acres)	272 (Goose Lake North)
Watershed area (acres)	9,293 (Goose Lake North)
DNR shoreline classification	General Development
Description of the watershed and near-shore land uses	Pasture/hay/grass, wetland, cropland, woodland, developed
Impairment status	Impaired
Protection or restoration	Restoration

Project Details

Project Name	Danson Ag. BMPs
Project Sponsor	Chisago SWCD
Additional Project Partner(s) (other than sponsor)	
Project Location (lat/long, address, or description)	SW ¼, Section 37N, Range 22W
DNR Level 8 Subwatershed	13008301
Applicable WBIF Work Plan Activity	Activity 1
Funding Specifically Allocated to this Project in Work Plan (if applicable)	No
Estimated Construction Timeline	Spring/Summer 2024

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Total Project Cost	\$60,000
Estimated Lifetime Project Cost (incl. O&M)	\$65,000
Requested Grant Funding	\$20,000
Match provided, match source (cannot be state funds)	\$10,000 (landowner)
Target Waterbody (from CWMP Table 5-2, 5-3, 5-4)	Rush Lake (West)
Est. Phosphorus Load Reduction @ Target Waterbody	23.3 lbs./yr.
Est. TSS Load Reduction @ Target Waterbody	26.7 Tons/yr.
Calculation Tool Used	BWSR Gully Erosion Tool
Project Lifespan	10 years (contract length)
Lifetime Cost-Benefit (\$/lb phosphorus removed)	\$279/lb (calculated using 10-year contract)

Pre-Project Identification

Total phosphorus load entering target waterbody	5,313 lbs/yr (Goose Lake North)
Total suspended solids load entering target waterbody	
Major sources of nutrient loading	Watershed runoff
P reduction required to achieve water quality goal	4,042 lbs/yr (Goose Lake North)
Completed projects, load reduction	2017-2023: Goose Creek watershed several ag BMPs completed totaling 361 lbs/yr of phosphorus removal
Alternative projects, load reduction	

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
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.

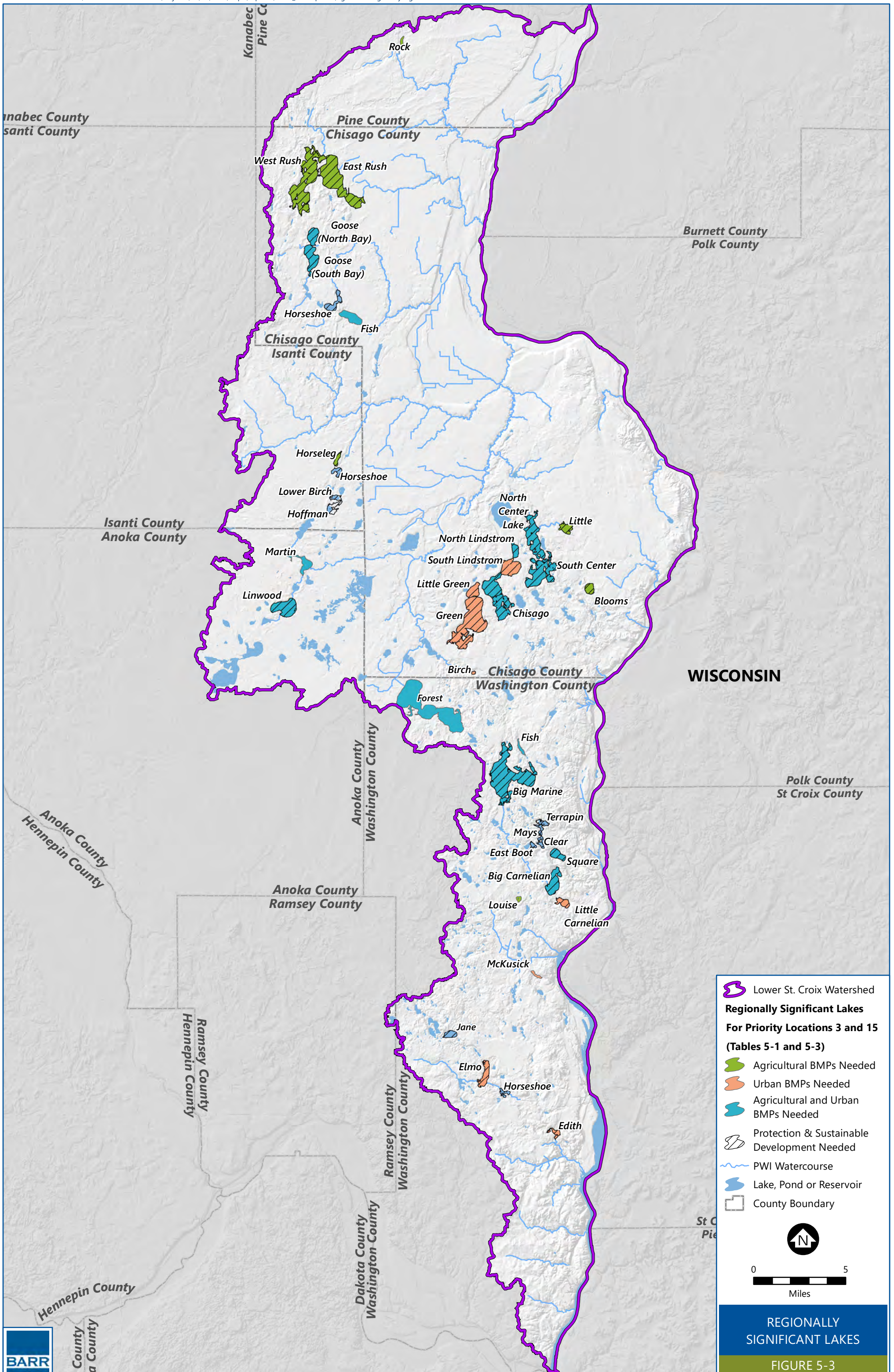
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Steering Committee Roll Call Vote

