

Lower St. Croix Partnership Annual Plan of Work (based on LSC CWMP Table 5-1)

Projects highlighted in green are funded by Watershed Based Implementation Fund grant. Projects in white are funded by other sources.

#	Activity	Priority Location	Measurable Output	Implementation Actions	From CWMP		2-year outputs and costs divided by 2				Fiscal Agent/ Responsible Party	Funding Sources	WD, WMO, SWCD, County, LID, or Multiple	2021 Yearend Progress Reporting			
					Years 1-2 Outputs	Years 1-2 Estimated Cost	Fiscal Year 1 (Jul '21-Jun '22) Outputs	Fiscal Year 1 (Jul '21-Jun '22) Estimated Cost	Fiscal Year 2 (Jul '22-Jun '23) Outputs	Fiscal Year 2 (Jul '22-Jun '23) Estimated Cost				Year 1 (2021) Description of Outputs Accomplished	Year 1 (2021) Dollars Spent	Year 1 (2021) Phosphorus Removal	
Part A. Implementation Actions for Agricultural Lands																	
1	*GW Quality (Table 3-1 GW1A, 2B)	Basin Wide Priority - Agricultural lands where: 1) DWSMA vulnerability is moderate, high, or very high; or 2) Pollution sensitivity to wells is high or very high; or 3) Pollution sensitivity to near surface materials is karst or high; or 4) Well testing show ≥ 5 mg/L nitrate See Figure 5-1	Install BMPs on 2,200 acres that improve soil health and/or reduce nitrogen and pesticide pollution to groundwater		300 ac	[see Table 5-1 Impl. Actions]	150 ac		150 ac		Chisago SWCD	FY21 WBIF (Activity 4), other Partner local funds, state/federal grants	WD	CLFLWD: 30 acres of cropland conversion to perennial (34 lb/yr P reduction to Bone Lake)	\$59,000	\$5,000	34 lb/yr phosphorus
												Multiple	CMSCWD/WCD/Land Trust 14.0 acres cropland to prairie and savannah 19.4 lb/y P reduction to Silver Creek.	\$54,000		19.4 lb/yr phosphorus	
												County	Washington County: 18 acres cropland to prairie at St. Croix Bluffs Regional Park				
2	*Rivers & Streams + St. Croix River WQ (Table 3-1 R&S 1A; STC 1B, C)	Regionally Significant Rivers and Streams: - All streams and tributaries in Sunrise River Watershed (whole watershed regardless of direct drainage) - Direct drainage areas to St. Croix River through Rock, Rush, Goose, Lawrence, and Browns Creeks and Trout Brook and other small streams shown in Figure 5-2 See Table 5-2 for streams and total phosphorus reduction goals; see Figure 5-2	Reduce total phosphorus by 3,300 lbs/year (install approximately 220 BMPs @ estimated 15 lbs/BMP) and reduce TSS, bacteria, and nitrogen as secondary benefit		450 lbs TP (approx. 30 BMPs)	[see Table 5-1 Impl. Actions]	225 lbs TP (approx 15 BMPs)		225 lbs TP (approx 15 BMPs)		Chisago SWCD for WBIF projects, see specific entity for non-WBIF projects	FY21 WBIF (Activity 2, 4), Partner local funds, state/federal grants	SWCD	ISWCD: Cover Crops (N. Branch Sunrise River (140 acres)= 6.6 lbs/yr.	\$897,712		6.6 lb/yr phosphorus
												SWCD	CSWCD: Direct Drainage 12 structural BMPs = 836 lbs/yr. Cover Crops (Sunrise River and Direct Drainage) 157 acres, 7.5 lbs/yr.,			7.5 lb/yr phosphorus	
												SWCD	WCD: buffer restoration (St. Croix direct drainage, Marine); St. Croix River shoreline stabilization = 37.4lb/yr P + 88,000 lb TSS			37.4 lb/yr phosphorus	
												Multiple	ACD & SRWMO: Martin Lake Shores Stormwater Pond Enhancement Project 1.09lb/yr P + 436lb/yr TSS.			1.09 lb/yr phosphorus	
												Multiple	ACD & SRWMO: Arvold Martin Lakeshore stabilization 2.8lb/yr TP + 5,625lb/yr TSS;			2.8 lb/yr phosphorus	
												Multiple	ACD & SRWMO: Ferden Martin Lakeshore stabilization 0.48lb/yr TP + 600lb/yr TSS.			0.48 lb/yr phosphorus	
												WD	CLFLWD: Bone Lake Southeast/Meadowbrook Wetland Restoration (Sunrise River watershed) = 35 lb/yr P.			35 lb/yr phosphorus	
												County	Washington County: 18 acres cropland to prairie at St. Croix Bluffs Regional Park = 21lb/yr TP to St. Croix River			21 lb/yr phosphorus	
												WD	CMSCWD: Marine on St. Croix Town Center Stormwater Retrofits. St. Croix River 16.7 lbs./yr TP and 15,010 lbs/yr TSS			16.7 lb/yr phosphorus	
												LID	CLLID: The CLLID provides match funds to encourage environmentally sound land use practices for urban and agricultural areas to protect water quality within the Chisago Lakes Chain of Lakes Watershed				
												WD	BCWD: Brown's Creek Diversion Tributary restoration benefits Brown's Creek, McKusick Lake, and the St. Croix. Installed 22 rock vanes along 5200 linear feet of stream. Reduced TP 52 lbs/year, TSS 48 tons/year. All funding from BCWD local levy. \$87,600		52 lb/yr phosphorus		
												SWCD	PSWCD: Partnership effort with NRCS to install WASCBs and a grassed waterway on two separate properties. EQUIP paid for a portion of the installation. Pine SWCD secured funding through Wild Rivers Conservancy to cover the rest. 222.48lbs/yr P, 184lbs/yr TSS		48 lb/yr phosphorus		
3	*Lake WQ from ag (Table 3-1 LK1A, 2A)	Regionally Significant Lakes for Agricultural BMPs See Table 5-3 for lakes and total phosphorus reduction goals; see Figure 5-3 for map	Install conservation BMPs, near sensitive lakes or in direct lake catchments to reduce TP by 1,275 lbs (estimated 15 lbs/BMP) and reduce TSS, bacteria, N as secondary benefit		150 lbs TP (approx. 300 ac and/or 10 BMPs)	[see Table 5-1 Impl. Actions]	75 lbs TP (approx 150 ac and/or 5 BMPs)		75 lbs TP (approx 150 ac and/or 5 BMPs)		Chisago SWCD for WBIF projects, see specific entity for non-WBIF projects	FY21 WBIF (Activity 2, 4), Partner local funds, state/federal grants	SWCD	CSWCD: Rush Lake: 1 structural BMP: 2.6 lbs/yr	\$142,599		2.6 lb/yr phosphorus
												WD	SWWD: McQuade Ravine Stabilization. 295 tons/yr TSS, 251 lbs/yr phosphorus. \$93,407 in LSC WBIFs, \$43,807 match provided. Reduce loading to St. Croix River and Lake St. Croix	\$137,214		251 lb/yr phosphorus	
												SWCD	Pine SWCD: Rock Lake: Cattle exclusion and buffer strip 3.5 lbs/yr. \$4,578 in LSC WBIFs, \$807 match provided	\$5,385		3.5 lb/yr phosphorus	
4	GW Quantity (Table 3-1 GW2A)	All agricultural irrigators; highest priority given to highest consumers [For context : Active water use permits from MPARS database 2018: 100 agricultural irrigators; 157 Water Supply Wells; 37 Non-crop irrigators. Total = 294. 100 of those used >1MG in 2018.]	Install or retrofit smart technology on 40 irrigation systems [For context: Active water use permits from MPARS database 2018: 100 agricultural irrigators; 157 Water Supply Wells; 37 Non-crop irrigators. Total = 294. 100 of those used >1MG in 2018.]			[see Table 5-1 Impl. Actions]					SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants					
5	River & Stream Flows (Table 3-1 R&S 3A)	Basin wide	Identify and map 100% of private ditches as part of developing Conservation Plans		Maps created during all applicable landowner interactions	[see Table 5-1 Impl. Actions]	Maps created during all applicable landowner interactions		Maps created during all applicable landowner interactions		SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants					
6	Drainage impacts on wetlands (Table 3-1 WTL 1B)	All public and private ditches	Review 100% of drainage projects for possible impacts to wetland quality		All active and proposed projects reviewed	[see Table 5-1 Impl. Actions]	All active and proposed projects reviewed		All active and proposed projects reviewed		SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants	County	Chisago County: As a result of the new buffer requirements, 2021 also saw a busy ditch inspection year. The Wetland Specialist continues to oversee the maintenance of County public and private ditch and drainage system for functionality and adherence to the drainage code and the WCA drainage standards. Chisago County: 2021 saw a further increase to Wetland Conservation Act (WCA) applications, particularly in the arena of wetland delineation reviews. The Wetland Specialist saw to 12 alleged wetland violations, five actual violations and resolved one restoration orders in 2021. The wetland specialist evaluated several pond applications which all required site visits and subsequent wetland permits. The wetland specialist issues and monitors the shoreland grade and fill permits, in 2020 there were 11 applications of which three were denied. The position is also responsible for commenting on the DNR public water permits if necessary, of which there were several related grade and fill permits.	\$27,700	\$27,700	

