

Lower St. Croix Watershed Partners 2022 Activities Report

January 1, 2022 - December 31, 2022

2021 WBIF-Funded Activities (as reported in eLINK (C21-4732))
and
Non-WBIF Activities

Over all 2022 Outcomes*

WBIF Funding Spent: \$506,691
Non-WBIF Funds Spent: \$2,319,998

WBIF Total Phosphorus Reduction: 715.5 lb/yr
Non-WBIF Funded Total Phosphorus Reduction: 945 lb/yr

TOTAL funding spent in 2022 to implement activities in priority areas in the LSC: \$2,826,689
TOTAL amount of phosphorus reduced in priority waterbodies in the LSC through 2022 implementation: 1,660.5 lb/yr

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

*Non-WBIF funding and pollutant removal outcomes may not reflect all work completed in priority areas in 2022. The information presented here incorporates reports from individual LSC Partners. Not every LSC Partner reported information and/or information may not have been complete.

Activity 1: Basin Ag Outreach Program

WBIF Funded Activities:

- Description of Work: Agronomy Outreach Specialist, Jennifer Hahn, was hired through University of MN Extension and began work in February 2022.
- Outputs Achieved:
 - Conducted outreach to 122 producers at field days, 14 at the workshop, completed mailings to 351, and emailing 154 producers promoting events, BMPs, and programs available, total of 617 large and small farms reached
 - Developed and held 3 field days, total of 98 attendees
 - Oversaw installation of 335.7 acres of non-structural ag BMPs – see Activity 4 for measurable project outcomes

WBIF Funds: \$93,815

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

Activity 2: Structural Ag BMP Implementation

WBIF Funded Activities:

- 2022 Description of Work: Approved projects include:
 - McQuade Ravine Stabilization (SWWD), completed in 2021
 - Hinze Cattle Exclusion (Pine SWCD), completed in 2021
 - Hinze WASCOD (Pine SWCD), construction not completed in 2022 due to weather conditions; postponed until spring 2023
- 2022 Outputs Achieved:
- 2022 Outcomes Achieved: Implemented one project using WBIF funds: Hinze WASCOD (20 lb/yr phosphorus reduction)

WBIF Funds: \$106,462

Pollutant Removal: 20 lb/yr total phosphorus

Non-WBIF Activities:

- 11 water and sediment control basins and diversions
- 4 stabilized waterways
- Cedar tree revetment along Lawrence Creek

Non-WBIF Funds: \$116,733

Pollutant Removal: 240.5 lb/yr total phosphorus

Activity 3: Shared Services Educator

WBIF Funded Activities:

- Description of work: Barbara Heitkamp, the shared services educator, has worked closely with Angie Hong (coordinator for the East Metro Water Resource Education Program), Jennifer Hahn (University of Minnesota Extension agronomy outreach specialist), and Lower St. Croix Watershed Partnership partners to provide educational services through community events, workshops, project tours, newsletters, social media, and public engagement.
- Abbreviated outputs achieved by BBH:
 - Started building relationships and trust with local-decision makers, including coordinating a workshop at a local winery that introduced water protection policies and practices (43 attendees)
 - Presented at 5 local lake association meetings and multiple community events to promote lakeshore buffers, utilized newspaper articles, blog posts, videos, and social media campaigns that resulted in upwards of 20 shoreline projects installed in priority areas (Chisago Lakes).
 - Helped the Chisago SWCD enter the Adopt a Drain program and led efforts to get 59 drains adopted over the past six months in Chisago County and helped promote drain adoption across Anoka and Washington county communities
 - Helped cover over 30 community events promoting native plantings, adopt a drain, water conservation, lakeshore buffers, Created a blog (Knickpoints.org) and has written 28 blog posts with over 2000 views and helped generate social media campaigns that with partner contributions has reached over 4.1 million people.
 - Provided outreach support via blog and social media to basinwide agronomist on promoting and executing three field days for production ag farmers (98 attendees) and one small acreage workshop (14 attendees).

- Created ag-centric video series on YouTube that has over 2K views.

WBIF Funds: \$91,036

Non-WBIF Activities:

- Progress on MIDS Implementation:
 - Started building relationships and trust with local-decision makers, including coordinating a workshop at a local winery that introduced water protection policies and practices (43 attendees)
 - Collaborated with Wild Rivers Conservancy, Minnesota and Wisconsin DNR, National Park Service, and Wisconsin counties to host a St. Croix River Workshop on the Water (100 attendees)
- Progress on chloride reduction:
 - Organizes a Smart Salting training, co-hosted by Dakota and Washington Counties (70 attendees)
 - Promoted Smart Salting training opportunities in monthly email updates to partners
 - Created a list of the 760+ public and private employees that are Smart Salt Certified in the EMWREP region
- City of East Bethel updated wetland protections in ordinances

