



# Grant Work Plan

## Watershed Based Implementation FEB 2021

**Grant Title:** 2021 WBIF - Lower St. Croix Watershed Partners

**Grant Award (\$):** \$1,264,531.00

**Grant Execution Date:** 03/31/2021

**Grant ID:** C21-4732

**Required Match (%):** 10

**Grant End Date:** 12/31/2024

**Grantee:** Chisago SWCD

**Required Match (\$):** \$126,453.10

**Fiscal Agent:** Chisago SWCD

**Grant Day-to-Day Contact:** Craig Mell

	Total Budgeted	Total Spent	Balance Remaining*
Grant Funds	\$1,264,531.00	\$1,264,531.00	\$0.00
Match Funds	\$129,800.00	\$502,634.52	(\$372,834.52)
Other Funds	\$742,000.00	\$927,306.47	(\$185,306.47)
<b>Total</b>	<b>\$2,136,331.00</b>	<b>\$2,694,471.99</b>	<b>(\$558,140.99)</b>

\*Grant balance remaining is the difference between the Awarded Amount and the Spent Amount. Other values compare budgeted and spent amounts.

### Budget Details

Activity Name	Category	Source Type	Source Description	Budgeted	Spent	Balance Remaining	Match Fund?
Administration/Coordination	Administration/Coordination	Local Fund	LSC Partners	\$0.00	\$712.17	(\$712.17)	Y
Structural Ag BMP Implementation	Agricultural Practices	Local Fund	LSC Partners	\$27,500.00	\$7,134.20	\$20,365.80	Y
McQuade Ravine Stabilization	Agricultural Practices	Local Fund	McQuade Ravine Stabilization	\$0.00	\$79,877.57	(\$79,877.57)	Y

<i>Activity Name</i>	<i>Category</i>	<i>Source Type</i>	<i>Source Description</i>	<i>Budgeted</i>	<i>Spent</i>	<i>Balance Remaining</i>	<i>Match Fund?</i>
Shared Services Educator	Education/Information	Local Fund	LSC Partners	\$4,800.00	\$86,240.50	(\$81,440.50)	Y
Targeting Analyses	Planning and Assessment	Local Fund		\$0.00	\$26,549.19	(\$26,549.19)	Y
Internal Analyses	Planning and Assessment	Local Fund	LSC Partners	\$0.00	\$15,852.26	(\$15,852.26)	Y
Basin Ag Outreach Program	Project Development	Local Fund	LSC Partners	\$0.00		\$0.00	Y
Technical/Engineering	Technical/Engineering Assistance	Local Fund	LSC Partners	\$0.00	\$189.77	(\$189.77)	Y
Structural Urban BMP Implementation	Urban Stormwater Management Practices	Local Fund	LSC Partners	\$70,000.00	\$232,763.50	(\$162,763.50)	Y
Wetland Restoration Implementation	Wetland Restoration/Creation	Local Fund		\$0.00	\$53,315.36	(\$53,315.36)	Y
Sunrise Wetland Construction	Wetland Restoration/Creation	Local Fund	CLFLWD Local Levy	\$50,000.00	\$50,000.00	\$0.00	Y
Sunrise Wetland Construction	Wetland Restoration/Creation	Local Fund	CLFLWD	\$60,000.00	\$243,361.08	(\$183,361.08)	Y
Administration/Coordination	Administration/Coordination	Current State Grant	2021 WBIF - Lower St. Croix Watershed Partners	\$100,000.00	\$109,544.74	(\$9,544.74)	N
Structural Ag BMP Implementation	Agricultural Practices	Current State Grant	2021 WBIF - Lower St. Croix Watershed Partners	\$13,766.70	\$10,175.09	\$3,591.61	N
McQuade Ravine Stabilization	Agricultural Practices	Current State Grant	2021 WBIF - Lower St. Croix Watershed Partners	\$93,407.30	\$93,407.30	\$0.00	N
McQuade Ravine Stabilization	Agricultural Practices	Other Funds	2019 - Watershed Based Funding Metro (Washington Conservatio..	\$0.00	\$1,945.39	(\$1,945.39)	N
Shared Services Educator	Education/Information	Current State Grant	2021 WBIF - Lower St. Croix Watershed Partners	\$125,000.00	\$149,983.85	(\$24,983.85)	N

<i>Activity Name</i>	<i>Category</i>	<i>Source Type</i>	<i>Source Description</i>	<i>Budgeted</i>	<i>Spent</i>	<i>Balance Remaining</i>	<i>Match Fund?</i>
Non-Structural Ag/Urban Implementation	Non-Structural Management Practices	Current State Grant	2021 WBIF - Lower St. Croix Watershed Partners	\$100,000.00	\$97,540.00	\$2,460.00	N
Targeting Analyses	Planning and Assessment	Current State Grant	2021 WBIF - Lower St. Croix Watershed Partners	\$150,000.00	\$136,231.03	\$13,768.97	N
Internal Analyses	Planning and Assessment	Current State Grant	2021 WBIF - Lower St. Croix Watershed Partners	\$16,500.00	\$16,500.00	\$0.00	N
Basin Ag Outreach Program	Project Development	Current State Grant	2021 WBIF - Lower St. Croix Watershed Partners	\$200,000.00	\$185,305.92	\$14,694.08	N
Technical/Engineering	Technical/Engineering Assistance	Current State Grant	2021 WBIF - Lower St. Croix Watershed Partners	\$0.00		\$0.00	N
Structural Urban BMP Implementation	Urban Stormwater Management Practices	Current State Grant	2021 WBIF - Lower St. Croix Watershed Partners	\$360,000.00	\$360,000.00	\$0.00	N
Wetland Restoration Implementation	Wetland Restoration/Creation	Current State Grant	2021 WBIF - Lower St. Croix Watershed Partners	\$25,408.00	\$25,394.07	\$13.93	N
Sunrise Wetland Construction	Wetland Restoration/Creation	Other Funds	2023 WBIF - Lower St. Croix Watershed Partners	\$220,000.00	\$220,000.00	\$0.00	N
Sunrise Wetland Construction	Wetland Restoration/Creation	Current State Grant	2021 WBIF - Lower St. Croix Watershed Partners	\$80,449.00	\$80,449.00	\$0.00	N
Sunrise Wetland Construction	Wetland Restoration/Creation	Other Funds	Sunrise River Drained Wetland Restoration	\$412,000.00	\$412,000.00	\$0.00	N
Structural Ag BMP Implementation	Agricultural Practices	Federal Funds	Federal Programs (NRCS)	\$27,500.00		\$27,500.00	Y

<i>Indicator Category</i>	<i>Proposed Indicator</i>	<i>Total Value</i>	<i>Unit</i>
Water Pollution (Reduction Estimates)	Phosphorus (Est. Reduction)	300	Lbs/Yr
Water Pollution (Reduction Estimates)	Phosphorus (Est. Reduction)	15	Lbs/Yr
Water Pollution (Reduction Estimates)	Phosphorus (Est. Reduction)	400	Lbs/Yr
Water Pollution (Reduction Estimates)	Phosphorus (Est. Reduction)	200	Lbs/Yr