Steering Committee roll call vote to recommend the Chisago SWCD project for Lower St. Croix Watershed Based Implementation Funding in the amount of \$ _____ for the Danson Ag BMP project.

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			
Valley Branch WD			
Washington CD			
Washington County			
TOTAL (need majority vote to pass)			



Lower St. Croix Watershed
Regionally Significant Lakes
For Priority Locations 3 and 15
(Tables 5-1 and 5-3)

- Agricultural BMPs Needed
- Urban BMPs Needed
- Agricultural and Urban BMPs Needed
- Protection & Sustainable Development Needed
- PWI Watercourse
- Lake, Pond or Reservoir
- County Boundary

0 5
Miles

REGIONALLY SIGNIFICANT LAKES
FIGURE 5-3



*Lakes of Phosphorus Sensitivity Significance (LPSS) - May 24, 2019: A ranked priority lake list based on sensitivity to additional phosphorus loading and the significance of that sensitivity.

Developed by: Minnesota Pollution Control Agency, Department of Natural Resources, and Board of Water and Soil Resources

Lake Phosphorus Sensitivity Significance, LPSS Priority Class = Grouping of waterbodies based on the lake phosphorus sensitivity significance priority score, which is a function of phosphorus sensitivity, and lake size, lake total phosphorus concentration, proximity to MPCA’s phosphorus impairment thresholds, and watershed disturbance. Classes relate to the state’s priority of focusing on “high quality, unimpaired lakes at greatest risk of becoming impaired.”

