

Lower St. Croix Watershed Partners 2023 Activities & Outcomes Report

January 1, 2023 - December 31, 2023

WBIF-Funded Activities
and
Non-WBIF Activities

Over all 2023 Outcomes*

WBIF Funding Spent: \$672,472
Non-WBIF Funds Spent: \$2,688,050

WBIF Total Phosphorus Reduction: 1,412 lb/yr
Non-WBIF Funded Total Phosphorus Reduction: 4,740 lb/yr

TOTAL funding spent in 2023 to implement activities in priority areas in the LSC: \$3,360,522
TOTAL amount of phosphorus reduced in priority waterbodies in the LSC through 2023 implementation: 6,152 lb/yr

For reference, the 10-year total phosphorus reduction goal across all priority lakes and streams is 5,503 lb/yr.

*Non-WBIF figures may not reflect all funding and pollutant removals for work completed in priority areas in 2023. The information presented here compiles reports from individual LSC Partners. Not every LSC Partner reported information and/or information may not be complete.

Leveraged Funds

More than \$2,680,000 in “non-WBIF funds” were utilized to implement activities throughout the Lower St. Croix River Watershed including funds directly from each of the LSC Partners. Additional sources include:

- Multiple LSC Cities
- Landowners
- Lake Associations
- MN Association of Conservation District Employees
- BWSR Clean Water Fund Grants
- DNR AIS Prevention Grants
- Minnesota Land Trust
- Metro Big Rivers State Funding
- MPCA Subsurface Sewage Treatment System (SSTS) Funding
- Section 319 Small Watershed Focus Grant
- Environment & Natural Resource Trust Fund
- Natural Resources Block Grant
- USDA EQIP Funds
- Local donations

Structural Ag BMP Implementation

WBIF Funded Activities:

- 3 water and sediment control basins constructed totaling 15.8 acres resulting in 20 lbs/year TP reduction in Rock Lake subwatershed

WBIF Funds: \$5,597

Pollutant Removal: 20 lb/yr total phosphorus

Non-WBIF Activities:

- 5 water and sediment control basins in direct drainage to St. Croix River
- 5 water and sediment control basins in Rush Lake watershed

Non-WBIF Funds: \$135,645

Pollutant Removal: 601 lb/yr total phosphorus

Structural Urban BMP Implementation

WBIF Funded Activities:

- 1.9 lbs/yr total phosphorus removed with 2 bioretention basins in Marine on St. Croix intercepting stormwater from 2.16 acres of residential neighborhoods
- 1.1 lbs/yr total phosphorus with one bioretention basin at Big Marine Lake boat launch

WBIF Funds: \$55,000

Pollutant Removal: 3 lbs/year total phosphorus

Non-WBIF Activities:

- 34 tree boxes installed along Neal Ave
- 13 projects installed directly draining to Lake St. Croix including infiltration basins, habitat restorations and shoreline/bluff stabilizations
- 5 bioretention basins with volume reduction of 20 acre-feet/year with direct discharge to the North Branch of the Sunrise River
- 4 rain gardens
- 1 lined waterway
- 1 vegetated swale
- 1 Iron Enhanced Salt Filter benefitting Forest Lake
- 4 shoreline restorations
- 1 infiltration basin
- Erosion control along Lawrence Creek

Non-WBIF Funds: \$546,200

Pollutant Removal: 141 lb/yr total phosphorus

Non-Structural Ag/Urban Implementation

WBIF Funded Activities:

- 17.9 lb/yr total phosphorus reduction with 3 enhanced street sweepings in Linwood Township around Martin and Linwood Lakes totaling 9.1 curb miles (\$910 23WBIF)
- 334 acres of cover crops for multiple producers in Chisago, Washington and Isanti Counties: Cramaur, May, Swanson, Swanson, Keene, Stamm (includes second year of 3-year contracts for some)
- 1,000 ac of conservation tillage for multiple producers in Washington County: Herman, Herman, Radke
- 300 acres of strip tillage for one producer in Chisago County: May