Non-WBIF Funds: \$5,236

Activity 4: Non-Structural Ag/Urban Implementation

WBIF Funded Activities:

- 2022 Description of Work: All completed projects were cover crops which were installed for the first year in 2022, and all will be installed annually for 3 years.
 - Pine County: Stevens Cover Crop
 - Chisago County: Cramaur Cover Crop and May Cover Crop
 - Washington County: Keene, G. Swanson, and T. Swanson cover crops
 - Isanti County: Three landowners interested in cover crops for 2023, but none spent in 2022.
 - Anoka County: No funds encumbered. May not be able to spend funds. May transfer funds to other partners (within Activity 4) if needed.
- 2022 Outputs Achieved: Non-structural BMP policy completed and approved in 2022. Installed 335.7 acres of non-structural ag BMPs.
- 2022 Outcomes Achieved:
 - Reduced TP by 682.71 lbs (reductions by priority area: Sensitive Groundwater TP Reduction: 389.09lbs, 133.4 ac; Regionally Significant Rivers and Streams: 682.71lbs TP Reduction, 335.7 ac; Regionally Significant Lakes: 140.63 TP Reduction, 66.7 ac)
 - Reduced TSS by 631.8 tons/yr (Regionally Significant Lakes: 130 tons/yr TSS; Regionally Significant Rivers and Streams: 631.8 tons/yr)
 - Reduced erosion by 865.1 tons/yr (Regionally Significant Lakes: 166.7 tons/yr; Regionally Significant Rivers and Streams: 865.1 tons/yr)

WBIF Funds: \$44,000

Pollutant Removal: 682.7 lb/yr total phosphorus

Non-WBIF Activities:

- 12 no-till acres
- 246.7 acres of cover crops
- 2.5 acres of prairie converted from row crops
- 396 new or replaced SSTS
- 23 wells sealed
- 12 shoreline restoration projects + 571 feet of bioengineered shoreline
- 19-acre acquisition near Cranberry Lake protecting 2-3 acres of mature forested upland, 16 acres of wetland and over 3,000 feet of undeveloped shoreline
- 100 acres of prairie plantings at parks and private residences
- 7,343 hours of watercraft inspections and decontaminations
- 124 locations of invasive phragmites treated
- 38 designs completed for shorelines, pollinator plantings, woodland management, and prairie restoration

Non-WBIF Funds: \$1,483,026

Pollutant Removal: 472 lb/yr total phosphorus

Activity 5: Structural Urban BMP Implementation**WBIF Funded Activities:**

- 2022 Description of Work: Two projects approved for funding:
 - Big Marine Boat Launch Stormwater Retrofit (CMSCWD), going out to bid in 2023
 - Trout Brook Project (SWWD), originally indicated needed to begin construction work in fall 2022 due to wildlife requirements and was prioritized for 2021 funding as such, however SWWD now plans to complete all construction activities in 2023 after ski season has ended at Afton Alps resort. Project is out for bid. No construction occurred in 2022.
- 2022 Outputs Achieved: Completed 1 urban BMP
- 2022 Outcomes Achieved: 1.1 lb/yr phosphorus reduction achieved in 2022

WBIF Funds: \$0

Pollutant Removal: 1 lb/year total phosphorus

Non-WBIF Activities:

- 2 stormwater capture and reuse projects
- 2 stabilized waterways
- 1 raingarden
- 12 shoreline restoration projects + 571 feet of bioengineered shoreline
- Ravine stabilization project in the Valley Creek watershed

Non-WBIF Funds: \$183,301

Pollutant Removal: 193 lb/yr total phosphorus

Activity 6: Wetland Restoration Implementation

WBIF Funded Activities:

- 2022 Description of Work: Projects approved for funding:
 - Jones Wetland Restoration (Pine SWCD), completed in 2022
 - Jahnz Wetland Restoration (Pine SWCD), completed in 2022
 - Goose Lake Wetland Restoration (CMSCWD), completed wetland excavation in 2022 and will complete planting in 2023.
- 2022 Outputs Achieved: 3 wetland restorations completed (2 will result in nutrient reductions for priority waterbodies)
- 2022 Outcomes Achieved: 11.8 lb/yr phosphorus reduction for priority waterbodies

WBIF Funds: \$25,394

Pollutant Removal: 11.8 lb/yr total phosphorus

Non-WBIF Activities:

- 39.6 acres restored wetlands
 - 0.6 acres Goose Lake Wetland Restoration
 - 2 acres Bone Lake Northeast Legacy Wetland Restoration Project
 - 37 acres restored Chisago County per wetland banking
- 33 acres wetland bank created

Non-WBIF Funds: \$207,473

Pollutant Removal: 40 lb/yr total phosphorus

Activity 7: Internal Analyses

WBIF Funded Activities:

- 2022 Description of Work: After releasing a request for proposals and reviewing responses, the A7 subcommittee ultimately decided to approve funding for one internal analysis study – Forest Lake (CLFLWD).
- 2022 Outputs Achieved: CLFLWD completed the Forest Lake Internal Load Analysis in 2022, and the report is available on the LSC website.