<i>Indicator Category</i>	<i>Final Indicator</i>	<i>Total Value</i>	<i>Unit</i>
Water Pollution (Reduction Estimates)	Phosphorus (Est. Reduction)	89	Lbs/Yr
Water Pollution (Reduction Estimates)	Sediment (Tss)	26	Tons/Yr
Water Pollution (Reduction Estimates)	Phosphorus (Est. Reduction)	23.48	Lbs/Yr
Water Pollution (Reduction Estimates)	Sediment (Tss)	1.89	Tons/Yr
Water Pollution (Reduction Estimates)	Phosphorus (Est. Reduction)	178.1	Lbs/Yr
Water Pollution (Reduction Estimates)	Sediment (Tss)	154	Tons/Yr
Water Pollution (Reduction Estimates)	Phosphorus (Est. Reduction)	251	Lbs/Yr
Water Pollution (Reduction Estimates)	Sediment (Tss)	295	Tons/Yr
Water Pollution (Reduction Estimates)	Phosphorus (Est. Reduction)	26.84	Lbs/Yr

<i>Indicator Category</i>	<i>Final Indicator</i>	<i>Total Value</i>	<i>Unit</i>
Estimates)			
Water Pollution (Reduction Estimates)	Phosphorus (Est. Reduction)	1354.02	Lbs/Yr
Water Pollution (Reduction Estimates)	Sediment (Tss)	9.52	Tons/Yr
Water Pollution (Reduction Estimates)	Soil (Est. Savings)	9.6	Tons/Yr

## Activity Name: Administration/Coordination

**Activity Category:** Administration/Coordination **Staff time?:** Yes

**Description:** Lead Agencies: Chisago SWCD, WCD, CLFLWD (see role assignments below)

Activity Description: This Activity will include the following tasks (performed by the organizations/staff members listed):

- Grant and progress reporting – includes coordinating with Chisago SWCD and other partners to gather reporting information, compiling said information, and entering reports into eLINK; will also include assisting Chisago SWCD with any grant/work plan amendments as necessary.
- o Lead organization: CLFLWD
- o Staff member: Emily Heinz, Planning Coordinator
- Coordination among Policy Committee, Steering Committee, Advisory Committee, and work plan activity planning team (lead coordination of meetings, agendas, meeting material distribution)
- o Lead organization: WCD (EMWREP)
- o Staff member: Angie Hong, Water Education Senior Specialist
- Website upkeep

- o☒ Lead organization: WCD (EMWREP)
- o☒ Staff member: Angie Hong, Water Education Senior Specialist
- o☒ Support organization: CLFLWD
- o☒ Staff member: Jessica Lindemyer, Operations & Outreach Specialist
- ☒ Fiscal agent administration and contract coordination – includes coordinating with other partners to gather reporting information and reviewing draft report; will also include leading any grant/work plan amendments as necessary
- o☒ Lead organization: Chisago SWCD
- o☒ Staff member: Craig Mell, District Administrator
- ☒ Agronomy Outreach Specialist and Educator administration, hiring and payroll administration. WCD will lead the process of coordinating the hiring subcommittees which will consist of staff members from partner organizations (see Grant Activities section for more description of grant activity subcommittees). Hiring subcommittees ideally not to exceed 5 people.
- o☒ Lead organization: WCD
- o☒ Staff member: Jay Riggs, District Manager

See Work Plan Detail in eLINK attachments for more info.

#### Budget Details

<u>Source Type</u>	<u>Source Description</u>	<u>Budgeted</u>	<u>Spent</u>	<u>Balance Remaining</u>	<u>Last Transaction Date</u>	<u>Match Fund?</u>
Current State Grant	2021 WBIF - Lower St. Croix Watershed Partners	\$100,000.00	\$109,544.74	(\$9,544.74)	01/17/2024	N
Local Fund	LSC Partners	\$0.00	\$712.17	(\$712.17)	08/10/2021	Y

December 31, 2021:

- ☒ Description of work and outputs achieved:
  - o☒ Chisago SWCD: Performed fiscal agent duties. Worked with CLFLWD to establish reporting forms and invoicing templates.
  - o☒ WCD: Performed hiring and payroll administration for Agronomy Outreach Specialist and Shared Services Educator.
  - o☒ WCD/EMWREP: Kept the LSC website up to date with meeting information and other updates. Coordinated/facilitated/took minutes for meetings.
  - o☒ CLFLWD: Coordinated establishment 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 establish reporting forms and invoicing templates.

## Actual Results

2022

o 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.

o WCD: Performed hiring and payroll administration for Agronomy Outreach Specialist and Shared Services Educator.

o 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.

o CLFLWD: 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.

Q1 2023: WCD staff coordinated committee meetings including developing agendas and meeting materials and facilitated meetings of Policy, Steering, and Plan Team committees. WCD staff updated the LSC website.

Chisago SWCD performed fiscal agent duties including gathering and reviewing invoices from partners and updating expenditures in eLINK.

Keystone Waters LLC assisted with grant reporting and planning. CLFLWD reviewed WBIF invoicing/tracking; completed eLINK year-end reporting

Q2 2023: WCD staff maintained the LSC website and coordinated logistics, agendas, and meeting materials for all meetings of the LSC including Policy Committee, Steering Committee, Planning Team, and Advisory Committee. Keystone Waters assisted with eLINK reporting and gathering/summarizing/reporting 2022 non-WBIF funded activities

Q3 2023: Facilitated planning team, steering committee, and policy committee meetings. Prepared meeting minutes. Maintained website. Developed 2024 Annual Plan. Assisted with grant/eLINK reporting.

Q4 2023: Chisago SWCD project management, budget tracking, sub-agreement coordination, grant fiscal reporting July - Dec 2023; Keystone Waters Q4 2023 grant reporting, non-WBIF activity tracking, annual planning

## Activity Name: Basin Ag Outreach Program

**Activity Category:** Project Development

**Staff time?:** Yes

**Description:** Lead Agency: Washington Conservation District, Jay Riggs

Co-lead Agency: Chisago SWCD, Craig Mell (Subcontract with WCD to act as host entity)

Estimated billing rate; hours: \$72/hour; 2,778 hours

Priority areas: Agronomy outreach specialist will focus on priority areas described in Structural Ag BMP Implementation and Non-Structural Ag/Urban Implementation

CWMP Reference: Page 61

Activity Description: Agronomy outreach specialist. (A) Shared Services: Hire or contract with an agricultural conservationist/agronomist (one individual) for basin wide assistance with agronomy, outreach, and technical assistance to agricultural producers including conservation planning and nutrient management plans. [Approximately 80% of this position's time will be directly working with agricultural producers in the LSC Watershed to identify economical farming practices with water quality benefits to make them a routine part of farm operations. A target is to interact with operators of both large and small operations with a cumulative total of at least 3,000 acres.] See Attachment A – Agronomy Outreach Specialist Details & Milestones for more information.

This would allow for 1 full time agronomy outreach specialist to work basin-wide. Staff will work basin-wide and may have more than one office space. LSC partners will ensure duties assigned to this new staff member will be in alignment with WBIF funding intent and requirements.

See Work Plan Detail in eLINK attachments for more information.

### Budget Details

<u>Source Type</u>	<u>Source Description</u>	<u>Budgeted</u>	<u>Spent</u>	<u>Balance Remaining</u>	<u>Last Transaction Date</u>	<u>Match Fund?</u>
Current State Grant	2021 WBIF - Lower St. Croix Watershed Partners	\$200,000.00	\$185,305.92	\$14,694.08	01/17/2024	N
Local Fund	LSC Partners	\$0.00		\$0.00		Y



## Actual Results

Actual Results – December 31, 2021 Update:

- Description of work: The A1 subcommittee compared options for hiring the Agronomy Outreach Specialist including internal hire and contracting through University of MN Extension, ultimately deciding on the latter due to benefits of a partnership with UMNE. The A1 subcommittee worked closely with UMNE to post the job opening, review applications, interview candidates, and ultimately hired the number one candidate from the interview process. Projected start date is sometime in February 2022.
- Outputs achieved: Hired Agronomy Outreach Specialist in partnership with University of MN Extension (official announcement sent out January 2022).