WBIF Funds: \$87,540

Pollutant Removal: 1,300 lb/yr total phosphorus

Non-WBIF Activities:

- 1,936 acres of conservation and soil health practices: pasture and hayland planting, native prairie planting, cover crops, and no-till/strip-tillage planting
- 242 non-compliant SSTS replaced; more than 90 of these in shoreland areas
- 2 native plantings
- 1 alum treatment (Forest Lake)
- 90 locations of phragmites treated
- Hundreds of hazardous waste generators licensed

Non-WBIF Funds: \$662,392

Pollutant Removal: 3,998 lb/yr total phosphorus

Shared Service Educator

WBIF Funded Activities:

- Q1 2023 Activities: South Washington field day, farming videos, lakeshore realtor workshop, local leaders chloride workshop, forestry workshop, Pine and Isanti Ag Update meeting, Farmer Equipment Meeting, Virtual Beef Workshop, Virtual Small Livestock Workshop, Pine City Biggest Asset Ag Meeting, workshop and event planning, 250 attendees at Master Gardener community event, 15 local officials educated at SMART salting workshop
- Q2 2023 Activities: Updated the LSC Farmer Resource page; developed social media content for partners; wrote four blog posts; created YouTube videos; helped to plan numerous events for farmers + two St. Croix Workshops on the Water events for local decision-makers; MIDS ordinance options were reviewed for Rush City
- Q3 2023 Activities: July Workshop of the Water with 140 community leaders and 30 partner staff in attendance, production of "When Development Comes to Town" video, tabling at Washington County fair and at other events
- Q4 2023 Activities: Completed "When Development Comes to Town" video; hosted Living Large on a Small Lake webinar with 65 people attending + YouTube views; hosted Smart Salting for Roads workshop in North Branch with 43 attendees; blog posts

WBIF Funds: \$72,258

Non-WBIF Activities:

- Progress on MIDS Implementation:
 - Engaged with 5 communities to gauge interest: Rush City, North Branch, Chisago City, Marine on St. Croix, and Scandia. Spoke with city administrators and public works managers to describe status and impact of MIDS in communities where the standards have already been adopted
- Progress on chloride reduction:
 - Hosted 2 Smart Salting certification trainings for 145 snow plow drivers (Cottage Grove & North Branch)
 - Hosted 1 Smart Salting training for 28 local decision-makers

Non-WBIF Funds: \$11,858

[AIS Prevention and Management](#)

No WBIF Funded Activities – all activities locally funded

Non-WBIF Activities:

- 7,395 hours of watercraft inspections in Chisago County and northern Washington County
- 13 decontaminations at 10 public water accesses in Chisago and northern Washington Counties

Non-WBIF Funds: \$153,649

[Land Protection](#)

No WBIF Funded Activities – All land protection activities were locally funded

Non-WBIF Activities:

- 90.6 acres protected in Washington County through 3 distinct projects
- 19 acres acquired and vegetation restored adjacent to Forest Lake, third basin

Non-WBIF Funds: \$897,000

[Wetland Restoration Implementation](#)

WBIF Funded Activities:

- 89 lbs/yr total phosphorus removed with 22-acre Sunrise River Wetland Restoration Project

WBIF Funds: \$300,449

Pollutant Removal: 89 lb/yr total phosphorus

Non-WBIF Activities:

- 12 acres Borden Wetland Restoration

Non-WBIF Funds: \$8,664

Pollutant Removal: 1.0 lb/yr total phosphorus

[Targeting Analyses & Technical/Engineering](#)

WBIF Funded Activities:

