

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

**To:** Steering Committee **Date:** February 14, 2024  
**From:** Comfort Lake-Forest Lake Watershed District  
**Subject:** WBIF Project Request: Activity #7 Heath Ave IESF Feasibility

**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)**

The CLFLWD is requesting WBIF grant funds to hire Emmons & Olivier Resources to perform Technical/Engineering services for a water quality improvement project in the Sunrise River headwaters. Grant funding will be used to complete a feasibility analysis for the Heath Avenue Iron Enhanced Sand Filter (IESF) Project. The resulting project will address CWMP Implementation Table activity #2: Rivers & Streams + St. Croix River WQ, priority locations include all streams and tributaries in Sunrise River Watershed (whole watershed regardless of direct drainage), and measurable output includes reducing total phosphorus by 3,300 lbs/year. Based on water monitoring data and modeling, the CLFLWD estimates the resulting IESF project will reduce phosphorus loading within the Sunrise River watershed by 79 lbs/year. This project will have the added benefit of improving water quality in Little Comfort Lake and Comfort Lake. This particular tributary was targeted by the CLFLWD through a diagnostic study, and it is a high priority for nutrient load reductions.

The CLFLWD is requesting LSC WBIF grant funding because of the timing necessary for this project. Normally, the CLFLWD would apply for a Clean Water Fund Projects & Practices competitive grant, and then complete the feasibility and project ordering, using grant funds, after the grant is awarded. However, this project is different in that we intend to purchase the underlying property from the current landowner. The CLFLWD would own the ~2.5-acre property in perpetuity and construct/maintain the project therein. Before we can close on the property acquisition, our legal counsel has advised us that we must complete the project feasibility and order the project first. We propose the following order of events: utilize LSC WBIF to complete the project feasibility in spring 2024, order the project and close on the property by end of 2024, apply for a FY25 CWF competitive grant in fall 2024, and hopefully be able to finalize project design and proceed with construction as soon as FY25 CWF is available (spring 2025). Time is of the essence, as we work to accommodate expectations of the current landowner who is currently willing to sell the property, and as we must work through a rezoning and lot division before closing as well (a process which can take several months).

# PROJECT REQUEST FORM

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

### Benefitted Waterbody Information

*Grant request is for Tech/Eng only. Information below applies to the resulting project.*

|  |   |
|--|---|
| Target waterbody   | Sunrise River   |
| Is target waterbody in LSC CWMP Table 5-2 or 5-3?                                | Yes   |
| Waterbody area (acres)   | N/A   |
| Watershed area (acres) – entire Sunrise River watershed, per Lake St. Croix TMDL | 238,634   |
| DNR shoreline classification   | N/A   |
| Description of the watershed and near-shore land uses                            | Agricultural, residential, wetland, deciduous forest                                  |
| Impairment status  | This section of the Sunrise River is impaired for aquatic life and aquatic recreation |
| Protection or restoration  | Restoration   |

### Project Details

|   |   |
|---|---|
| Project Name  | Heath Avenue Iron Enhanced Sand Filter Feasibility Study  |
| Project Sponsor   | Comfort Lake-Forest Lake Watershed District   |
| Additional Project Partner(s) (other than sponsor)                          | N/A   |
| Project Location (lat/long, address, or description)                        | Property ID 211070300<br>Located south of Hwy 8, east of Heath Ave  |
| DNR Level 8 Subwatershed  | 3705200   |
| Applicable WBIF Work Plan Activity  | Activity 7: Technical/Engineering   |
| LSC CWMP Goal Addressed by this Proposal (see Table 3-1)                    | 1A. Improve water quality in key rivers and streams with human contact and significant pollutant loading to St. Croix River and Lake St. Croix.   |
| LSC CWMP Implementation Action Addressed by this Proposal (see Table 5-1)   | Activity #2: Rivers & Streams + St. Croix River WQ  |
| Funding Specifically Allocated to this Project in Work Plan (if applicable) | N/A   |
| Estimated Timeline  | March 2024-September 2024   |
| Total Project Cost (for Feasibility Study)                                  | \$58,784  |
| Estimated Lifetime Project Cost (incl. O&M)                                 | N/A   |
| Requested Grant Funding   | \$49,000  |
| Match provided, match source (cannot be state funds)                        | \$9,784   |
| Explain if other funding sources were sought out                            | Sought CPL grant for acquisition cost, but was not awarded due to small site size and small area of habitat benefit. Will seek CWF competitive grant for final design and construction. |
| Target Waterbody (from CWMP Table 5-2, 5-3, 5-4)                            | Sunrise River   |
| Est. Phosphorus Load Reduction @ Target Waterbody                           | 79 lb/yr  |
| Est. TSS Load Reduction @ Target Waterbody                                  | TBD   |
| Calculation Tool Used   | PCSWMM model  |
| Project Lifespan  | 25 years  |
| Lifetime Cost-Benefit (\$/lb phosphorus removed)                            | Early estimate = ~\$750/lb removed over 25 year lifespan  |