Actual Results – December 31, 2022 Update:

- Description of Work: Agronomy Outreach Specialist, Jennifer Hahn, was hired through University of MN Extension and began work in February 2022.
- Outputs Achieved:
  - o 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
  - o Developed and held 3 field days, total of 98 attendees
  - o Oversaw installation of 335.7 acres of non-structural ag BMPs – see Activity 4 for measurable project outcomes

Jennifer Hahn: Ag program coordination, South Washington field day, farming videos, 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, Lower St. Croix committee meetings, Master Gardener presentation, farmer conservation support. 139 farmers/landowners reached through workshops

Q2 2023: Jennifer Hahn (Ag outreach coordinator) activities included outreach to 100 operators managing at least 1500 acres. Coordinating monthly ag team meetings, participating on MN Soil Health Action Framework Stakeholder cohort, presenting at various events, creating educational videos, giving radio interviews, hosting 3 field days, providing technical assistance to 10 producers to set up test plots to evaluate practice performance, communicating regularly with producers to provide education and information on events, trainings, publications, etc.

Q3 2023: Jennifer Hahn (Ag outreach coordinator) activities included outreach to over 100 farmers. Coordinating monthly ag team meetings, participating on MN Soil Health Action Framework Stakeholder cohort, presenting at various events, creating educational videos, giving radio interviews, hosting 5 field days, providing technical assistance to producers, communicating regularly with producers to provide education and information on events, trainings, publications, etc

Q4 2023: J. Hahn finished up current activities and reporting before leaving her position in fall 2023.

## Activity Name: Internal Analyses

**Activity Category:** Planning and Assessment

**Staff time?:** No

**Description:** Lead Agency: Chisago County, Jerry Spetzman and Susanna Wilson-Witkowski

Co-lead Agency: Chisago SWCD, Craig Mell (subcontracts with local partners for each subwatershed project)

Staff Qualifications: Work is likely to be performed by an outside consultant which will be vetted for staff qualifications.

Activity Description: Calculate internal loading of phosphorus on 2 lakes estimated at \$25,000 each. Two lakes will be awarded through the project evaluation process identified in the plan. The group will develop a timeline for evaluating internal load evaluation for lakes. Internal load evaluation should only occur after external loading is substantially addressed. Work under this activity will likely be performed by a contracted consultant.

Priority projects identified include:

- Linwood Lake and Martin Lake Anoka. Both are priority A for internal loading analysis in LSC CWMP Table 5-4.
- Goose Lake Washington. Priority B for internal loading analysis in CWMP Table 5-4. Water monitoring indicates watershed loads are addressed. Internal load reduction is the last step to delisting from MPCA Impaired waters list.
- Priority "A" lakes with Rush (E & W) and Goose Lakes as our preferred top three.
- Priority A Basin listed in Table 5-4, Downs Lake will be considered.
- Wallmark, Pioneer and North Goose Lakes in Chisago all priority A

See Work Plan Detail in eLINK attachments for more info.

### Budget Details

<u>Source Type</u>	<u>Source Description</u>	<u>Budgeted</u>	<u>Spent</u>	<u>Balance Remaining</u>	<u>Last Transaction Date</u>	<u>Match Fund?</u>
Current State Grant	2021 WBIF - Lower St. Croix Watershed Partners	\$16,500.00	\$16,500.00	\$0.00	07/12/2022	N
Local Fund	LSC Partners	\$0.00	\$15,852.26	(\$15,852.26)	10/10/2022	Y

## Actual Results

Actual Results -- December 31, 2021 Update:

- Description of work: The A7 subcommittee established the Internal Analysis Request for Funding and Scoring Criteria for inclusion in the Project Request Packet (see Activity 10), advertised the request for partner proposals, and reviewed and gave preliminary rankings to proposed projects. Top tier lakes for internal analyses include Forest Lake, Martin and Typo Lakes and West Rush Lake. The deadline for full proposal submittal was December 15, 2021. Funding allotments will be made in early 2022.
- Outputs achieved: Completed Internal Analysis Request for Funding and Scoring Criteria, began project proposal and ranking process.

Actual Results -- December 31, 2022 Update:

- 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.

## Activity Name: McQuade Ravine Stabilization

Activity Category: Agricultural Practices

Staff time?: No

Description: Funded out of Washington CD P19-3284 WBIF (subproject of Implementation: Rural Structural Incentive Program in original workplan) and Chisago SWCD C21-4732 WBIF (subproject of Non-Structural Ag BMP Activity in original workplan).

### Budget Details

<u>Source Type</u>	<u>Source Description</u>	<u>Budgeted</u>	<u>Spent</u>	<u>Balance Remaining</u>	<u>Last Transaction Date</u>	<u>Match Fund?</u>
Current State Grant	2021 WBIF - Lower St. Croix Watershed Partners	\$93,407.30	\$93,407.30	\$0.00	12/15/2021	N
Local Fund	McQuade Ravine Stabilization	\$0.00	\$79,877.57	(\$79,877.57)	07/21/2022	Y
Current State Grant	2019 - Watershed Based Funding Metro (Washington Conservatio..	\$0.00	\$1,945.39	(\$1,945.39)	09/01/2021	N

## Actual Results

Final Indicators		
<u>Indicator</u>	<u>Total Value</u>	<u>Unit</u>
Phosphorus (Est. Reduction)	251	Lbs/Yr
Sediment (Tss)	295	Tons/Yr

Activity Action Name: McQuade Ravine Stabilizatio	Activity Count: 1
Practice Type: 468 - Lined Waterway or Outlet	Size/Units: 460 - Linear Feet
TA Provider/JAA: SWCD	Lifespan: 10 Years
Practice Description:	Install Date: 10/25/2021
	Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Phosphorus (Est. Reduction)	Lbs/Yr	251	Other	St. Croix River
Sediment (Tss)	Tons/Yr	295	Other	St. Croix River

## Activity Name: Non-Structural Ag/Urban Implementation

**Activity Category:** Non-Structural Management Practices **Staff time?:** No

**Description:** Ag Lead Agency: Chisago SWCD, Craig Mell

Urban Lead Agency: CMSCWD, Mike Isensee

Urban/Ag Co-lead Agency: Chisago SWCD, Craig Mell (subcontracts with local partners for specific projects)

Priority areas:

- Ag:

o Tier 1: Rock Lake, Rock Creek, Sunrise River, St. Croix River tribs with direct discharge.

o Tier 2: lakes that drain to St. Croix tribs.

Rush and Goose Lakes in Chisago County

Forest and Comfort Lakes in CLFLWD (drain to Sunrise River)

• Urban:

o Rush Creek (Rush City)

o Goose Creek (Harris)

o Sunrise River (North Branch, Stacy, Wyoming)

o St. Croix River (Taylors Falls, Marine on the St. Croix, Stillwater, and MSCWMO cities).

• See Detail Work Plan Text for more info on priority areas.

CWMP Reference: Pages 61 and 65

Activity Description: Provide cost-share/incentives for implementing non-structural agricultural best management practices (e.g., soil health BMPs, reduced tillage, cover crops, nutrient management planning, forage/biomass plantings). Provide cost-share/incentives for implementing non-structural urban best management practices (e.g., enhanced street sweeping). BWSR accepted standards will be followed for all practices implemented. Projects to be chosen through targeting and prioritization process described in Section VII.B and Appendix C of CWMP. Specific enhanced street sweeping targeting analyses will be performed for priority areas.

The target phosphorus load reduction for this Activity is 400 lb/yr. The estimated number of agricultural land converted is 1,300 acres. The estimated number of enhanced street sweeping curb miles is 1,000.