Projects highlighted in green are funded by Watershed Based Implementation Fund grant. Projects in white are funded by other sources.

#	Activity	Priority Location	Measurable Output	Implementation Actions	From CWMP		2-year outputs and costs divided by 2				Fiscal Agent/ Responsible Party	Funding Sources	WD, WMO, SWCD, County, LID, or Multiple	2021 Yearend Progress Reporting			
					Years 1-2 Outputs	Years 1-2 Estimated Cost	Fiscal Year 1 (Jul '21-Jun '22) Outputs	Fiscal Year 1 (Jul '21-Jun '22) Estimated Cost	Fiscal Year 2 (Jul '22-Jun '23) Outputs	Fiscal Year 2 (Jul '22-Jun '23) Estimated Cost				Year 1 (2021) Description of Outputs Accomplished	Year 1 (2021) Dollars Spent	Year 1 (2021) Phosphorus Removal	
7	Drainage impact on rivers & streams (Table 3-1 R&S 1C)	Judicial and public ditches	Maintain or improve downstream water quality following ditch maintenance		No negative change in downstream water quality	[see Table 5-1 Impl. Actions]	No negative change in downstream water quality		No negative change in downstream water quality		SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants					
8	GW quality from contaminants (Table 3-1 GW1B)	Priority areas: Where pollution sensitivity to near surface materials is high, or in karst areas, or where bedrock is at or near the surface; see Figure 1-3 for map Secondary priority: Basin wide	Upgrade 100 non-conforming or non-compliant SSTS to properly functioning, compliant systems. [For context: Estimated 4,202 SSTS basin wide failing to protect GW. Source: SSTS Annual Report 2018 (MPCA, Aug 2019) Number of SSTS per county * % of county in LSC * estimated 15% of SSTS failing to protect groundwater statewide]								SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants	SWCD	ACD: 1 SSTS replaced. 7lbs/yr TP, 20lb/yr N	\$10,724	7 lb/yr phosphorus	
													County	Chisago County: Completed 268 compliance inspections, of which 232 were compliant and 36 were noncompliant. 67 new septic and 78 replacements were installed.	\$18,600		
													County	Washington County: Completed 509 compliance inspections, of which 338 were compliant, and 171 were noncompliant. 106 new septic and 198 replacements were installed. 5 grants were issued for the STSS Program. 14 STSS loans were also issued.	\$376,260		
9	Lake impacts from SSTS (Table 3-1 LK 1C)	Basin wide: Shorelands adjacent to nutrient impaired lakes Chisago Co: Countywide	Basin wide: Decrease non-compliant and non-conforming SSTS in shorelands adjacent to nutrient impaired lakes Chisago Co: Decrease non-compliant and non-conforming SSTS in all areas by 50% and in shorelands adjacent to nutrient impaired lakes by 80%		20 systems	[see Table 5-1 Impl. Actions]	10 systems		10 systems		SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants	County	Chisago County: Completed 268 compliance inspections, of which 232 were compliant and 36 were noncompliant. 67 new septic and 78 replacements were installed.	\$18,600		
													County	Washington County: Completed 509 compliance inspections, of which 338 were compliant, and 171 were noncompliant. 106 new septic and 198 replacements were installed. 5 grants were issued for the STSS Program. 14 STSS loans were also issued.	\$394,860	\$376,260	
10	GW quality from contaminants (Table 3-1 GW1B)	Basin wide	Properly seal or floodproof 100% of known or discovered abandoned wells or wells at risk of flooding		100% of known and discovered abandoned wells are sealed	[see Table 5-1 Impl. Actions]	100% of known and discovered abandoned wells are sealed		100% of known and discovered abandoned wells are sealed		SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants		Washington: 13 wells have been sealed.	\$6,755	\$6,755	
SUBTOTAL: Part A. Implementation Actions for Agricultural Lands (Part A does not assign dollar amounts to numbered line items)						\$2,072,800		\$1,036,400		\$1,036,400					\$1,934,210		546.07 lb/yr phosphorus
Part B. Implementation for Developed and Developing Lands																	
11	*GW recharge & infiltration (Table 3-1 GW 2B) + Lake & stream WQ (Table 3-1 LK1B, R&S 1A)	Basin wide [Estimated 40 communities in basin without MIDS or similar standards]	Implement Minimal Impact Design Standards or more restrictive in 20 communities; including climate resiliency provisions or standards			[see Table 5-1 Impl. Actions]					Chisago SWCD for WBIF projects, see specific entity for non-WBIF projects	FY21 WBIF (Activity 3) Partner local funds, state/federal grants	Multiple	This effort was delayed until 2023 in order to on board the new educator. Additional Notes: -VBWD adopted MIDS in 2013. -MSCWMO adopted MIDS in 2014 and worked with all 10 communities to update local ordinances. -BCWD adopted a version of MIDS for a portion of the watershed. -CLFLWD have rules more restrictive than MIDS in place (overlaps 5 communities). -CMSCWD have rules more restrictive (and more complicated) than MIDS in place (overlaps 4 communities); but community ordinances still do not align with Watershed District rules, causing confusion and frustration for single family residential applicants.			