# PROJECT REQUEST FORM

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

### Pre-Project Identification

|   |  |
|---|--|
| Total phosphorus load entering target waterbody       | Sunrise River total from TMDL: 37,544 lb/yr  |
| Total suspended solids load entering target waterbody | TBD  |
| Major sources of nutrient loading                     | Insufficient stormwater management from historic development in the area and ditched/degraded wetland systems  |
| P reduction required to achieve water quality goal    | Sunrise River total from TMDL: 18,306 lb/yr  |
| Completed projects, load reduction                    | The CLFLWD recently completed the Highway 61 Wetland Enhancement project on a nearby branch of the Sunrise River   |
| Alternative projects, load reduction                  | The CLFLWD evaluated other projects in this area, including a wetland restoration, gravel pit water impoundment, and beaver dam analogs in stream channel. However, these projects were deemed infeasible due to landowner approvals and DNR permitting. The proposed IESF project is the top priority due to its significant load reduction on the target drainage area, participation from a willing landowner, and high likelihood of permitting approvals for an IESF project. |

### 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 1, 2, 3, 7](#))
- Completed Wetland Restoration Scoring Matrix (for [Activity 4](#))
- 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](mailto: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 \$49,000 for the Heath Ave Iron Enhanced Sand Filter Feasibility.