Subcommittee will establish cost-share/incentive rates and policies which will entail:

1. Draft proposed non-structural land management policy
2. Send to BWSR for review.
- 3-4. LSC partner boards approve

See Work Plan Detail in eLINK attachments for more information.

## Budget Details

<u>Source Type</u>	<u>Source Description</u>	<u>Budgeted</u>	<u>Spent</u>	<u>Balance Remaining</u>	<u>Last Transaction Date</u>	<u>Match Fund?</u>
Current State Grant	2021 WBIF - Lower St. Croix Watershed Partners	\$100,000.00	\$97,540.00	\$2,460.00	01/09/2024	N
<b>Actual Results</b>						
Actual Results -- December 31, 2021 Update:						
<ul style="list-style-type: none"> <li>• Description of work: The A2/4/5 subcommittee focused on working with the A8 subcommittee to establish protocols for enhanced street sweeping studies (a highly cost-effective non-structural urban BMP). See Activity 8. Once protocols are complete, partners will complete enhanced street sweeping studies for priority communities. Only communities with enhanced street sweeping studies in alignment with protocols will be eligible for street sweeping incentive payments through this grant activity.</li> <li>• Outputs achieved: Protocols to be completed in early 2022.</li> <li>• Outcomes achieved: No projects implemented yet.</li> </ul>						
Actual Results -- December 31, 2022 Update:						
<ul style="list-style-type: none"> <li>• 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.</li> <li>o Pine County: Stevens Cover Crop</li> <li>o Chisago County: Cramaur Cover Crop and May Cover Crop</li> <li>o Washington County: Keene, G. Swanson, and T. Swanson cover crops</li> <li>o Isanti County: Three landowners interested in cover crops for 2023, but none spent in 2022.</li> <li>o Anoka County: No funds encumbered. May not be able to spend funds. May transfer funds to other partners (within Activity 4) if needed.</li> <li>• 2022 Outputs Achieved: Non-structural BMP policy completed and approved in 2022. Installed 335.7 acres of non-structural ag BMPs.</li> <li>• 2022 Outcomes Achieved: <ul style="list-style-type: none"> <li>o 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)</li> <li>o Reduced TSS by 631.8 tons/yr (Regionally Significant Lakes: 130 tons/yr TSS; Regionally Significant Rivers and Streams: 631.8 tons/yr)</li> <li>o Reduced erosion by 865.1 tons/yr (Regionally Significant Lakes: 166.7 tons/yr; Regionally Significant Rivers and Streams: 865.1 tons/yr)</li> </ul> </li> </ul>						
Q2 2023: 3 new contracts for conservation tillage (Radke, S. Herman, T. Herman) totaling 1,000 acres through WCD. One strip tillage contract (Mays) for 300 acres through Chisago SWCD						
Q3 2023: Isanti SWCD conservation planning and implementation of multispecies cover crop; 340 cover crops installed on 53 acres, will install annually for 3 years, these acres will follow the landowners small grain fields.						

Final Indicators		
<u>Indicator</u>	<u>Total Value</u>	<u>Unit</u>
Sediment (Tss)	9.52	Tons/Yr
Soil (Est. Savings)	9.6	Tons/Yr
Phosphorus (Est. Reduction)	1354.02	Lbs/Yr

Activity Action Name: Cramaur Cover Crop	Activity Count: 2
Practice Type: 340 - Cover Crop	Size/Units:
TA Provider/JAA: SWCD	Lifespan: 1 Year
Practice Description: Annual payments, and the cover crops will be installed on different fields in different years (rotation)	Install Date: 10/27/2022
guidance: <a href="https://bwsr.state.mn.us/node/9821">https://bwsr.state.mn.us/node/9821</a>	
	Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Phosphorus (Est. Reduction)	Lbs/Yr	11.8	Other	Rush Creek
Soil (Est. Savings)	Tons/Yr	9.6	Bwsr Calc (Sheet And Rill)	Rush Creek
Sediment (Tss)	Tons/Yr	8.16	Bwsr Calc (Sheet And Rill)	Rush Creek

Activity Action Name: John Stevens Cover Crop	Activity Count: 1
Practice Type: 340 - Cover Crop	Size/Units: 55.6 - Acres
TA Provider/JAA: SWCD	Lifespan: 1 Year
Practice Description:	Install Date:
	Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Phosphorus (Est. Reduction)	Lbs/Yr	36.5	Other	Rock Lake

Activity Action Name: May Cover Crop	Activity Count: 1
Practice Type: 340 - Cover Crop	Size/Units: 40.9 - Acres
TA Provider/JAA: Other	Lifespan: 1 Year
Practice Description:	Install Date: 11/09/2022
	Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Sediment (Tss)	Tons/Yr	1.36	Bwsr Calc (Sheet And Rill)	Rush Creek
Phosphorus (Est. Reduction)	Lbs/Yr	1.59	Other	Rush Creek

Activity Action Name: G. Swanson Cover Crop	Activity Count: 1
Practice Type: 340 - Cover Crop	Size/Units: 66.7 - Acres
TA Provider/JAA: SWCD	Lifespan: 1 Year
Practice Description:	Install Date: 10/28/2022
	Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Phosphorus (Est. Reduction)	Lbs/Yr	248.46	Other	Trout Brook



Activity Action Name:	T. Swanson Cover Crop	Activity Count: 1
Practice Type:	340 - Cover Crop	Size/Units: 66.7 - Acres
TA Provider/JAA:	SWCD	Lifespan: 1 Year
Practice Description:		Install Date: 10/28/2022
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Phosphorus (Est. Reduction)	Lbs/Yr	243.69	Other	Trout Brook

Activity Action Name:	Keene Cover Crop	Activity Count: 2
Practice Type:	340 - Cover Crop	Size/Units: 66.7 - Acres
TA Provider/JAA:	SWCD	Lifespan: 1 Year
Practice Description:		Install Date: 11/04/2022
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Phosphorus (Est. Reduction)	Lbs/Yr	140.63	Other	Tributary to St. Croix

Activity Action Name:	Radke Conservation Tillage	Activity Count: 1
Practice Type:	345 - Residue 345 - Residue & Tillage Management (Reduced Till) Management (Reduced Till)	Size/Units: 333 - Acres
TA Provider/JAA:	SWCD	Lifespan: 1 Year
Practice Description:	Conservation tillage on 333.3 acres tributary to St. Croix River. Estimated to reduce TP by 39 lbs/year	Install Date: 06/04/2023
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Phosphorus (Est. Reduction)	Lbs/Yr	38.78	Bwsr Calc (Sheet And Rill)	St. Croix River

Activity Action Name:	S Herman Conservation Tillage	Activity Count: 1
Practice Type:	345 - Residue 345 - Residue & Tillage Management (Reduced Till) Management (Reduced Till)	Size/Units: 333 - Acres
TA Provider/JAA:	SWCD	Lifespan: 1 Year
Practice Description:	Conservation tillage on 333 acres on tributary to St. Croix River. Estimated to reduce TP by 378 lbs/year	Install Date: 06/09/2023
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Phosphorus (Est. Reduction)	Lbs/Yr	373.58	Bwsr Calc (Sheet And Rill)	St. Croix River

Activity Action Name:	May Strip Tillage	Activity Count: 1
Practice Type:	345 - Residue 345 - Residue & Tillage Management (Reduced Till) Management (Reduced Till)	Size/Units: 300 - Acres
TA Provider/JAA:	SWCD	Lifespan: 1 Year
Practice Description:	Strip tillage on 300 acres in Rush Cr watershed. Estimated to reduce TP by 31 lb/yr	Install Date: 06/01/2023
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Phosphorus (Est. Reduction)	Lbs/Yr	31.13	Rusle2 (Updated)	Rush Creek