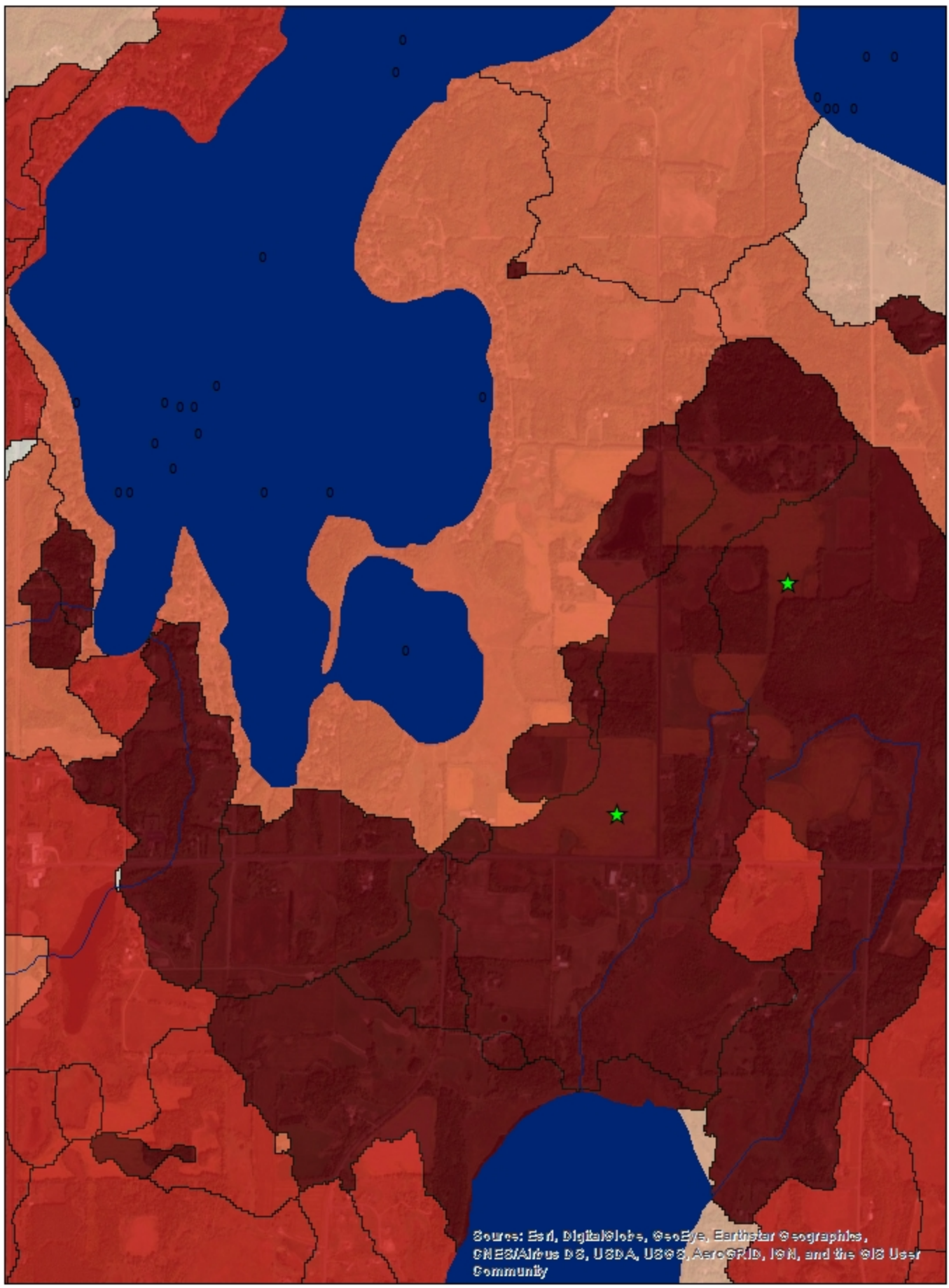
Lake ID	Name	LPSS Priority Class
2002600	Linwood	Impaired
2003400	Martin	Impaired
13004200	Birch	NA
13000100	Blooms	NA
1300120	Chisago	Higher
13006800	Fish	Highest
13008301/13008302	Goose (North & South)	Impaired
13004102 /13004101	Green/Little Green	Highest
13003300	Little	Impaired
13003201	North Center Lake	Impaired
13003500	North Lindstrom	Higher
13006901/13006902	Rush (East & West)	Impaired
13002700	South Center	Impaired
13002800	South Lindstrom	Higher
30000800	Hoffman	NA
30001200	Horseleg	Highest
30000300	Horseshoe	Highest
30000700	Lower Birch	NA
58011700	Rock	Impaired
82004900	Big Carnelian	Higher
82005204	Big Marine	Highest
82004500	Clear	Higher
82003400	East Boot	Impaired
82000400	Edith	Higher
82010600	Elmo	Higher
82001400	Little Carnelian	Higher
82002500	Louise	Impaired
82003300	Mays	High
82002000	McKusick	High
82004600	Square	Highest
82003100	Terrapin	High