12	*GW recharge & stream flow (Table 3-1 GW 2B, R&S 3A)	In critical groundwater recharge areas as identified in existing or future maps or studies	Retrofit 20 existing developments with infiltration, recharge and reuse projects		4 projects	[see Table 5-1 Impl. Actions]	2 projects		2 projects		Chisago SWCD for WBIF projects, see specific entity for non-WBIF projects	FY21 WBIF (Activity 5) Partner local funds, state/federal grants			\$360,100	See line 15 \$360,100 Clean Water grant	
13	St. Croix River flows (Table 3-1 STC 3A)	Direct catchments to the St. Croix River and Lake St. Croix	Evaluate and update small storm volume control and large storm rate control ordinances in 4 communities			[see Table 5-1 Impl. Actions]					SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants					
14	*St. Croix River + Rivers & streams WQ (Table 3-1 STC 1B; R&S 1A)	Regionally Significant Rivers and Streams: - All streams and tributaries in Sunrise River Watershed (whole watershed regardless of direct drainage) - Direct drainage areas to St. Croix River through Rock, Rush, Goose, Lawrence, and Browns Creeks and Trout Brook and other small streams shown in Figure 5-2 See Table 5-2 for streams and total phosphorus reduction goals; See Figure 5-2	Reduce TP by 100 lbs. (approximately 100 BMPs) and reduce TSS, bacteria, and nitrogen as secondary benefit [Assume 1 lb/BMP; typical reduction for raingarden or similar BMP]		20 lbs TP (approx. 20 BMPs)	[see Table 5-1 Impl. Actions]	10 lbs TP (approx. 10 BMPs)		10 lbs TP (approx. 10 BMPs)		Chisago SWCD for WBIF projects, see specific entity for non-WBIF projects	FY21 WBIF (Activity 5) Partner local funds, state/federal grants	SWCD	WCD: bluff stabilization St. Croix River - Lake St. Croix Beach = 34lb TP + 12,000 lb TSS; 2x urban native plantings in Stillwater = 0.3lb TP + 40lb TSS	\$350,000	0.3 lb/yr phosphorus	
													Multiple	ACD & SRWMO: See projects reported for activity 2 - the BMPs are in lakes that flow into the Sunrise River and unclear if it should be reported at a lake or stream benefit, or both?	\$752,555		
													WD	BCWD Oak Glen reuse project = 78lb/yr TP to Brown's Creek and St. Croix River	\$2,555	78 lb/yr phosphorus	
													WD	CMSCWD: Marine on St. Croix Town Center Stormwater Retrofits. St. Croix River 16.7 lbs./yr TP and 15,010 lbs/yr TSS. CMSCWD = \$400,000 319 grant and local funding	\$400,000	16.7 lb/yr phosphorus	
15	*Lake WQ (Table 3-1 LK 1B)	Regionally Significant Lakes for Urban BMPs See Table 5-3 for lakes and total phosphorus reduction goals; See Figure 5-3	Reduce TP by 100 lbs. (approximately 100 BMPs) and reduce TSS, bacteria, and nitrogen as secondary benefit [Assume 1 lb/BMP; typical reduction for raingarden or similar BMP]		20 lbs TP (approx. 20 BMPs)	[see Table 5-1 Impl. Actions]	10 lbs TP (approx. 10 BMPs)		10 lbs TP (approx. 10 BMPs)		Chisago SWCD for WBIF projects, see specific entity for non-WBIF projects	FY21 WBIF (Activity 5) Partner local funds, state/federal grants	LID	CLLID: Please see note under #2	\$338,000	\$85000 \$253000	
16	St. Croix River chlorides (Table 3-1 STC 1D)	Basin wide	75% of all cities have staff certified in MPCA's Level 1 and Level 2 Smart Salting Training		Total of 15% of cities	[see Table 5-1 Impl. Actions]	Total of 7.5% of cities		Total of 7.5% of cities		SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants		Cities with certified staff include: Stillwater, Cottage Grove, Woodbury, Forest Lake, Linwood Township, East Bethel, Columbus, Ham Lake	\$1,000	\$1,000	
17	GW quantity (Table 3-1 GW 2A)	All irrigators; highest priority given to highest consumers and communities with highest residential usage	Install or retrofit smart technology on 40 irrigation systems			[see Table 5-1 Impl. Actions]					SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants		Cities in Washington County report distributing a total of 3887 SMART irrigation controllers to community residents			

Projects highlighted in green are funded by Watershed Based Implementation Fund grant. Projects in white are funded by other sources.