Activity Action Name:	K. Stamm Cover Crop	Activity Count: 1
Practice Type:	340 - Cover Crop	Size/Units: 53 - Acres
TA Provider/JAA:	SWCD	Lifespan: 3 Years
Practice Description:	340 Cover crops installed on 53 acres, will install annually for 3 years, these acres will follow the landowners small grain fields	Install Date: 08/01/2023
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Phosphorus (Est. Reduction)	Lbs/Yr	22.9	Bwsr Calc (Filter Strip)	Sunrise River

Activity Action Name:	T Herman Conservation Tillage	Activity Count: 1
Practice Type:	345 - Residue 345 - Residue & Tillage Management (Reduced Till) Management (Reduced Till)	Size/Units: 333 - Acres
TA Provider/JAA:	SWCD	Lifespan: 1 Year
Practice Description:	Conservation tillage on 333 acres on tributary to St. Croix River. Estimated to reduce TP by 205 lbs/year	Install Date: 06/09/2023
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Phosphorus (Est. Reduction)	Lbs/Yr	204.96	Bwsr Calc (Sheet And Rill)	St. Croix River

<b>Activity Name: Shared Services Educator</b>	
<b>Activity Category:</b> Education/Information	<b>Staff time?:</b> Yes
<b>Description:</b> Lead Agency: Washington Conservation District, Jay Riggs	

Co-lead Agency: Chisago SWCD, Craig Mell (Subcontract with WCD to act as host entity)

Estimated billing rate; hours: \$66/hour; 1,894 hours

Priority areas: Basin-wide

CWMP Reference: Page 65

Activity Description: Facilitate shared education and outreach program across basin to provide education; engage residents, businesses, and local officials; and promote and market programs and practices. Education and outreach tasks will serve the goals outlined in the LSC CWMP and may not always pertain to the implementation items described in this WBIF grant work plan, but will always have a primary benefit to water quality in priority resources.

- 90% = develop, distribute and implement outreach programs that result in behavioral changes achieving water quality benefits;
- 10% = solicit willing landowners to install BMPs that are goals within this plan. Promoted practices will be in line with BWSR eligibility requirements and will focus on water quality.

[0.5 FTE to expand EMWREP basin wide; \$50,000/yr or \$100,000/2 yrs]. Outreach will specifically include MIDS promotion to communities. Outreach will also include preliminary work with LGUs to set shoreline "view corridors" to 25% of lot width or maximum 35' width and maximum vegetation clearing standards or adopt innovative shoreland standards to protect buffers, native ecosystems, and habitat corridors. This work will provide water quality benefits through their protection of shoreline and streambank buffers. LSC partners will ensure duties assigned to this new staff member will be in alignment with WBIF funding intent and requirements. See Attachment B Education Details & Milestones for more information.

See Work Plan Detail in eLINK attachments for more information.

#### Budget Details

<u>Source Type</u>	<u>Source Description</u>	<u>Budgeted</u>	<u>Spent</u>	<u>Balance Remaining</u>	<u>Last Transaction Date</u>	<u>Match Fund?</u>
Current State Grant	2021 WBIF - Lower St. Croix Watershed Partners	\$125,000.00	\$149,983.85	(\$24,983.85)	01/17/2024	N
Local Fund	LSC Partners	\$4,800.00	\$86,240.50	(\$81,440.50)	10/20/2023	Y

December 31, 2021:

**Actual Results:** Barbara Heitkamp as the LSC Shared Services Educator.

o Virtual tour, 10 new videos, 80+ social media posts, one cover crop flyer, three lake association events, two soil health field days, 3 visits w/landowners, 1 public officials tour, 2 presentations for lake groups, two quarterly emails for Lower St. Croix partners, one e-newsletter to lake associations, a successful nomination for AMC-BWSR Conservation Award

December 31, 2022:

• Barbara Heitkamp worked closely with Angie Hong, Jennifer Hahn, and LSC partners to provide educational services through community events, workshops, project tours, newsletters, social media, and public engagement.

o 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)

o 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).

o 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

o 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.

o 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).

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

Q1 2023: Barbara Heitkamp: 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, Lower St. Croix committee meetings

- 250 members of the public reached at Master Gardener community event

- 15 local officials educated at SMART salting workshop

Q2 2023: 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

Q3 2023 Shared Education and EMWREP programs and outcomes: 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.

## Activity Name: Structural Ag BMP Implementation

**Activity Category:** Agricultural Practices

**Staff time?:** No

**Description:** Lead Agency: Chisago SWCD, Craig Mell

Co-lead Agency: Washington Conservation District, Jay Riggs

Priority areas:

- Tier 1: Rock Lake, Rock Creek, Sunrise River, St. Croix River tributaries with direct discharge to the St. Croix River.
- Tier 2: lakes that drain to St. Croix tributaries:
  - o Rush and Goose Lakes in Chisago County
  - o Forest Lake in CLFLWD (drains to Sunrise River)
- See Detail Work Plan Text for more information on priority areas.

CWMP Reference: Page 61

Activity Description: Provide cost-share/incentives for installing or implementing structural agricultural best management practices (e.g., feedlot improvements, buffers, WASCObS, diversions, lined waterways, grade stabilization structures, vegetative swales, livestock water management, etc.). The project ranking subcommittee will check BWSR eligibility requirements and consult the BWSR Board Conservationist to ensure projects are eligible. NRCS or other BWSR accepted standards will be followed for all practices installed. For feedlot improvement projects, the subcommittee will complete the BWSR supplemental feedlot worksheet to ensure compliance with BWSR policy for using CWF funds for feedlot improvements. Projects to be chosen through targeting and prioritization process described in Section VII.B and Appendix C of the CWMP.

The target phosphorus load reduction for this Activity is 300 lb/yr. The estimated number of BMPs implemented under this activity is 20, with an average phosphorus reduction of 15 lb/yr per BMP as measured at the target waterbody.

Subcommittee will establish cost-share/incentive rates and policies which will entail:

1. Draft proposed cost-share rates and policies.
2. Send to BWSR for review.
3. Steering Committee approve rates and policies.

See Work Plan Detail in eLINK attachments for more information.

Original grant budget for A2 = \$160,000. Separated out McQuade Ravine Stabilization project - \$93,407.30

**Budget Details**

<u>Source Type</u>	<u>Source Description</u>	<u>Budgeted</u>	<u>Spent</u>	<u>Balance Remaining</u>	<u>Last Transaction Date</u>	<u>Match Fund?</u>
Local Fund	LSC Partners	\$27,500.00	\$7,134.20	\$20,365.80	09/22/2023	Y
Federal Funds	Federal Programs (NRCS)	\$27,500.00		\$27,500.00		Y
Current State Grant	2021 WBIF - Lower St. Croix Watershed Partners	\$13,766.70	\$10,175.09	\$3,591.61	09/22/2023	N

## Actual Results

Actual Results -- December 31, 2021 Update:

- Description of work: The A2/4/5 subcommittee (note that this subcommittee encompasses multiple grant activities from structural urban/ag to nonstructural urban/ag) met several times over the course of the period to review potential projects.
- Outputs achieved: The A2/4/5 subcommittee approved two projects for WBIF funding: McQuade Ravine Stabilization (South Washington Watershed District) and Hinze Cattle Exclusion (Pine SWCD).
- Outcomes achieved: Implemented two projects using WBIF funds: McQuaid Ravine Stabilization (251 lb/yr phosphorus reduction, 295 tons/yr TSS reduction to St. Croix River) and Hinze Cattle Exclusion (3.48 lb/yr phosphorus reduction, 1.89 tons/yr TSS to Rock Lake).