Appendix C: Project Targeting Criteria and Scoring Matrix

Lower St. Croix River Comprehensive Watershed Management Plan

October 2020

Criteria and Points for Ranking Agricultural and Urban BMPs for Watershed Based Funds as referenced in Section VII.B.			
1	Lake Restoration & Protection	The project addresses total phosphorus on a priority lake (See table on page 2)	LPSS Priority Class* is "Impaired" or "Highest" = 5 LPSS Priority Class is "High" or "Higher" = 3
Can score points for #1 or #2, but not both.			
2	Stream Restoration	Project is located near stream reach and will address stream impairment or Lake St. Croix total phosphorus impairment)	Within ¼ mile = 5 Within ½ mile = 3
3	Groundwater	Project improves groundwater quality/quantity (examples: soil health, nutrient management, pesticide reduction, recharge, infiltration, reuse)	Yes = 3 No = 0
4	Readiness	Concept plans, cost estimates, and landowner agreements/easements are complete 3 or 0	Yes = 3 No = 0
5	Urgency & Opportunity	Is the project contingent on securing funding now? (Example, BMP is part of a larger project that will move forward with or without the BMP; opportunity would be lost if not funded and implemented now)	Yes = 1 No = 0
6	Cost effectiveness	Level of cost benefit when compared to all projects analyzed in particular SWA or similar targeting analysis.	Top 1% = 10 Top 10% = 7 Top 25% = 5 Top 50% = 3 < 50% = 0
7	Partners & Funding	Partnership and collaboration with agencies, organizations, or other groups is being leveraged or utilized by this project (Are there multiple partners providing funding, in-kind support, or other assistance or involvement?)	Yes = 1 No = 0
8	Multiple Benefit	Project provides added benefit of habitat improvements (aquatic, riparian, upland, wetland). Note: water quality improvements are not considered habitat improvements for this criterion.	Yes = 1 No = 0
9	Multiple Benefit	Project provides added benefit of education (examples: signage, demonstration project)	Yes = 1 No = 0
10	Multiple Benefit	Project improves water quality while also addressing flooding concern (examples: pond, wetland restoration, or floodplain expansion)	Yes = 1 No = 0
TOTAL POINTS			21



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

COST ESTIMATE-Preliminary
WASCOBs

Danson
COUNTY Chisago

ITEM	AMOUNT	UNIT	PRICE	COST
1 Site Preparation	1	JOB	\$2,000.00	\$2,000.00
2 Salvaging & Spreading Topsoil	1	JOB	\$2,000.00	\$2,000.00
3 Excavation	200	CY	\$5.00	\$1,000.00
4 Earthfill	2000	CY	\$10.00	\$20,000.00
5 6" Direct Intake Assembly	4	EA	\$250.00	\$1,000.00
6 6" Offset Intake Assembly	3	EA	\$300.00	\$900.00
7 6" HD Drain Tile (Non-Perf)	1786	LF	\$6.00	\$10,716.00
8 8" HD Drain Tile (Non-Perf)	245	LF	\$8.00	\$1,960.00
9 10" HD Drain Tile (Non-Perf)	620	LF	\$10.00	\$6,200.00
10 10' x 8" Dia. HCMP Outlet Pipe w/Guard	3	EA	\$250.00	\$750.00
11 10' x 15" Dia. HCMP Outlet Pipe w/Guard	1	EA	\$400.00	\$400.00
12 Stilling Basin	4	EA	\$150.00	\$600.00
13 Seeding	1	AC	\$1,000.00	\$1,000.00
14 Erosion Control Blanket	2900	SQ YD	\$2.00	\$5,800.00

SUBTOTAL		\$54,326.00
CONTINGENCIES	10%	\$5,432.60

COST ESTIMATE		\$59,758.60
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