- Rock Lake Subwatershed Analysis (SWA) completed with detailed information about targeted locations, suggested BMPS, and pollution reduction estimates
- Direct Drainage subwatershed analysis completed for 29.9 square miles of contributing catchments flowing to 21 spring streams and the St. Croix River. Evaluation included prioritization of potential legacy loading wetlands for future monitoring and the feasibility, cost, and pollutant reductions for nonstructural and structural best management practices
- Street sweeping plans for Wyoming, Marine, Scandia, Lake Elmo, Afton, Rush City, and North Branch
- Sunrise River Watershed Catchment Prioritization Project - Phase 2

WBIF Funding: \$55,007

Non-WBIF Activities:

- Completed 3 Subwatershed Assessments: Lawrence Creek, Dry Creek, and Direct Drainage to the St. Croix River
- Reviewed dozens of Wetland Conservation Act (WCA) applications and addressed wetland violations
- Substantially completed plan development for ravine stabilization, flow rate control, and landscape restoration within St. Croix Bluffs Regional Park
- Monitored water levels on 96 lakes and basins
- Developed 3 habitat management plans that include climate adaptation management recommendations and one corresponding action plan
- Completed BMP designs for 91 landowners (e.g., raingardens, shorelines, pollinator plantings, prairie restorations, ravine stabilizations)
- Collected data on 40 groundwater observation wells
- Collected water quality data on 64 lakes and basins
- Continued flood hazard mapping and floodplain vulnerability assessments
- Updated Washington County MLCCS coverage to 2022/2023 aerial photos and confirmed 162 natural sites to level 6/7 under new MLCCS/NPC code system
- Monitored and performed feasibility/design for 2 degraded wetlands upstream of impaired waters

Non-WBIF Funds: \$272,641

[Basin Ag Outreach Program](#)**WBIF Funded Activities:**

- Agronomy Outreach Specialist, Jennifer Hahn, hired through University of MN Extension worked for LSC Partnership January – Fall 2023

Q1 2023:

- Coordinated multiple meetings, workshops, and events including South Washington field day, Pine and Isanti Ag Update meeting, Farmer Equipment Meeting, Virtual Beef Workshop, Virtual Small Livestock Workshop, Pine City Biggest Asset Ag Meeting
- Developed educational videos for agricultural producers
- Presented at Master Gardener meetings
- Provided technical support for farmer conservation practices
- 139 farmers/landowners reached through workshops

Q2 2023:

- Provided outreach to 100 operators managing at least 1500 acres
- Coordinated monthly ag team meetings
- Participated on MN Soil Health Action Framework Stakeholder cohort
- Presented at various events, gave multiple radio interviews
- Hosted 3 field days
- Provided technical assistance to 10 producers to set up test plots to evaluate practice performance

Q3 2023:

- Provided outreach to more than 100 farmers
- Coordinated monthly ag team meetings
- Participated on MN Soil Health Action Framework Stakeholder cohort
- Presented at various events, gave multiple radio interviews
- Hosted 5 field days

WBIF Funds: \$50,183

Non-WBIF Activities: Staff with most LSC Partners spent time and effort on outreach efforts with agricultural producers including building and maintaining relationships, marketing BMPs and programs, performing site visits, etc. These activities are ingrained within the daily work of staff members across the basin. Local funding (non-WBIF funds) spent on these efforts is not reported.

Non-WBIF Funds: None reported

Administration/Coordination

WBIF Funded Activities:

- 2023 Description of Work and Outputs Achieved:
 - Managed agreements, sub-agreements and contracts, prepared financial reports, coordinated payments to partners and contractors
 - Prepared and submitted grant reports in eLINK
 - Prepared report on all 2022 activities including WBIF-funded and non-WBIF funded activities
 - Prepared 2024 Annual Work Plan
 - Maintained LSC Partnership website
 - WCD coordinated various meetings of the partnership including preparing meeting agendas and minutes for Policy Committee, Steering Committee, Planning Team Committee, and Advisory Committee
 - Drafted position description and posting for new agronomy outreach specialist

WBIF Funds: \$46,438

Non-WBIF Activities: None Reported