Actual Results -- December 31, 2022 Update:

- 2022 Description of Work: Approved projects include:
  - o McQuade Ravine Stabilization (SWWD), completed in 2021
  - o Hinze Cattle Exclusion (Pine SWCD), completed in 2021
  - o 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)

Q3 2023: Installation of three water and sediment control basins totaling 15.8 acres for Hinze (landowner) by Pine SWCD resulting in 20 lbs/year TP reduction in Rock Lake subwatershed.

## Final Indicators

<u>Indicator</u>	<u>Total Value</u>	<u>Unit</u>
Phosphorus (Est. Reduction)	23.48	Lbs/Yr
Sediment (Tss)	1.89	Tons/Yr



Activity Action Name:	Hinze Cattle Exclusion	Activity Count: 1
Practice Type:	472 - Access Control	Size/Units: 0.6 - Acres
TA Provider/JAA:	SWCD	Lifespan: 10 Years
Practice Description:		Install Date: 11/01/2021
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Sediment (Tss)	Tons/Yr	1.89	Other	Rock Lake
Phosphorus (Est. Reduction)	Lbs/Yr	3.48	Other	Rock Lake

Activity Action Name:	Hinze WASCObS	Activity Count: 3
Practice Type:	638 - Water and Sediment Control Basin	Size/Units:
TA Provider/JAA:	NRCS	Lifespan: 10 Years
Practice Description:	3 water and sediment control basins installed	Install Date: 05/23/2023
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Phosphorus (Est. Reduction)	Lbs/Yr	20	Bwsr Calc (Sheet And Rill)	Rock Lake

## Activity Name: Structural Urban BMP Implementation

**Activity Category:** Urban Stormwater Management Practices

**Staff time?:** No

**Description:** Lead Agency: CMSCWD, Mike Isensee

Co-lead Agency: Chisago SWCD, Craig Mell (subcontracts with local partners for specific projects)

Priority areas: St. Croix River direct drainage, Sunrise River watershed, Fish Lake, Big Carnelian, Big Marine, Forest Lake. Projects may also occur at other priority waters in tables 5-2 and 5-3 in the LSC CWMP.

CWMP Reference: Page 65

Activity Description: Provide cost-share/incentives for implementing structural urban best management practices (e.g., vegetated swales, pervious pavement, gully stabilization, rain gardens, and other urban practices). BWSR accepted standards will be followed for all practices installed. Projects to be chosen through targeting and prioritization process described in Section VII.B and Appendix C of the CWMP.

The target phosphorus load reduction for this Activity is 200 lb/yr. The estimated number of BMPs implemented under this activity is 20, with an average phosphorus reduction of 10 lb/yr per BMP as measured at the target waterbody.

Subcommittee will establish cost-share/incentive rates and policies which will entail:

1. Draft proposed cost-share rates and policies.
2. Send to BWSR for review.
3. Steering Committee approve rates and policies.

See Work Plan Detail in eLINK attachments for more information.

### Budget Details

<u>Source Type</u>	<u>Source Description</u>	<u>Budgeted</u>	<u>Spent</u>	<u>Balance Remaining</u>	<u>Last Transaction Date</u>	<u>Match Fund?</u>
Current State Grant	2021 WBIF - Lower St. Croix Watershed Partners	\$360,000.00	\$360,000.00	\$0.00	09/17/2024	N
Local Fund	LSC Partners	\$70,000.00	\$232,763.50	(\$162,763.50)	09/17/2024	Y

### Actual Results

Actual Results -- December 31, 2021 Update:

- Description of work: The A2/4/5 subcommittee did not have any structural urban BMPs proposed by partners during this period. Outcomes of the A8 subcommittee's work on Subcatchment Prioritization will bring the LSC Partnership closer to targeting cost-effective urban practices to work toward achieving goals set forth in the CWMP.
- Outputs achieved: See Activity 8.
- Outcomes achieved: No projects implemented yet.

Actual Results -- December 31, 2022 Update:

- 2022 Description of Work: Two projects approved for funding:
  - o Big Marine Boat Launch Stormwater Retrofit (CMSCWD), going out to bid in 2023
  - o 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

Q3 2023: SWWD removed existing perched culverts on Trout Brook at Afton Alps and replaced them with a new 16x7 box culvert. The new culvert is sized to maintain stream connectivity and convey all ranges of flow without causing downstream erosion. Additionally, the culvert is partially backfilled with rocky substrate and boulders to maintain fish passage during all flow conditions. Rock riffles, root wads, and bank stabilization were completed upstream and downstream of the new culvert. A new remeandered channel was constructed within Afton State Park, but flow has not yet been transferred to the new channel. Project will be completed in 2024.

Completed Big Marine East Boat Launch Water Quality Project. This project diverted drainage from the township road to divert drainage into a vegetated swale and a bioretention basin resulting in 1.1 lbs TP reduction for Big Marine Lake.

Q3 2024: September 2023 - September 2024 South Washington WD completed all remaining work on the Trout Brook Phase III Restoration Project. The project included culvert replacements, in stream rock riffles, root wads, bank stabilization, native seeding. The new remeandered channel was connected to the stream and the old straightened channel was backfilled. All disturbed areas have been stabilized and planted with native seed mixes and tree and shrub plantings are complete.

**Final Indicators**

<u>Indicator</u>	<u>Total Value</u>	<u>Unit</u>
Sediment (Tss)	154	Tons/Yr
Phosphorus (Est. Reduction)	178.1	Lbs/Yr

Activity Action Name:	Trout Brook Phase III Restoration Project	Activity Count: 1
Practice Type:	468 - Lined Waterway or Outlet	Size/Units: 3780 - Linear Feet
TA Provider/JAA:	Private Consultant	Lifespan: 25 Years
Practice Description:	Large stream restoration project including culvert replacements, channel re-meandering, in-stream habitat, bank stabilization, native vegetation establishment	Install Date: 09/12/2024
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Phosphorus (Est. Reduction)	Lbs/Yr	177	Literature Value	St. Croix River
Sediment (Tss)	Tons/Yr	154	Literature Value	St. Croix River

Activity Action Name:	Big Marine Lk Boat Launch Bioretention	Activity Count: 1
Practice Type:	712M - Bioretention Basin	Size/Units: 2000 - Square Feet
TA Provider/JAA:	Private Consultant	Lifespan: 20 Years
Practice Description:	This project tipped the township road to the North to divert drainage into a vegetated swale and a bioretention basin. Overflow from the bioretention basin.	Install Date: 12/29/2023
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Phosphorus (Est. Reduction)	Lbs/Yr	1.1	Simple Method (MPCA)	Big Marine Lake

## Activity Name: Sunrise Wetland Construction

**Activity Category:** Wetland Restoration/Creation

**Staff time?:** No

**Description:** The proposed project will modify an existing ditched wetland to increase water quality treatment potential and storage capacity of the wetland. Construction costs for soil grading, berm enhancements, inlet and outlet control structures, and revegetation.

This activity will be carried out by a contractor selected through a public bidding process. EOR and CLFLWD staff will oversee the bidding and construction process.

This activity is not new to the 2021 and 2023 WBIF workplan but a sub-activity that was split out for the purposes of being able to link among other grants.

Accounting for downstream treatment (43%) through the Shallow Pond wetland complex, the total load reduction to Comfort Lake is expected to be approximately 80 lb/yr, or 63% of the total reductions needed to meet the State water quality standard for growing season average phosphorus concentration of 40 g/L, and 26% of the watershed runoff reductions needed for Comfort Lake to achieve the District long-term goal for growing season average phosphorus concentration of 30 g/L.