#	Activity	Priority Location	Measurable Output	Implementation Actions	From CWMP		2-year outputs and costs divided by 2				Fiscal Agent/ Responsible Party	Funding Sources	WD, WMO, SWCD, County, LID, or Multiple	2021 Yearend Progress Reporting				
					Years 1-2 Outputs	Years 1-2 Estimated Cost	Fiscal Year 1 (Jul '21-Jun '22) Outputs	Fiscal Year 1 (Jul '21-Jun '22) Estimated Cost	Fiscal Year 2 (Jul '22-Jun '23) Outputs	Fiscal Year 2 (Jul '22-Jun '23) Estimated Cost				Year 1 (2021) Description of Outputs Accomplished	Year 1 (2021) Dollars Spent	Year 1 (2021) Phosphorus Removal		
18	GW contaminants (Table 3-1 GW 1B)	Basin wide - all currently unlicensed facilities and generators	License 100% of hazardous waste generators		Figures depend on number of generators identified	[see Table 5-1 Impl. Actions]	Figures depend on number of generators identified		Figures depend on number of generators identified		SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants	County	Chisago County: MPCA licenses all hazardous waste generators located in the county.				
19	GW contaminants (Table 3-1 GW 1B)	Priority areas: Where pollution sensitivity to near surface materials is high, or in karst areas, or where bedrock is at or near the surface Secondary priority: Basin wide	Upgrade non-conforming or non-compliant SSTS to properly functioning, compliant systems. [See Line 8 of this table for context.]		[Covered under Table 5-1, Part A #8]	[see Table 5-1 Impl. Actions]	[Covered under Table 5-1, Part A #8]		[Covered under Table 5-1, Part A #8]		SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants	Multiple	ACD: see line 8 Chisago County: Please see # 8.				
20	Lake impacts from SSTS (Table 3-1 LK 1C)	Basin wide: Shorelands adjacent to nutrient impaired lakes Chisago Co: Countywide	Basin wide: Decrease non-compliant and non-conforming SSTS in shorelands adjacent to nutrient impaired lakes Chisago Co: Decrease non-compliant and non-conforming SSTS in all areas by 50% and in shorelands adjacent to nutrient impaired lakes by 80% [See Line 10 of this table for context.]		[Covered under Table 5-1, Part A #9]	[see Table 5-1 Impl. Actions]	[Covered under Table 5-1, Part A #9]		[Covered under Table 5-1, Part A #9]		SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants	County	Washington & Chisago County: Please see # 9.				
21	Lake shorelines (Table 3-1 LK 2B & UP 2A)	Regionally Significant Lakes for Protection and Sustainable Development: Table 5-3 and Figure 5-3	Install 100 shoreline restoration projects [100% of lakeshore owners with altered shorelines are provided information on restoration programs]		20 projects	[see Table 5-1 Impl. Actions]	10 projects		10 projects		SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants	SWCD	CSWCD: 5 shoreline restorations	\$30,000			
													Multiple	ACD/SRWMO: 4 shoreline restos				
													WD	CMSCWD: 100' biorengineered shoreline restoration on Big Marine Lake				
													LID	CLLID: Provides match to provide technical and educational information to interested landowners and local units of government to implement urban and shoreland BMPs.				
													LID	CLLID: Provides match to develop and implement a cost share program to assist landowners to implement urban and shoreland BMPs.				
22	*Protect wetlands (Table 3-1 WTL 1A)	Basin wide during land use change or alteration, development or redevelopment	Increase by 5 the number of LGUs with adopted wetland protections including buffer requirements and setbacks for permanent structures		1 LGU	[see Table 5-1 Impl. Actions]			1 LGU		Chisago SWCD for WBIF projects, see specific entity for non-WBIF projects	FY21 WBIF (Activity 3) Partner local funds, state/federal grants	Multiple	ACD/SRWMO: Columbus updated wetland protections in ordinances.				
23	Maintain & restore habitat (Table 3-1 UP 1F)	Land with priority habitats and corridor connections	10% of land in new developments is dedicated to wildlife habitat [significant new areas of land conversion from vacant or rural land to residential, commercial/industrial, institutional, or transportation]		10% of land in new dev.	[see Table 5-1 Impl. Actions]	10% of land in new dev.		10% of land in new dev.		SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants						
24	Sensitive lake protection (Table 3-1 LK 2A)	Regionally Significant Lakes for Protection and Sustainable Development: Table 5-3 and Figure 5-3	Implement sustainable development and land preservation programs in lakesheds of priority lakes through 10 easements or acquisitions		2 easements or acquisitions	[see Table 5-1 Impl. Actions]	1 easement or acquisition		1 easement or acquisition		SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants						
25	Landlocked basin impact on River (Table 3-1 STC 1B, 3A, 4C)	Eutrophic natural landlocked basins to be discharged to St. Croix River	Perform analysis and implement measures to meet state standards for nutrients on 3 waterbodies		2 basins	[see Table 5-1 Impl. Actions]	1 basin		1 basin		SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants	WD	VBWD performed analyses on Goose Lake in city of Lake Elmo in 2021.	\$37,000	\$37,000		
SUBTOTAL: Part B. Implementation for Developed and Developing Lands (Part B does not assign dollar amounts to numbered line items)							\$2,041,600		\$1,020,800						\$1,518,655		95	lb/yr phosphorus
Part C. Implementation for Ecosystem Services																		
26	Rivers & Streams ecosystems & flow (Table 3-1 R&S 2A, 3A, STC 1B)	St. Croix River and Lake St. Croix direct drainage tributaries	Reduce TP loading and TSS loading by 425 lbs and 1,085 tons, respectively. Implement 5 stream restoration projects to restore and improve stream corridors, instream habitat, and riparian area stability [Average TP reduction/restoration = 85 lbs; Average TSS reduction/restoration = 217 tons]		1 stream resto project	[see Table 5-1 Impl. Actions]			1 stream resto project		SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants	WD	CMSCWD: Marine on St. Croix Town Center Stormwater Retrofits. St. Croix River 16.7 lbs./yr TP and 15,010 lbs/yr TSS	\$400,000	CMSCWD = \$400,000 319 grant and local funding	16.7	lb/yr phosphorus
27	Trout populations (Table 3-1 R&S 1B)	Trout streams (Brown's Creek, Valley Creek, Lawrence Creek, Trout Brook, Willow Brooke, Mill Stream, Falls Creek, Gilbertson's Creek)	Trout populations maintained through stream restorations, BMP installations, and enforcement of development standards			[see Table 5-1 Impl. Actions]					SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants	WD	VBWD: Yes. BCWD: Oak Glen stormwater reuse project (see above) CMSCWD: Yes- I think. We do not actually measure trout populations.				
28	*Wetland quantity (Table 3-1 WTL 2A, 2B)	1. In highest priority catchments (red, yellow and green areas) within BWSR's Compensation Planning Framework priority catchments in the Lower St. Croix River Watershed (Figure 5-5) 2. In locations where studies or mapping tools find that restoration will have significant positive impact on natural resources.	Create or restore 1,000 acres of historic wetlands lost to land use changes		200 acres created or restored	[see Table 5-1 Impl. Actions]	100 acres created or restored		100 acres created or restored		Chisago SWCD for WBIF projects, see specific entity for non-WBIF projects	FY21 WBIF (Activity 6) Partner local funds, state/federal grants	WD	CLFLWD: Restored 6 acres of wetlands - Bone Lake Southeast/Meadowbrook Wetland Restoration (cost included in line #2)				
29	Wetland loss (Table 3-1 WTL 2A, 1B)	Judicial and public ditches	Mitigate loss of wetland acres resulting from ditch maintenance activities		No net wetland loss	[see Table 5-1 Impl. Actions]	No net wetland loss		No net wetland loss		SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants						

Projects highlighted in green are funded by Watershed Based Implementation Fund grant. Projects in white are funded by other sources.