WBIF Funds: \$16,500

Non-WBIF Activities: None

Activity 8: Targeting Analyses

WBIF Funded Activities:

- 2022 Description of Work and Outputs Achieved: Funding approved for the following initiatives:
 - Tree Canopy Assessment Protocols for Enhanced Street Sweeping, completed in 2022
 - Prioritization and Targeting Protocols, to be completed in early 2023; the sequential diagnostic monitoring protocols drafted by CLFLWD took longer than anticipated to complete and go

through final internal review process. The SDM protocols were presented in early December 2022 and will be incorporated into the larger Prioritization and Targeting Protocols document in combination with portions completed by WCD.

- Rock Lake SWA (Pine County): Pine Co work is done, and Pine SWCD work is in progress (expected to be completed by spring 2023).
- Sunrise River Priority Drainage Areas (PDA): current status: 75-80% complete; goal to be done by end of February 2023
- Northeastern Washington County St. Croix and Spring Streams SWA (CMSCWD): started in the fall. On track to be done by mid-summer 2023.
- Tree Canopy Assessments and Enhanced Street Sweeping Studies:
 - Linwood Twp, Anoka SWCD: 98% completed in 2022
 - Afton, WCD: In progress
 - Lake Elmo, WCD: In progress
 - MSCWMO Cities, WCD: In progress
 - Wyoming, CLFLWD: In progress
 - Marine on St. Croix, CMSCWD/WCD: In progress (work is being done by WCD)
 - Scandia, CMSCWD/WCD: In progress (work is being done by WCD)
 - North Branch, Chisago SWCD: In progress
 - Rush City, Chisago SWCD: In progress

WBIF Funding: \$82,265

Non-WBIF Activities:

- 20 Groundwater monitoring wells monitored
- 19 Lakes monitored for water level
- 39 Lake sites sampled for water quality
- 21 new streams monitored for biological parameters
- St. Croix Spring Stream Subwatershed Analysis
- Seven Lake Subwatershed Analysis
- Flood hazard mapping

Non-WBIF Funds: \$149,679

Activity 9: Technical/Engineering

WBIF Funded Activities: Partners paid for all project technical/engineering locally, or worked with LSC Agronomy Outreach Specialist for technical assistance. As such, no grant funds were utilized under this activity. Funding was removed from this activity in the most recent grant amendment.

WBIF Funds: \$0

Non-WBIF Activities:

- Reviewed dozens of WCA applications for potential impacts to wetlands
- Worked to resolved multiple wetland violations

- Comprehensive Landlocked Basin Study
 - Collected water quality data (including PFAS, standard water quality parameters, and sediment coring data) to evaluate water quality and quantity impacts of possible outlets from nine landlocked basins
 - Evaluated impact of climate change
- Reviewed the 2016 Channel & Weir Operation & Maintenance Plan
- Continued implementation Channel & Weir Operation & Maintenance plan
- Completed 2 Habitat Management Plans
- Completed 1 Forest Management Plan
- Conducted 40 invasive species focused site visits

Non-WBIF Funds: \$174,550

Activity 10: Administration/Coordination

WBIF Funded Activities:

- 2022 Description of Work and Outputs Achieved:
 - Chisago SWCD: Performed fiscal agent duties including execution of partner sub-agreements, payment of invoices, and eLINK financial reporting. Worked with CLFLWD to establish reporting forms and invoicing templates that align with reporting requirements to ensure all activities receiving WBIF grant funds are in alignment with work plan and reporting criteria. Worked with CLFLWD and BWSR staff to complete FY21 WBIF grant amendment and associated work plan revisions.
 - WCD: Performed hiring and payroll administration for Agronomy Outreach Specialist and Shared Services Educator.
 - WCD/EMWREP: Kept the LSC website up to date with meeting information and other updates. Coordinated/facilitated/took minutes for meetings of the Policy Committee, Steering Committee, Advisory Committee, and Planning Team.
 - CLFLWD: Coordinated revisions and refinement of Project Request Packet including cover memo, attachments associated with each work plan activity, and informational attachments such as maps and the project request process flow chart. Worked with Chisago SWCD to update reporting forms and invoicing templates as needed. Worked with Chisago SWCD and BWSR staff to complete FY21 WBIF grant amendment and associated work plan revisions.

WBIF Funds: \$47,219

Non-WBIF Activities: None Reported