See detail work plan text in eLINK attachments for further description.

### Budget Details

<u>Source Type</u>	<u>Source Description</u>	<u>Budgeted</u>	<u>Spent</u>	<u>Balance Remaining</u>	<u>Last Transaction Date</u>	<u>Match Fund?</u>
Current State Grant	2023 WBIF - Lower St. Croix Watershed Partners	\$220,000.00	\$220,000.00	\$0.00	03/28/2023	N
Local Fund	CLFLWD Local Levy	\$50,000.00	\$50,000.00	\$0.00	03/28/2023	Y
Current State Grant	2021 WBIF - Lower St. Croix Watershed Partners	\$80,449.00	\$80,449.00	\$0.00	03/28/2023	N
Current State Grant	Sunrise River Drained Wetland Restoration	\$412,000.00	\$412,000.00	\$0.00	06/13/2023	N
Local Fund	CLFLWD	\$60,000.00	\$243,361.08	(\$183,361.08)	09/18/2023	Y

## Actual Results

12/31/21 Update: Construction slated for winter 2022/2023. Since conditions will likely not be frozen enough for construction until January/February, CLFLWD will be requesting a grant extension for this project.

12/31/22 Update: Began site prep in December, with main bulk of construction (excavation/earthwork) to occur in February once conditions are cold/frozen enough. No pay applications received from contractor as of yet, but are expected in the coming few weeks/months.

2/10/23 Update: Construction is underway now that soil is frozen enough. NTP #2 has been issued - all work under NTP #2 occurs after both state grants have been executed (CWF and WBIF). The reported expenditures toward the CWF grant and match have been thoroughly reviewed to ensure eligibility; reported expenditures do not include work that occurred under NTP #1, and do not include utilities work. The District executed a change order with the contractor to address unexpected utilities issues on the construction site. Utility companies failed to map utility lines, resulting in the need to move them as part of project construction. This work is separated out from the grant expenditures.

Contractor has substantially completed the majority of construction tasks including excavation and weir installation. Site restoration and revegetation will occur in the spring/summer months of 2023, and we expect to close out the project before end of 2023. Project outcomes include: 89 lb/yr phosphorus removal at edge-of-project/Sunrise River, 65 lb/yr phosphorus removal at Comfort Lake. The latest phosphorus removals are based on the final project design. Additional project benefits include: total suspended solids reductions (51,740 lb/yr at Sunrise River, 18,630 lb/yr at Comfort Lake), 22 acres of wetland restored within the LSC wetland restoration priority area, creation of 18 ac-ft of floodplain storage, reductions in nitrogen/heavy metals/pathogens, and wildlife habitat improvements.

Final update: Project was completed by fall 2023, and it was officially closed out by the CLFLWD Board of Managers on October 26, 2023.

## Final Indicators

<u>Indicator</u>	<u>Total Value</u>	<u>Unit</u>
Phosphorus (Est. Reduction)	89	Lbs/Yr
Sediment (Tss)	26	Tons/Yr

Activity Action Name:	Wetland Restoration	Activity Count: 1
Practice Type:	657 - Wetland Restoration	Size/Units: 22 - Acres
TA Provider/JAA:	Private Consultant	Lifespan: 25 Years
Practice Description:	The proposed project will modify an existing ditched wetland to increase water quality treatment potential and storage capacity of the wetland.  (Wanted to use Practice #638 - "Water and Sediment Control Basin" similar to FY14 Bixby Park CWF Project, but was not available in the drop down menu.)	Install Date: 03/13/2023
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Sediment (Tss)	Tons/Yr	26	Other	Sunrise River
Phosphorus (Est. Reduction)	Lbs/Yr	89	Other	Sunrise River

## Activity Name: Targeting Analyses

**Activity Category:** Planning and Assessment

**Staff time?:** Yes

**Description:** Lead Agency: Washington Conservation District, Jay Riggs

Co-lead Agency: Chisago SWCD, Craig Mell (subcontracts with local partners for each subwatershed project)

Estimated billing rate; hours: \$65/hour; 2,308 hours

Staff Qualifications: This task will be completed by existing qualified staff members of LSC Partner organizations.

Activity Description: This Activity includes two general types of analyses: 1) Subwatershed Assessment (or similar analysis, not necessarily SWA protocols) and 2) Targeted

### Street Sweeping Analysis.

All requested waterbodies are listed in tables 5.2 and 5.3 Regionally Significant Lakes, Rivers and Streams for Pollutant Reductions (ballpark cost estimate)

- Linwood Lake Anoka County (\$10,000) (priority waterbody: Linwood Lake)
- St. Croix Direct Washington County (\$15,000) (priority waterbody: St. Croix River)
- Desktop Analysis and Prioritized Catchments of the Sunrise River Watershed Chisago (\$10,000) (priority waterbody: Sunrise River)
- Rock Lake Pine and St. Croix Direct Pine County (\$20,000) (priority waterbodies: Rock Lake and St. Croix River)
- Targeting analysis protocol refinements (\$5,000) (applies to all of the waterbodies listed above)

Targeted Street Sweeping Analysis for the following cities with direct discharge to priority waterbodies listed in Table 5-2 and Table 5-3 of the LSC CWMP. Benefitted waterbodies are listed in parentheses. The initial estimate is this task will require approximately \$40,000 for the following communities:

- Rush City (Rush Creek)
- Harris (Goose Creek)
- North Branch (Sunrise River)
- Stacy (Sunrise River)
- Wyoming (Sunrise River)
- Stillwater (St. Croix River, Brown's Creek, Lake McKusick)
- Taylors Falls (St. Croix River)
- Marine on St. Croix (St. Croix River)
- Lakeland (St. Croix River)
- Lake St. Croix Beach (St. Croix River)
- Afton (St. Croix River)
- Bayport (Perro Creek)

See Work Plan Detail in eLINK attachments for more info.

### Budget Details

<u>Source Type</u>	<u>Source Description</u>	<u>Budgeted</u>	<u>Spent</u>	<u>Balance Remaining</u>	<u>Last Transaction Date</u>	<u>Match Fund?</u>
Current State Grant	2021 WBIF - Lower St. Croix Watershed Partners	\$150,000.00	\$136,231.03	\$13,768.97	01/17/2024	N
Local Fund		\$0.00	\$26,549.19	(\$26,549.19)	01/17/2024	Y



**Actual Results** 2021 Update:

- A8 subcommittee established the Targeting Analysis Eligibility Form for inclusion in the Project Request Packet (see Activity 10). It also began work on three initiatives under the Activity 8 category:
  - o Enhanced Street Sweeping Study Protocols: establish criteria for partners to perform studies.
  - o Prioritization and Targeting Protocols: establish criteria for partners to perform prioritization/targeting studies for project identification.
  - o Subcatchment Prioritization: perform a desktop analysis to fill data gaps in the LSC basin. This initiative entails conducting GIS evaluations of the Lower St. Croix Watershed to delineate and prioritize contributing subcatchments, and to identify pollutant hot spots.
- Outputs achieved: Completed Targeting Analysis Eligibility Form, began work on several targeting initiatives.

