To: Steering Committee Date: April 12, 2023

From: Comfort Lake-Forest Lake Watershed District
Subject: WBIF Project Request: Wyoming Street Sweeping Implementation

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)

Comfort Lake-Forest Lake Watershed District staff completed the tree canopy assessment and enhanced street sweeping plan for the entirety of the City of Wyoming. The City of Wyoming proposes to sweep 12.5 curb miles four times per year (twice in spring, twice in fall), for a total of 50 curb miles swept per year. The proposed streets to be swept are included in the "Plan A" group as identified in the Wyoming Enhanced Street Sweeping Plan and attached maps. The City of Wyoming will track the movement of the sweeper with a GPS unit mounted on the sweeper. The City will track the weights and dates of material swept.

Chisago SWCD, as the LSC WP WBIF grant fiscal agent, will execute the cost share contract with the City of Wyoming. CLFLWD with serve as the technical representative.

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

| Target waterbody | Sunrise River, Comfort Lake, Ashton Lake, <br> Heims Lake |
| :--- | :--- |
| Waterbody area (acres) | Various |
| Watershed area (acres) | Various |
| DNR shoreline classification | Various |
| Description of the watershed and near-shore land uses | Various |
| Impairment status | Sunrise River impaired for dissolved oxygen, <br> Escherichia coli (E. coli), fish <br> bioassessments <br> Comfort Lake impaired for nutrients |
| Protection or restoration | Both |

## PROJECT REQUEST FORM

Lower St. Croix Partnership - Watershed Based Implementation Funding

## Project Details

| Project Name | Wyoming Street Sweeping Implementation |
| :---: | :---: |
| Project Sponsor | CLFLWD |
| Additional Project Partner(s) (other than sponsor) | City of Wyoming |
| Project Location (lat/long, address, or description) | City of Wyoming |
| DNR Level 8 Subwatershed | DNR catchment IDs 3705200, 3704300, 3704400 |
| Applicable WBIF Work Plan Activity | Activity 3 - Nonstructural (Urban) Implementation |
| Funding Specifically Allocated to this Project in Work Plan (if applicable) | Provide cost-share/incentives for implementing non-structural urban best management practices (e.g., enhanced street sweeping). Specific enhanced street sweeping targeting analyses will be performed for priority areas (see Activity 9 Targeting Analyses). |
| Estimated Timeline | April 2023-December 2025 (three year contract) |
| Total Project Cost | \$15,000 |
| Estimated Lifetime Project Cost (incl. O\&M) | N/A |
| Requested Grant Funding | $\$ 15,000$ (paid in annual installments of $\$ 5,000$ over three years) |
| Match provided, match source (cannot be state funds) | \$0 (no match required; no match budgeted in WBIF work plan) |
| Target Waterbody (from CWMP Table 5-2, 5-3, 5-4) | Sunrise River (among others not listed in tables) |
| Est. Phosphorus Load Recovery by Sweeper | Proposed Sweeping Plan (Plan A, Option 2): $26.9 \mathrm{lb} / \mathrm{yr}$ |
| Est. Solids Load Recovery by Sweeper | Proposed Sweeping Plan (Plan A, Option 2): $74,903 \mathrm{lb} / \mathrm{yr}$ |
| Est. Phosphorus Load Reduction @ Target Waterbody | Phosphorus: $\leq 13.4 \mathrm{lb} / \mathrm{yr}$ |
| Est. Solids Load Reduction @ Target Waterbody | Solids: $\leq 37,451 \mathrm{lb} / \mathrm{yr}$ <br> Load recovery estimates are based on material removed from the street surface and do not reflect total load reductions to the downstream lakes. The actual load reduction to downstream water resources achieved through street sweeping is less than the total load recovery (generally $50 \%$ or less) and depends on the number and type of BMPs along the treatment train. |
| Calculation Tool Used | MPCA Street Sweeping Tool |
| Project Lifespan | Three-year contract |
| Annual Cost-Benefit (\$/lb phosphorus removed) | \$53.65/lb |

## Pre-Project Identification

| Total phosphorus load entering target waterbody | Various |
| :--- | :--- |
| Total suspended solids load entering target waterbody | Various |


| Major sources of nutrient loading | Urban development from cities of Forest <br> Lake and Wyoming; ditched wetlands |
| :--- | :--- |
| P reduction required to achieve water quality goal | Sunrise River and Tributaries - Lake St. <br> Croix TMDL P reduction goal: $18,306 \mathrm{lb} / \mathrm{yr}$ |
| Completed projects, load reduction | Other CLFLWD projects in the Sunrise <br> River drainage (P reduction @ Sunrise <br> River): Sunrise River/Hwy 61 Wetland <br> Enhancement - Chisago Co. Petitioned <br> Project (89 lb/yr phosphorus reduction); <br> Bixby Park Water Quality Improvement <br> Project - Chisago Co. Petitioned Project <br> (206 lb/yr phosphorus reduction); Target Big <br> Box Retrofits (11 lb/yr phosphorus <br> reduction); Stormwater Management Permits <br> (cumulative: 43 lb/yr) |
| Alternative projects, load reduction | Street sweeping is highly cost-effective and <br> is a high priority water quality practice |

## 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 $1 \& 2$ )
4. Wetland Restoration Scoring Matrix (for Activity 4)
5. Internal Analysis Request for Funding (for Activity 8 ; filled out by applicant)
6. Internal Analysis Selection Criteria (for Activity 8; filled out by subcommittee)
7. Targeting Analysis Scoring Matrix (for Activity 9)

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

$\boxtimes$ Project Plans/Visual/Map (for all requests)
$\square$ Completed Appendix C Project Scoring Matrix (for Activities 1 \& 2)
$\square$ Completed Wetland Restoration Scoring Matrix (for Activity 4)
$\square$ Completed Internal Analysis Request for Funding (for Activity 8)
Completed Internal Analysis Selection Criteria (for Activity 8)
Completed Targeting Analysis Scoring Matrix (for Activity 9)

| 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.

## PROJECT REQUEST FORM

Lower St. Croix Partnership - Watershed Based Implementation Funding
Steering Committee Roll Call Vote
Steering Committee roll call vote to recommend Comfort Lake-Forest Lake WD project for Lower St. Croix Watershed Based Implementation Funding in the amount of $\$ 15,000$ for the Wyoming Enhanced Street Sweeping Implementation.

| 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) |  |  |  |

## PROJECT REQUEST FORM

## Lower St. Croix Partnership - Watershed Based Implementation Funding

## Attachment: Proposed Street Sweeping Maps

This proposal requests incentive funding to sweep the "Plan A" area 4 x per year (twice in spring, twice in fall). Plan A encompasses 12.5 curb miles of roadway; swept 4 x equals 50 curb miles per year.


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 Lower St. Croix Partnership - Watershed Based Implementation Funding