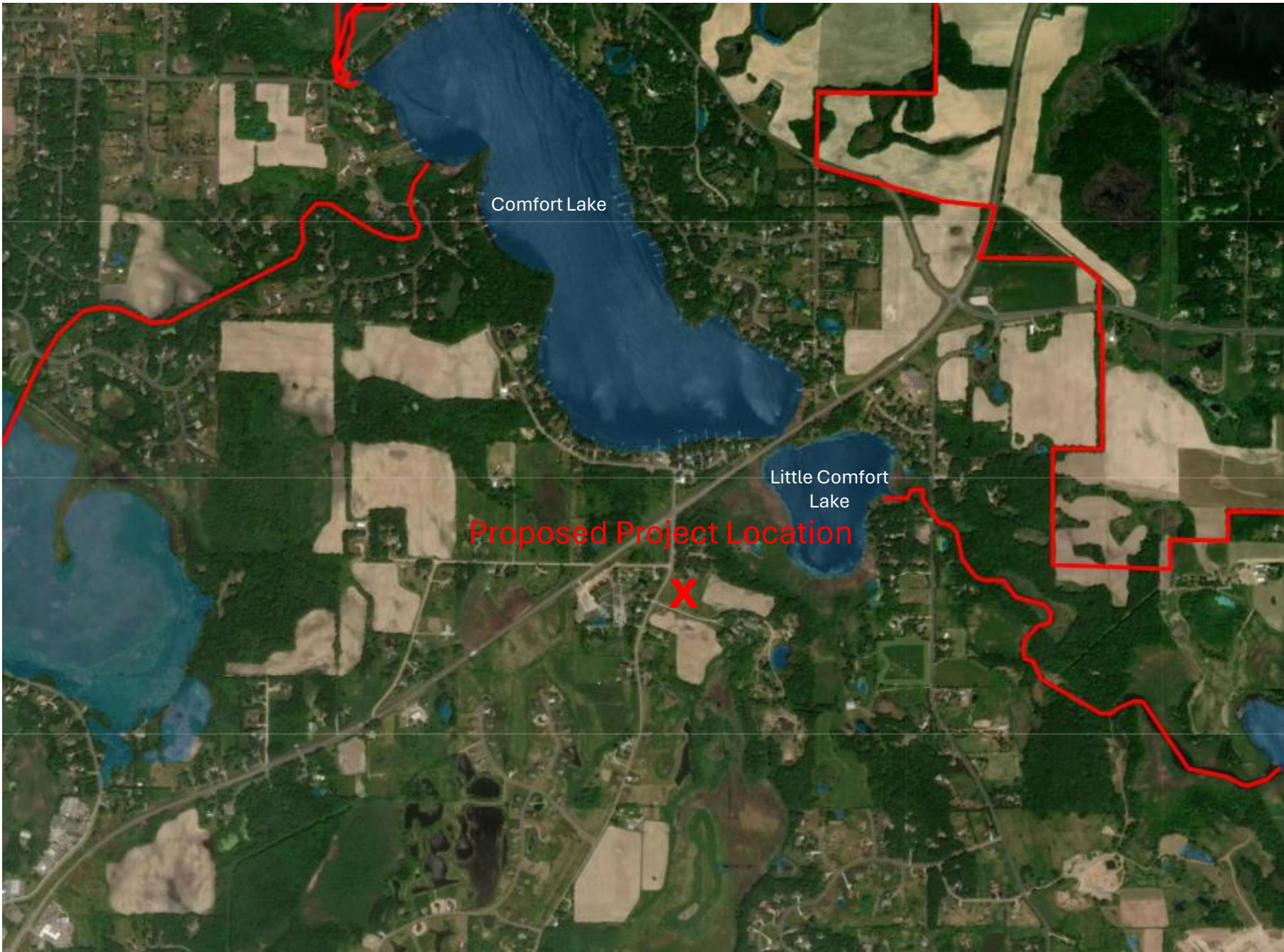
| <b>Organization</b>                       | <b>Aye</b> | <b>Nay</b> | <b>Absent</b> |
|---|------------|------------|---------------|
| Anoka SWCD                                |            |            |               |
| Brown's Creek WD                          |            |            |               |
| 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                         |            |            |               |
| <b>TOTAL (need majority vote to pass)</b> |            |            |               |

# Project Targeting Criteria and Scoring Matrix

Heath Ave IESF Feasibility Study  
Comfort Lake-Forest Lake Watershed District

| Criteria and Points for Ranking Agricultural and Urban BMPs for Watershed Based Fundas referenced in Section VII.B. |  |   |  | Points & Description   |
|---|--|---|--|--|
| 1   | <b>Lake Restoration &amp; Protection</b> | The project addresses total phosphorus on a priority lake (See table on page 2)   | LPSS Priority Class* is “Impaired” or “Highest” = 5<br>LPSS Priority Class is “High” or “Higher” = 3 |  |
| <b>Can score points for #1 or #2, but not both.</b>   |  |   |  |  |
| 2   | <b>Stream Restoration</b>                | Project is located near stream reach and will address stream impairment or Lake St. Croix total phosphorus impairment)  | Within ¼ mile = 5<br>Within ½ mile = 3   | 5<br>Within ¼ mile and has direct flowage to Sunrise River headwaters through stormwater conveyance pipes  |
| 3   | <b>Groundwater</b>                       | Project improves groundwater quality/quantity (examples: soil health, nutrient management, pesticide reduction, recharge, infiltration, reuse)  | Yes = 3<br>No = 0  | 0<br>Clay soils not conducive to infiltration. Will be a flow-through IESF filtration system.  |
| 4   | <b>Readiness</b>                         | Concept plans, cost estimates, and landowner agreements/easements are complete 3 or 0   | Yes = 3<br>No = 0  | 3<br>We have early concepts and estimates and a letter of support from the landowner.  |
| 5   | <b>Urgency &amp; Opportunity</b>         | 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<br>No = 0  | 1<br>Yes. Otherwise the project timeline will be pushed out by 1 year while the District applies for FY25 CWF Projects and Practices grant. CLFLWD is trying to move quickly while the landowner is ready to sell. See timeline explanation on project request form. |