#	Activity	Priority Location	Measurable Output	Implementation Actions	From CWMP		2-year outputs and costs divided by 2				Fiscal Agent/ Responsible Party	Funding Sources	WD, WMO, SWCD, County, LID, or Multiple	2021 Yearend Progress Reporting			
					Years 1-2 Outputs	Years 1-2 Estimated Cost	Fiscal Year 1 (Jul '21-Jun '22) Outputs	Fiscal Year 1 (Jul '21-Jun '22) Estimated Cost	Fiscal Year 2 (Jul '22-Jun '23) Outputs	Fiscal Year 2 (Jul '22-Jun '23) Estimated Cost				Year 1 (2021) Description of Outputs Accomplished	Year 1 (2021) Dollars Spent	Year 1 (2021) Phosphorus Removal	
30	Wetland quantity (Table 3-1 WTL 2B)	Basin wide	Create and maintain 2 new BWSR and USACE approved wetland banks within the basin		1 new wetland bank	[see Table 5-1 Impl. Actions]			1 new wetland bank		SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants					
31	AIS in Lakes & St. Croix River (Table 3-1 LK 2C; STC 2A)	High traffic boat launches on St. Croix River and Lake St. Croix	Increase watercraft inspection hours by 25%		Increase hours by 5%	[see Table 5-1 Impl. Actions]	Increase hours by 2.5%		Increase hours by 2.5%		SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants	County	- Chisago County: St. Croix River = 35 increase in total watercraft inspection and decontamination hours from 2020 - 2021 in Chisago County (127.5 total hours in 2020 to 162.5 total hours in 2021 - a 27.4% increase). Countywide = 1,306.75 increase in total watercraft inspection and decontamination hours from 2020 - 2021 in Chisago and Northern Washington Counties (3,694.50 total hours in 2020 to 5,001.25 total hours in 2021 - a 35.4% increase).	\$76,000		
													County	Washington County - 657 increase in hours of Level 1 inspection hours for the entire program. Note that CLFLWD performs their own inspection program and is not reflected in this total. Also note that hours are spent outside the LSC basin. (2020 3,381 hours total - 2021 hours total 4,038 - 16% increase).	\$237,326	\$113,615	
													WD	CLFLWD partners with Chisago County to implement a watercraft inspection program and also hires its own inspectors to perform even more inspection hours. CLFLWD-hired inspection hours (Bone/Comfort/Forest - all three accesses): 2020 = 2,911 hours; 2021 = 2,107 hours (28% decrease due to hiring difficulties, but still met CLFLWD goals overall)		\$47,711	
32	AIS (Table 3-1 LK 2C; STC 2A; R&S 2B)	Within 15 miles of all public boat launches on zebra mussel infested lakes and rivers	Provide AIS decontamination station		2 new decon stations	[see Table 5-1 Impl. Actions]	1 new decon station		1 new decon station		SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants	Multiple	CLFLWD: Partnered with Chisago County to provide rotating mobile decontamination station at Forest 1, Forest 3, Comfort and Bone accesses. Chisago County: Completed 64 decontaminations at 10 public water accesses located in Chisago and Northern Washington Counties (Bone, Chisago/South Lindstrom, Comfort, N/S Center, Forest E/W, Green, and E/W Rush Lakes).	\$16,000	\$16,000	
33	AIS signs (Table 3-1 LK 2C; STC 2A; R&S 2B)	Basin wide	Install AIS informational signage at 20 boat launches and marinas		4 new launches w/ signage	[see Table 5-1 Impl. Actions]	2 new launches w/ signage		2 new launches w/ signage		SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants	Multiple	CLFLWD: Installed bait disposal signage at 5 accesses (Forest 1-3, Bone, Comfort). Last general AIS signage upgrade was in 2019. Chisago County: Received 6 bait disposal bins from CLFLWD and installed at Chisago/South Lindstrom, N/S Center, Green, and E/W Rush Lakes public water accesses.	\$4,000	\$4,000	
34	AIS in Lakes (Table 3-1 LK 2C)	Lakes in Chisago Co. and Isanti Co. with public access	Develop 1 comprehensive AIS rapid response plan for lakes		1 comprehensive AIS rapid response plan developed	[see Table 5-1 Impl. Actions]			1 comp. AIS rapid response plan developed		SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants					
35	Phragmites (Table 3-1 WTL 1C)	In order of priority 1. Chisago Lakes LID 2. Carlos Avery WMA 3. Elsewhere in Chisago Co and Isanti Co 4. Headwaters of North Branch & West Branch Sunrise River	Reduce the size and number of invasive phragmites locations as reported on EddMaps by 50% or 45 infestation areas. Stabilize and eradicate those small infestations less than 1,000 – 2,000 sq. ft. through rapid response plans, where available		Reduce by 9 infestations	[see Table 5-1 Impl. Actions]	Reduce by 4 infestations		Reduce by 5 infestations		SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants	Multiple	CLLID partnered with area lake associations and the University of Minnesota to control invasive phragmites along lakeshores and in roadside right-of-ways. 68 locations were treated in 2021. The CLLID provided funding to local lake associations to treat for aquatic invasive plants including curlyleaf pondweed, Eurasian water milfoil and invasive phragmites. Control efforts will continue in 2022. Chisago County: Partnered with Wild Rivers Conservancy to conduct roadside surveys in N/S Chisago Lake, Franconia and Lent Townships and Harris to identify and map invasive phragmites populations. Partnered with U of M to treat 40 locations along roadsides and private property in Chisago County.	\$19,000	17000 \$2,000	
36	Lake levels (Table 3-1 LK 3A)	Chisago Co. Lakes = Chisago Lakes Chain of Lakes (Chisago, South Lindstrom, North Lindstrom, Green, Little Green, North Center, South Center), Fish, Horseshoe, Little Horseshoe, Sunrise	Develop resiliency plans or responses, such as a Slow-No-Wake Ordinance or Channel and Weir Operations and Maintenance Plans, to address vulnerable properties		Review and modify existing plans	[see Table 5-1 Impl. Actions]	Review and modify existing plans		Review and modify existing plans		SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants	Multiple	Chisago County: Staff and volunteers monitor 4 lake level gauges to determine implementation of countywide Slow-No-Wake Ordinance. (Fish, Horseshoe, Goose and Rush Lakes, along with 15 gauges located in the CLLID). CLLID reviewed the 2016 Channel & Weir Operation & Maintenance Plan. No changes will be made to the plan. An appendix will be added to the plan summarizing a review of the operational procedures for the Lofton weir. The plan will be submitted to the DNR for renewal in 2022.			
37	Internal loading (Table 3-1 LK 1D)	In lakes where internal loading is estimated to be a significant contributor to degraded water quality and where not addressing the internal loading would result in sustained degradation (See Internal Loading Lakes Table 5-4)	Address source of internal loading in 3 lakes			[see Table 5-1 Impl. Actions]					SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants	WD	82-135 Echo Lake in VBWD is being de-listed.			
38	*Shoreland (Table 3-1 UP 1A, R&S 2A, LK 2B)	Basin wide	Increase the number of LGUs (including counties) by 2 that adopt innovative shoreland standards			[see Table 5-1 Impl. Actions]				Chisago SWCD	FY21 WBIF (Activity 3)	Multiple		Hired Shared Services Educator. 2021 WBIF expenditures on Educator: \$39,449	\$39,449	\$39,449	
39	Resilient lands (Table 3-1 UP 1C, 1D)	Private lands in priority corridors and critical habitat areas and large-scale developments with land-use change	Increase in the number of diverse landscape designs and plantings resilient to climate change		4 designs	[see Table 5-1 Impl. Actions]	2 designs		2 designs		SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants					
40	Land protection (Table 3-1 UP 1B; R&S 2A; LK 2A)	First priority: Areas near already protected lands (public or private), tributaries near impaired waters, areas where known endangered species are present and identified biologically significant natural areas as identified by MLCCS mapping Second priority: Basin wide	At least 1,000 acres protected through acquisition and easements.		200 acres protected	[see Table 5-1 Impl. Actions]	100 acres protected		100 acres protected		SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants	WD	VBWD: 4.1 acres purchased and kept in permanent conservation easement in 2021	\$324,800		
													State	DNR: 60 acres added to William O'Brien State Park			
													County	Washington County: 53 acre conservation easement on Silver Creek near Fairy Falls (NPS) in CMSCWD			
													County	Chisago County: 40 acres purchased and added to Checkerboard County Park. Closing date is April 15, 2022. Purchased through DNR Natural and Scenic grant (\$44,800 total cost).			

