**To:** LSC Steering Committee **Date:** 3/22/2022

**From:** Carnelian Marine St. Croix Watershed District

**Subject:** WBIF Project Request:Big Marine Boat Launch Sediment Plume Reduction Retrofit

# 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 |

# Description of Project (brief paragraph)

The Big Marine South Boat Launch is a public launch owned by the Minnesota DNR located on the South end of Big Marine Lake at the intersection of May Avenue. The launch has 3.4 acres, including a minimally maintained township gravel road, that drains to it.

As demonstrated by the attached photo, township road drainage frequently flows across the public launch parking lot and generates large turbid discharges to Big Marine Lake during spring melt and summer storm events. This project proposes to tip the township road to the North to divert drainage into a vegetated swale and a bioretention basin. Overflow from the bioretention basin will then flow into a wetland prior to flowing into Big Marine Lake.

Drainage Area – 3.4 acres

Construction Cost - $35,000

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

|  |  |
| --- | --- |
| Goose Lake area (acres) | 1,800 |
| Mean and max depths | Max Depth 59 feet  |
| Watershed area (acres) | 5,241 acres |
| Recreational uses | Fishing and Swimming |
| Description of the watershed and near-shore land uses | 11% developed, 24% forests and woodlands, 6% grassland/shrubland/sparse vegetation,37% lakes and open water wetlands, 15% planted or cultivated, 7% wetlands |
| Impairment status and description of degree of impairment: | High quality recreational lake with three public launches and a public beach |
| Describe any previous internal loading projects: | Redevelopment permitting stormwater volume requirements, buffer requirements, bioengineering shoreline requirements, technical assistance and cost share projects |

# Project Details

|  |  |
| --- | --- |
| Project Name | Big Marine East Boat Launch Sediment Plume Reduction Retrofit |
| Project Sponsor | Carnelian Marine St. Croix Watershed District |
| Additional Project Partner(s) (other than sponsor) | Washington Conservation District |
| Project Location (lat/long, address, or description) | Intersection of Margo Avenue N and 177th St. N, May Township. Sec 05 T31 R20 |
| DNR Level 8 Subwatershed | 82005200 |
| Applicable WBIF Work Plan Activity | Activity 2,4,5 Urban Stormwater Quality  |
| Funding Specifically Allocated to this Project in Work Plan (if applicable) | $48,000 CMSCWD Annual Budget Line Item |
| Estimated Construction Timeline | Fall 2022 |
| Total Project Cost | $45,000 |
| Estimated Lifetime Project Cost (incl. O&M) | $3,000 |
| Requested Grant Funding | $10,000 |
| Target Waterbody (from CWMP Table 5-2, 5-3, 5-4) | Big Marine Lake |
| Est. Phosphorus Load Reduction @ Target Waterbody | 1.1 lbs./yr. |
| Est. TSS Load Reduction @ Target Waterbody | 475 lbs./yr. |
| Project Lifespan | 20 years |
| Lifetime Cost-Benefit ($/lb phosphorus removed) | $2,300.00 |

**Informational Attachments/Templates:**

1. WBIF Project Request Process Flow Chart
2. CWMP Priority Waterbody Maps
3. Wetland Restoration Scoring Matrix (for Activity 6)

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

[ ]  Project Plans/Visual/Map

[x]  Completed Appendix C Project Scoring Matrix (for Activities 2, 4, 5)

[ ]  Completed Wetland Restoration Scoring Matrix (for Activity 6)

[ ]  Completed Internal Analysis Scoring Matrix (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.*

# Roll Call Vote

Roll call vote to recommend project for Lower St. Croix Watershed Based Implementation Funding in the amount of $10,000.

|  |  |  |  |
| --- | --- | --- | --- |
| **Organization** | **Aye** | **Nay** | **Absent** |
| Anoka SWCD | x |  |  |
| Brown's Creek WD |  |  | x |
| Carnelian Marine St Croix WD | x |  |  |
| Chisago County | x |  |  |
| Chisago Lakes LID |  |  | x |
| Chisago SWCD | x |  |  |
| Comfort Lake Forest Lake WD | x |  |  |
| Isanti County |  |  | x |
| Isanti SWCD | x |  |  |
| Middle St. Croix WMO |  |  | x |
| Pine County |  |  | x |
| Pine SWCD | x |  |  |
| South Washington WD | x |  |  |
| Sunrise River JP WMO |  |  | x |
| Valley Branch WD |  |  | x |
| Washington CD | x |  |  |
| Washington County |  |  | x |
| **TOTAL (need majority vote to pass)** | **9** |  | **8** |