|    |                               |  |   |  |
|----|-------------------------------|--|---|--|
| 6  | <b>Cost effectiveness</b>     | Level of cost benefit when compared to all projects analyzed in particular SWA or similar targeting analysis.  | Top 1% = 10<br>Top 10% = 7<br>Top 25% = 5<br>Top 50% = 3<br>< 50% = 0 | 10<br>This is the top project identified for this drainage area. The CLFLWD performed a diagnostic study for this drainage area, and we evaluated 3 other practices in the area, but they were deemed infeasible for various reasons. This project is the next best alternative, and it involves a willing landowner and no impacts on surrounding landowners. |
| 7  | <b>Partners &amp; Funding</b> | 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<br>No = 0   | 1<br>CLFLWD has been in communication with the City of Wyoming and Chisago County about this project and other improvements surrounding the Highway 8 corridor.  |
| 8  | <b>Multiple Benefit</b>       | 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<br>No = 0   | 1<br>CLFLWD will incorporate native planting and pollinator habitat into project design (surrounding IESF filter bed).   |
| 9  | <b>Multiple Benefit</b>       | Project provides added benefit of education (examples: signage, demonstration project)   | Yes = 1<br>No = 0   | 1<br>Educational signage will be installed. This is a visible location from Heath Avenue and serves as a good demonstration site for IESFs.  |
| 10 | <b>Multiple Benefit</b>       | Project improves water quality while also addressing flooding concern (examples: pond, wetland restoration, or floodplain expansion)   | Yes = 1<br>No = 0   | 0<br>Flow-through IESF filtration system, not providing significant flood storage.   |
|    |                               | <b>Total Points</b>  | <b>26</b>   | <b>22</b>  |



**Additional Attachments:**

- Letter of Support from Landowners
- Letter of Support from City of Wyoming



Date: August 17, 2023

To: Conservation Partners Legacy Grant Review Committee

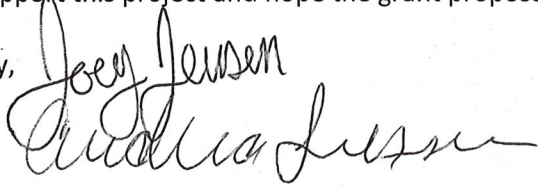
Re: Letter of Support for Comfort Lake-Forest Lake Watershed District Proposal

To whom it may concern,

We support the Comfort Lake-Forest Lake Watershed District (CLFLWD) in its proposal to subdivide and purchase a portion of our property at 24989 Heath Avenue, Forest Lake, MN for conservation and water quality purposes. The Watershed District proposes to implement native plantings and a water quality improvement project with the land. This will improve habitat for pollinators and other wildlife, and it will result in a significant water quality improvement for Little Comfort Lake, which is located just downstream of my property.

I fully support this project and hope the grant proposal is well received.

Sincerely,

Handwritten signatures of Joe Jensen and Andrea Vollrath. The signature of Joe Jensen is written above the signature of Andrea Vollrath.

Andrea Vollrath & Joe Jensen  
24989 Heath Avenue  
Forest Lake, MN 55025



September 5, 2023

Conservation Partners Legacy Grant Review Committee  
MN DNR  
500 Lafayette Road  
Box #20  
St. Paul, MN 55155

Re: Letter of Support for Comfort Lake-Forest Lake Watershed District Proposal

To whom it may concern,

The city of Wyoming supports the Comfort Lake-Forest Lake Watershed District (CLFLWD) in its proposal to subdivide and purchase a portion of the property at 24989 Heath Avenue, Forest Lake, MN for conservation and water quality purposes. The Watershed District proposes to implement native plantings and a water quality improvement project with the land. This will improve habitat for pollinators and other wildlife, and it will result in a significant water quality improvement for Little Comfort Lake, which is located just downstream of my property.

The city of Wyoming supports this project and hopes the grant proposal is well received.

Sincerely,

Robb Linwood  
City Administrator  
City of Wyoming  
651-462-0575  
[rlinwood@wyomingmn.org](mailto:rlinwood@wyomingmn.org)  
26885 Forest Blvd  
Wyoming, MN 55092