Projects highlighted in green are funded by Watershed Based Implementation Fund grant. Projects in white are funded by other sources.

#	Activity	Priority Location	Measurable Output	Implementation Actions	From CWMP		2-year outputs and costs divided by 2				Fiscal Agent/ Responsible Party	Funding Sources	WD, WMO, SWCD, County, LID, or Multiple	2021 Yearend Progress Reporting					
					Years 1-2 Outputs	Years 1-2 Estimated Cost	Fiscal Year 1 (Jul '21-Jun '22) Outputs	Fiscal Year 1 (Jul '21-Jun '22) Estimated Cost	Fiscal Year 2 (Jul '22-Jun '23) Outputs	Fiscal Year 2 (Jul '22-Jun '23) Estimated Cost				Year 1 (2021) Description of Outputs Accomplished	Year 1 (2021) Dollars Spent	Year 1 (2021) Phosphorus Removal	Year 1 (2021) Phosphorus Removal		
41	Land protection (Table 3-1 UP 1C, LK 1B)	First priority: Areas where upland habitat is fractured and shoreline areas where there is high to moderate development or land under future development pressure Second priority: Basin wide	Create 20 new Landscape Stewardship Plans		4 new plans	[see Table 5-1 Impl. Actions]	2 new plans		2 new plans		SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants	County	Washington County: 53 acre conservation easement on Silver Creek near Fairy Falls (NPS) in CMSCWD					
42	Habitat improve (Table 3-1 UP 2C)	Basin wide based on prioritized mapping including MLCCS maps and other critical habitat mapping	1,000 new acres managed for better habitat, or as recommended in Landscape Stewardship Plans		200 new acres managed	[see Table 5-1 Impl. Actions]	100 new acres managed		100 new acres managed		SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants	County	Washington County: 14 acre prairie and savannah restoration on Silver Creek near Fairy Falls (NPS) in CMSCWD Washington County: 166 acres prairie and oak savanna restoration in Lake Elmo Park Reserve	\$473,000	\$43,000 CMSCWD, WCD, Land Trust funds \$430K – Outdoor Heritage grant at all WashCo Parks			
43	Protected lands (Table 3-1 UP 2B)	Areas located along bluffland or adjacent to publicly owned forest land such as state parks and trails	Increase acres under private Forest Management Plans or Woodland Stewardship Plans by 20% [23 plans over 10 years]		4 new plans developed	[see Table 5-1 Impl. Actions]					SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants	SWCD	PSWCD: 2 Woodland Stewardship Plans written in Rock Creek Watershed. Total acreage under both plans are 254 acres.					
SUBTOTAL: Part C. Implementation for Ecosystem Services (Part C does not assign dollar amounts to numbered line items)								\$1,907,000		\$953,500						\$1,513,575		16.7	lb/yr phosphorus
Part D. Implementation for Prioritization and Analysis: Issues, Goals, Actions, Measurable Outputs, and Priority Locations																			
44	*STC 1A	Basin wide	Evaluate the water quality metrics, set reporting standards, report on goal progress for the St. Croix River	Identify, appoint, and empower entity or person to lead/evaluate the water quality metrics, set reporting standards, report on goal progress.		\$50,000		\$25,000		\$25,000	Chisago SWCD for WBIF projects, see specific entity for non-WBIF projects	FY21 WBIF (Activity 10) Partner local funds, state/federal grants							
45	GW 3A	Order of Priority: 1) Surrounding known contamination sites where data are lacking 2) DWSMAs 3) Townships without nitrate testing 4) Basin wide	Pollution sources (including mines), areas around chemical contamination sites, vulnerable areas, and surface water-GW interactions are studied and mapped	Work with State agencies and Metropolitan Council to study and map pollution sources (including mines), areas around chemical contamination sites, vulnerable areas, and surface water-GW interactions		\$0		\$0		\$0	SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants							
46	GW 3A	Basin wide	100% of recharge areas and groundwatersheds of GW dependent natural resources are mapped	Support agencies such as DNR and Met Council in mapping recharge areas and groundwatersheds of GW dependent natural resources		\$0		\$0		\$0	SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants							
47	GW 3A	Basin wide where needed	Complete at least one county groundwater plan	Build on existing GRAPS to develop groundwater plans that lay out technical framework, issues, policies and implementation actions for the protection and conservation of groundwater resources.		\$0		\$0		\$0	SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants							
48	GW 3A	Maintain basin wide; expand in Isanti and Pine Co. 1) DWSMAs 2) Groundwatersheds of GW-dependent natural resources	Maintain existing or increase number of new observation wells	Work with MnDNR to maintain and expand observation well program		\$83,730		\$41,865		\$41,865	SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants	LID	CLLID - 4 ground water monitoring wells are located in the CLLID. These wells are monitored to ensure that substantial drawdown of the aquifers does not occur which may affect drinking water wells.					
49	*LK 1D	Regionally Significant Lakes for Internal Loading Analyses Table 5-4	Calculate internal loading of phosphorus	Calculate internal loading of phosphorus on 15 lakes @ \$25,000 each		\$75,000		\$37,500		\$37,500	Chisago SWCD for WBIF projects, see specific entity for non-WBIF projects	FY21 WBIF (Activity 7)	WD	CLFLWD: Began planning for 2022 Forest Lake Internal Load Analysis. Study approved for WBIF grant funding (\$16,500 in WBIF grant, \$19,830 proposed match). None spent in 2021. Study to occur in 2022.	\$0	\$0			
50	LK 4A	Anoka Co. Lakes = Pet, Rice, South Coon, Skunk, Tamarack Chisago Co. Lakes = Sunrise, Little Horseshoe Isanti Co. Lakes = Hoffman, Horseleg, Horseshoe, Upper and Lower birch, East and West Twin, Tamarack (30-0001-00), Long (30-0002-00), Big Pine (30-0015-00), Grass (30-0017-00), Splittstoesser (30-00041-00)	Baseline data such as transparency, total phosphorus and chlorophyll- a are collected	Develop monitoring plan and collect data using available means such as volunteers, Met Council's CAMP, MPCA's citizen monitoring program, MPCA's intensive watershed monitoring program, SWCDs, counties, parks departments, lake associations, etc. Anoka Co annual costs (5 lakes * \$2,100/lake) = \$10,500 Chisago Co annual costs (2 lakes) = \$1,200 Isanti Co annual costs (12 lakes) = \$1,430/lake = \$17,160		\$57,720		\$28,860		\$28,860	SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants	SWCD	ISWCD: Data collected on Hoffman, Horseleg, Horseshoe, Upper and Lower Birch, East and West Twin Lakes. (Funding Source: Oxford Twp)		\$8,300			
													WMO	SRWMO: In 2021 did 2 rounds of outreach at Pet, Rice, South Coon, Skunk and Tamarack Lakes but secured volunteers at none.		\$907			