December 31, 2022 Update:

- Funding approved for the following initiatives:
  - o Tree Canopy Assessment Protocols for Enhanced Street Sweeping, completed in 2022
  - o Prioritization and Targeting Protocols, to be completed in early 2023
  - o Rock Lake SWA (Pine County): Pine Co work is done, and Pine SWCD work is in progress (expected to be completed by spring 2023).
  - o Sunrise River Priority Drainage Areas (PDA): current status: 75-80% complete; goal to be done by end of February 2023
  - o Northeastern Washington County St. Croix and Spring Streams SWA (CMSCWD): started in the fall. On track to be done by mid-summer 2023.
  - o Tree Canopy Assessments and Enhanced Street Sweeping Studies in progress

Multiple street sweeping studies underway or completed; Street sweeping plans are in progress for Marine, Scandia, Lake Elmo, Afton and MSCWMO; CLFLWD Completed Wyoming Tree Canopy Assessment and Enhanced Street Sweeping Plan; EOR completed catchment prioritization work and conversion of deliverables to ArcGIS format; CSWCD completed enhanced street sweeping analyses for City of Rush City and City of North Branch

Q2 2023: Pine Co/Pine SWCD completed the Rock Lake Subwatershed Analysis (SWA) along with final report. SWA generated detailed information about targeted locations, suggested BMPS, and pollution reduction to contribute Rock Lake SWA. WCD and Chisago SWCD worked on street sweeping analyses. EOR was contracted to perform work for the Catchment Prioritization Phase 2 Project.

Q3 2023: GIS assistance by WCD for street sweeping studies.

Q4 2023 The CMSCWD completed a subwatershed analysis of contributing (not landlocked) catchments flowing to 21 spring streams and the St. Croix River. This evaluation includes prioritization of potential legacy loading wetlands for future monitoring and the feasibility, cost, and pollutant reductions for nonstructural and structural best management practices. The area of evaluation encompasses 29.9 square miles (19,107 acres) of urban, rural, and agricultural land uses from the northern board of Washington County to the Northern board of Stillwater.

## Activity Name: Technical/Engineering

Activity Category: Technical/Engineering Assistance

Staff time?: Yes

Description: Lead Agencies:

- Chisago SWCD, Craig Mell (lead agency for Activity 2 Structural Ag BMP Implementation and non-structural ag implementation under Activity 4; subcontracts with local partners for specific projects)
- CMSCWD, Mike Isensee (lead agency for Activity 5 Structural Urban BMP Implementation and non-structural urban implementation under Activity 4)

Estimated billing rate; hours:

- Professional Engineer: \$76/hour; 132 hours
- Technical Assistant: \$65/hour; 462 hours

Staff Qualifications: This task will be completed by existing qualified staff members of LSC Partner organizations.

Activity Description: This Activity will include technical site assessment, surveys, preliminary analysis and design, final design, construction supervision, installation, inspection, and completion of projects. Funds may be used to contract with a third-party consultant for technical/engineering assistance. Funding allocation will be prioritized in areas where there are not local funds to support design work.

See Work Plan Detail in eLINK attachments for more info.

### Budget Details

<u>Source Type</u>	<u>Source Description</u>	<u>Budgeted</u>	<u>Spent</u>	<u>Balance Remaining</u>	<u>Last Transaction Date</u>	<u>Match Fund?</u>
Current State Grant	2021 WBIF - Lower St. Croix Watershed Partners	\$0.00		\$0.00		N
Local Fund	LSC Partners	\$0.00	\$189.77	(\$189.77)	09/22/2023	Y

## Actual Results

Actual Results -- December 31, 2021 Update:

- Description of work: None to date.
- Outputs achieved: None to date.

Actual Results -- December 31, 2022 Update:

- 2022 Description of Work: 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.

## Activity Name: Wetland Restoration Implementation

**Activity Category:** Wetland Restoration/Creation

**Staff time?:** No

**Description:** Lead Agency: Anoka SWCD, Becky Wozney (Wetland Specialist)

Co-lead Agency: Chisago SWCD, Craig Mell (subcontracts with local partners for specific projects)

Priority areas: Priority wetland restorations will result in measurable improvements to rivers/streams in Table 5-2 and/or lakes in Table 5-3 of the LSC CWMP. Areas of particular concern include the St. Croix River direct drainage area, Sunrise River corridor, Rock Creek corridor and subwatersheds identified in Figure 5-5 of the LSC CWMP.

CWMP Reference: Page 70

Activity Description: This Activity will involve implementation of wetland restoration project(s) as needed to achieve a phosphorus reduction of at least 15 pounds per year for target waterbodies. The primary purpose of the wetland restoration project(s) will be for the improvement of water quality in receiving lakes/streams. Secondary benefits of wetland restoration projects will be considered as well, such as floodplain storage and habitat creation/enhancement.

Wetland restorations will not be used to mitigate wetland impacts. Grant funds will not be used for fee title land acquisition (but may be used as match in accordance with WBIF Policy). LSC Partners will ensure proposed wetland restorations are consistent with WBIF eligibility requirements. LSC Partners will target specific restorations through utilization of existing studies and targeting analyses (e.g., drained wetland inventories, diagnostic studies, subwatershed assessments), performance of additional modeling analyses using existing data from said studies, and completion of additional targeting analyses as necessary to fill data gaps. Work pertaining to targeting strategies is included as part of other grant Activities.

The target phosphorus load reduction for this Activity is 15 lb/yr. This work plan proposes to implement at least one wetland restoration to achieve the 15 lb/yr phosphorus reduction goal.

See Work Plan Detail in eLINK attachments for more info.

### Budget Details

<u>Source Type</u>	<u>Source Description</u>	<u>Budgeted</u>	<u>Spent</u>	<u>Balance Remaining</u>	<u>Last Transaction Date</u>	<u>Match Fund?</u>
Current State Grant	2021 WBIF - Lower St. Croix Watershed Partners	\$25,408.00	\$25,394.07	\$13.93	01/11/2023	N
Local Fund		\$0.00	\$53,315.36	(\$53,315.36)	12/31/2022	Y

### Actual Results

Actual Results -- December 31, 2021 Update:

- Description of work: The A6 subcommittee established the Wetland Restoration Scoring Matrix for inclusion in the Project Request Packet (see Activity 10). The subcommittee did not receive any applications for projects in 2021.
- Outputs achieved: Completed Wetland Restoration Scoring Matrix.
- Outcomes achieved: No projects implemented yet.

Actual Results -- December 31, 2022 Update:

- 2022 Description of Work: Projects approved for funding:
  - o Jones Wetland Restoration (Pine SWCD), completed in 2022
  - o Jahnz Wetland Restoration (Pine SWCD), completed in 2022
  - o 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

### Final Indicators

<u>Indicator</u>	<u>Total Value</u>	<u>Unit</u>
Phosphorus (Est. Reduction)	26.84	Lbs/Yr

Activity Action Name:	Goose Lake Wetland Restoration	Activity Count: 1
Practice Type:	657 - Wetland Restoration	Size/Units: 0.5 - Acres
TA Provider/JAA:	SWCD	Lifespan: 25 Years
Practice Description:		Install Date: 12/01/2022
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Phosphorus (Est. Reduction)	Lbs/Yr	15	Literature Value	Goose Lake

Activity Action Name:	Jahnz Wetland Restoration	Activity Count: 1
Practice Type:	657 - Wetland Restoration	Size/Units: 2.6 - Acres
TA Provider/JAA:	SWCD	Lifespan: 15 Years
Practice Description:		Install Date: 11/10/2022
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Phosphorus (Est. Reduction)	Lbs/Yr	5.46	Other	Rock Lake

Activity Action Name:	Jones Wetland Restoration	Activity Count: 1
Practice Type:	657 - Wetland Restoration	Size/Units: 9.8 - Acres
TA Provider/JAA:	SWCD	Lifespan: 30 Years
Practice Description:	Lifespan is 50 years, per USFWS standards	Install Date: 11/10/2022
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Phosphorus (Est. Reduction)	Lbs/Yr	6.38	Other	Rock Creek/Lake