**To:** Lower St. Croix Policy Committee **Date:** 04/15/2022

**From:** South Washington Watershed District

**Subject:** WBIF Project Request:Trout Brook Stream Restoration

# 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)

South Washington Watershed District (SWWD) proposes to work with to Minnesota DNR, Great River Greening, and Afton Alps to complete a stream restoration project along Trout Book in Afton. This project will restore cold-water aquatic habitat within the stream channel, in addition to reducing phosphorus loading by 177 lbs/yr and TSS loading by 154 tons/yr.

Critical components of the Trout Brook restoration project will include re-routing the stream from its current, straightened alignment back to its historical location; re-creating a natural floodplain to reduce channel erosion and allow suspended sediment to settle-out; and re-creating natural pools, riffles, and runs for fish and other aquatic organisms.

SWWD has previously worked with Minnesota DNR and Afton Alps to restore segments upstream and downstream of the project location. See [Trout Brook Project](https://swwd.maps.arcgis.com/apps/MapJournal/index.html?appid=6d6435eb1a674d1b9d5b7132d8b62861) for additional information.

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

|  |  |
| --- | --- |
| Target waterbody | Trout Brook |
| Target waterbody, secondary | Lake St. Croix |
| Waterbody area (acres) |  |
| Watershed area (acres) | 5472 |
| DNR shoreline classification | Public Waters Stream |
| Description of the watershed and near-shore land uses | Ski Resort/parking lot, State Park |
| Impairment status | impaired |
| Protection or restoration | restoration |

# Project Details

|  |  |
| --- | --- |
| Project Name | Trout Brook restoration Phase III |
| Project Sponsor | South Washington Watershed District |
| Additional Project Partner(s) (other than sponsor) | DNR, Great River Greening, Afton Alps |
| Project Location (lat/long, address, or description) | Denmark Township, MN |
| DNR Level 8 Subwatershed | 3706900 |
| Applicable WBIF Work Plan Activity | Urban restoration |
| Funding Specifically Allocated to this Project in Work Plan (if applicable) |  |
| Estimated Construction Timeline | Late summer 2022 |
| Total Project Cost | $1,000,000 |
| Estimated Lifetime Project Cost (incl. O&M) | $1,000,000 (+monitoring, construction engineering and inspection and veg mgmt. covered under other programs) |
| Requested Grant Funding | $350,000 |
| Match provided, match source (cannot be state funds) | 25% SWWD funds |
| Target Waterbody (from CWMP Table 5-2, 5-3, 5-4) | Trout Brook, delivered to LSC |
| Est. Phosphorus Load Reduction @ Target Waterbody | 177 lbs/yr |
| Est. TSS Load Reduction @ Target Waterbody | 154 tons/yr |
| Calculation Tool Used | Field date, BANCS assessment, literature |
| Project Lifespan | 25+ |
| Lifetime Cost-Benefit ($/lb phosphorus removed) | $226/lb TP/yr, $5,650/lb TP |

# Pre-Project Identification

|  |  |
| --- | --- |
| Total phosphorus load entering target waterbody |  |
| Total suspended solids load entering target waterbody |  |
| Major sources of nutrient loading | Regionally significant streams (table 5-2) |
| P reduction required to achieve water quality goal | 4,140 lbs TP/yr from stream sources to LSC |
| Completed projects, load reduction |  |
| Alternative projects, load reduction | None for Trout Brook streambank erosion |

**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):**

[x]  Project Plans/Visual/Map (for all requests)

[x]  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.*

# Policy Committee Roll Call Vote

Policy Committee roll call vote to recommend SWWD project for Lower St. Croix Watershed Based Implementation Funding in the amount of $\_$350,000\_ for the Trout Brook Restoration.

|  |  |  |  |
| --- | --- | --- | --- |
| **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)** |  |  |  |