Projects highlighted in green are funded by Watershed Based Implementation Fund grant. Projects in white are funded by other sources.

#	Activity	Priority Location	Measurable Output	Implementation Actions	From CWMP		2-year outputs and costs divided by 2				Fiscal Agent/ Responsible Party	Funding Sources	WD, WMO, SWCD, County, LID, or Multiple	2021 Yearend Progress Reporting			
					Years 1-2 Outputs	Years 1-2 Estimated Cost	Fiscal Year 1 (Jul '21-Jun '22) Outputs	Fiscal Year 1 (Jul '21-Jun '22) Estimated Cost	Fiscal Year 2 (Jul '22-Jun '23) Outputs	Fiscal Year 2 (Jul '22-Jun '23) Estimated Cost				Year 1 (2021) Description of Outputs Accomplished	Year 1 (2021) Dollars Spent	Year 1 (2021) Phosphorus Removal	
												County	Chisago County: Data collected on Little Horseshoe Lake and at 8 additional sites located in northern Chisago County. See #50 CLLID - for water quality monitoring procedures and summary report process.		\$2,423		
												LID	CLLID - Conducted monthly (May-September) water quality monitoring at 23 lake sites. Monitoring included secchi disk readings, chlorophyll a, ammonia nitrogen and total phosphorus levels. This included a summary report which provided trophic state index values for each lake monitored. The long term water quality monitoring program provided data to support delisting North & South Center Lakes from the impaired waters list for nutrients.		\$16,500		
51	LK 4A STC 2B, 4C	Basin wide	Participate in studies and/or stay informed of latest science to assess the impact of a changing climate on lakes and the St. Croix River	Use latest climate science to implement adaptive management	Included in existing work		\$0		\$0	SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants	SWCD	ACD: Completed SWCD comp plan in which climate change is a consideration in implementation.	\$20,000			
												Multiple	CMSCWD, BCWD, CLFLWD, MSCWMO hosted a floodplain resiliency planning work session for Wash Co., LGUs, and state entities to identify best approaches for evaluating floodplain resiliency. Final report is guiding floodplain resiliency modeling and planning efforts in 2022/2023.		\$20,000		
52	LK 4A	Chisago Chain of Lakes	100% of lakes prone to anthropogenic water level variation are identified	Manage the channel and weir system with an approved operation and maintenance plan.		\$72,000		\$36,000		SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants	LID	The CLLID has an approved Channel & Weir Operation and Maintenance plan. The channel & weir system controls water levels during high water conditions. The CLLID conducts inspections and maintenance of the system as needed. The system is well maintained and functioning properly.	\$31,000	\$31,000		
53	LK 4A	Basin wide	100% of lakes prone to direct anthropogenic water level variation are identified	Participate in DNR lake level monitoring program to routinely collect lake level data		\$26,000		\$13,000		SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants	LID	The CLLID monitors 15 lake level gauges weekly during open water season. Lake levels, observed from the gauges, help determine when to open and close the weirs during high water conditions. In 2021, the Lake Ellen weir, which controls water levels on Green, Little Green and Lake Ellen, was opened from April through October.	\$4,800	\$3,600		
												County	Chisago County: Staff and volunteers monitor 4 lake level gauges to determine implementation of countywide Slow-No-Wake Ordinance. (along with 15 gauges located in the CLLID).		\$1,200		
54	*LK 1A, 1B, 4A	Subwatersheds of Regionally Significant Lakes Table 5-3 and Figure 5-3	20 subwatershed project targeting analyses are completed (estimated \$10,000-\$50,000/SWA or \$30,000 ave)	Conduct analyses to identify and prioritize water quality improvement projects within a priority subwatershed. Methods and analyses can include site or field scale subwatershed analyses, diagnostic monitoring, spatial analysis and	5 SWAs	\$150,000		\$75,000		Chisago SWCD	FY21 WBIF (Activity 8)	SWCD	CSWCD: Goose Lake.	\$8,000	\$8,000		
												WD	CLFLWD: Began drafting sequential diagnostic monitoring protocols. Other targeting-related protocols are in-progress as well by other partners, but have not incurred expenditures in 2021.	\$3,000	\$3,000		

Projects highlighted in green are funded by Watershed Based Implementation Fund grant. Projects in white are funded by other sources.

#	Activity	Priority Location	Measurable Output	Implementation Actions	From CWMP		2-year outputs and costs divided by 2				Fiscal Agent/ Responsible Party	Funding Sources	WD, WMO, SWCD, County, LID, or Multiple	2021 Yearend Progress Reporting					
					Years 1-2 Outputs	Years 1-2 Estimated Cost	Fiscal Year 1 (Jul '21-Jun '22) Outputs	Fiscal Year 1 (Jul '21-Jun '22) Estimated Cost	Fiscal Year 2 (Jul '22-Jun '23) Outputs	Fiscal Year 2 (Jul '22-Jun '23) Estimated Cost				Year 1 (2021) Description of Outputs Accomplished	Year 1 (2021) Dollars Spent	Year 1 (2021) Phosphorus Removal			
55	*R&S 1A, STC 4B	Regionally Significant Rivers and Streams: - Streams and tributaries in Sunrise R. Watershed - Direct drainage areas to St. Croix River through Rock, Rush, Goose, and Browns Creeks and Trout Brook and other small streams as shown in Table 5-2 and Figure 5-2.	20 subwatershed project targeting analyses are completed (estimated \$10,000 - \$50,000/SWA or \$30,000 ave)	mapping, modeling, cost benefit analyses, or other data-driven targeting activities. See Section VII.B. for further description.	5 SWAs	\$150,000		\$75,000		\$75,000	Chisago SWCD	FY21 WBIF (Activity 8)	SWCD	CSWCD: Direct Drainage and City of NB	\$9,000	\$9,000			
56	STC 4A, 4C	Tributaries to the St. Croix	Coordinated hydrologic, chemical, and biological monitoring of the St. Croix River and its tributaries; nutrient loading data of major tributaries to the St. Croix River is evaluated.	Operate up to 10 new monitoring stations that lack data (quality and quantity) to evaluate progress toward achieving the TMDL and to identify priority subwatersheds. @ \$10,000/year/station		\$100,000		\$50,000		\$50,000	SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants							
57	STC 3A	Land use authorities in the St. Croix Riverway.	Evaluate the floodplain and zoning ordinances for consistency and effectiveness in protecting the floodplain function and preventing flood damages. Include impacts of variances in the evaluation.	Work with land use authorities along St. Croix River and MNDNR Area Hydrologists to evaluate floodplain and zoning ordinances and update where appropriate.		\$50,000		\$25,000		\$25,000	SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants							
58	*STC 4B & UP 2A	Intermittent and perennial tributaries and watercourses flowing directly to St. Croix River	Inventory and prioritize active erosion sites.	Identify, evaluate, and rank active gullies directly discharging into the St. Croix or its tributaries (LIDAR to identify gully locations; RUSLE & BWSR pollution reduction calculator to determine pollution reduction numbers)		\$50,000		\$25,000		\$25,000	Chisago SWCD	FY21 WBIF (Activity 8)							
59	*STC 2B, 4C UP 1A	Basin wide	Map priority restoration and protection areas for acquisition, easements, and voluntary stewardship	Complete level 4/5 MLCCS basin wide. Expand the Washington County Natural Resource Framework and use their methodology in Anoka, Chisago, Isanti, and Pine Counties. (MLCCS = \$1,000/sq mi * 640 sq miles)		\$240,000		\$120,000		\$120,000	Chisago SWCD	FY21 WBIF (Activity 8)							
60	UP 1E	First priority: Public lands or near public lands; areas may be further prioritized thru cooperative weed mgmt area Second priority: Basin wide	Map and target "eradicate and control list" invasive species populations for each county Contact 50% of landowners for species on restricted list	Implement a cooperative weed management area (including MNDOT when possible) and promote associated implementation strategies.		\$0		\$0		\$0	SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants	Multiple	Chisago County and Chisago Lakes Lake Improvement District: Please see #35.					
61	WTL 3E	Pine County	Complete soil survey	Complete soil survey as developed by NRCS, USDA & shown in Soil Survey Geographic (SSURGO) Database	To be completed by NRCS			\$0		\$0	SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants							
62	*WTL 3D	Wetlands upstream of nutrient impaired streams and lakes	Monitor 10 identified wetlands for nutrient and volume contribution to impaired lakes and streams	Use subwatershed analyses or monitoring/modeling data to identify degraded wetlands with the potential of contributing high nutrient loads to downstream resources.		\$150,000		\$75,000		\$75,000	Chisago SWCD	FY21 WBIF (Activity 8)							
63	*WTL 3D	Basin wide	Identify 5 degraded wetlands with best restoration potential in each HUC 10	Use existing Restorable Wetland Prioritization Tool to focus effort	To be completed in conjunction with existing activities			\$0		\$0	Chisago SWCD	FY21 WBIF (Activity 8)							
64	WTL 3E & 1D	1st priority: Public ditches in Isanti Co. 2nd priority: Basin wide	Obtain Nutrient Loading Data in basins/wetlands near Ditch outlets to identify areas for ditch improvements to filter runoff	Collect water quality data near ditch outlets of 25 ditches (estimated \$2,000 per ditch)		\$10,000		\$5,000		\$5,000	SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants							
65	WTL 3A, 3B, 3C	1 st Priority: Isanti County 2 nd Priority: Basin wide	Create wetland inventory based on MLCCS, and function and value assessment and/or floristic quality assessment	Increase by 5 the number of LGUs with policies requiring wetland function and value assessments with project proposals such as developments or ditch work.		\$20,000		\$10,000		\$10,000	SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants							
66	WTL 3B	Pine County and Isanti County	An inventory and map of all areas of wetland loss and historic wetlands is locally verified	Verify recently completed inventory and map % of areas of wetland loss and historic wetlands		\$12,000		\$6,000		\$6,000	SWCD/WMO/WD/CLLID	Partner local funds, state/federal grants							
SUBTOTAL: Part D. Implementation for Prioritization and Analysis: Issues, Goals, Actions, Measurable Outputs, and Priority Locations						\$1,296,450		\$648,225		\$648,225					\$103,930				
TOTAL: Table 5-1 Parts A, B, C, D						\$7,317,850		\$3,658,925		\$3,658,925						\$5,070,370		657.77	lb/yr phosphorus

WBIF 2021 Administrative Costs = \$24,219
*\$164,653 of total spend came from WBIF, and the remainder were local funds or other grant sources

Activity Abbreviations
 GW = Groundwater UP = Upland Habitat WQ = Water Quality
 R&S = Rivers & Streams STC = St. Croix River & Lake St. Croix
 LK = Lakes AIS = Aquatic Invasive Species
 WTL = Wetlands SSTS = Subsurface Sewage Treatment Systems

Projects funded by FY21 WBIF grant are highlighted in green
 *LSC Implementation Plan activities related to FY21 WBIF grant work plan have an asterisk

EVALUATION OF PARTNERSHIP GOVERNANCE STRUCTURE: During January and April 2022 the Policy Committee evaluated the adequacy and effectiveness of the partnership's governance structure. They recommend continuing with the joint powers collaboration model. Some operating procedure changes were recommended by the Steering Committee to increase efficiency, including: accepting funding requests approximately three times per year rather than continuously, reducing the use of subcommittees to review proposals and instead have proposals directly reviewed by the full Steering Committee, and seeking Policy Committee recommendations on all requests over \$50,000. The Policy Committee favored these changes and the Steering Committee will make them. The governance structure will be reviewed annually.