Table 5-2. Regionally Significant Rivers and Streams for Pollutant Reductions (See Figure 5-2)

Stream Name	Lake St. Croix TMDL Total Phosphorus Reduction Goal (lbs/yr)[1]	10-year TP Reduction Goal (lbs/yr)[2]
Sunrise River and Tributaries	18,306	2,256
Lawrence Creek[3]	1,177	118
Browns Creek[4]	848	85
Valley Branch (includes Valley Creek and Kelle's Creek)[3]	968	97
Trout Brook[3]	1,419	142
Small Streams Draining to St. Croix River (south of Lawrence Cr & north of Valley Br.)	6,450	645
Rock Creek	3,512	351
Rush Creek	2,451	245
Goose Creek	2,980	298
TOTAL	~~37,143~~38,111	~~4,140~~4,237

(1) Table B-7, 2012 Lake St. Croix Total Maximum Daily Load Study
(2) 10% per stream + 425 lbs for stream restoration projects in Sunrise River Watershed
(3) According to Lake St. Croix TMDL: Actual phosphorus load reduction goals in Lawrence Creek, Valley Branch, and Trout Brook may be smaller than shown (possibly even zero) due to substantial landlocked portions resulting in smaller drainage areas than those used to calculate load reductions.
(4) Browns Creek reduction goal based on Implementation Plan for Lake St. Croix Nutrient TMDL (2013), App B.

	street sweeping; lakeshore restorations. Projects modeled for estimated pollution reduction and project cost.	
McKusick Lake Subwatershed Assessment	Urban and Shoreline: Variety of stormwater retrofit approaches were identified including maintenance of, or alterations to, existing stormwater treatment practices; residential curb-cut rain gardens; swales with check dams; street sweeping; lakeshore restorations. Projects modeled for estimated pollution reduction and project cost.	Washington Conservation District, Middle St Croix WMO www.metrotsa4.org/swa
Lily Lake Subwatershed Assessment	Urban and Shoreline: Variety of stormwater retrofit approaches were identified including maintenance of, or alterations to, existing stormwater treatment practices; residential curb-cut rain gardens; swales with check dams; street sweeping; lakeshore restorations. Projects modeled for estimated pollution reduction and project cost.	Washington Conservation District, Middle St Croix WMO www.metrotsa4.org/swa
Perro Creek Subwatershed Assessment	Urban and Streambank: Variety of stormwater retrofit approaches were identified including maintenance of, or alterations to, existing stormwater treatment practices; residential curb-cut rain gardens; swales with check dams; street sweeping; stream restorations. Projects modeled for estimated pollution reduction and project cost.	Washington Conservation District, Middle St Croix WMO www.metrotsa4.org/swa
St Croix River Direct PII Subwatershed Assessment	Urban and Shoreline: Variety of stormwater retrofit approaches were identified including maintenance of, or alterations to, existing stormwater treatment practices; residential curb-cut rain gardens; swales with check dams; street sweeping; lakeshore restorations. Projects modeled for estimated pollution reduction and project cost.	Washington Conservation District, Middle St Croix WMO www.metrotsa4.org/swa
Top50P! Subwatershed Assessment	One of the first Rural SWAs. Identifies and ranks the Top 50 potential BMPs to reduce Phosphorus loads to the St. Croix from the rural portion of Washington County, south of I94.	Washington Conservation District, Middle St. Croix WMO, Valley Branch WD, South Washington WD www.metrotsa4.org/swa
DeMontreville Lake Subwatershed Assessment	Urban and Shoreline: Variety of stormwater retrofit approaches were identified including maintenance of, or alterations to, existing stormwater treatment practices; residential curb-cut rain gardens; swales with check dams; street sweeping; lakeshore restorations. Projects modeled for estimated pollution reduction and project cost.	Washington Conservation District, Valley Branch WD www.metrotsa4.org/swa
Kelle's Creek/Sunfish Lake TMDL	Identifies sources of pollution and an implementation plan to reduce pollution	Minnesota Pollution Control Agency

		Valley Branch Watershed District Total Maximum Daily Load (TMDL) (state.mn.us)
Valley Branch Watershed District Watershed Restoration and Protection Strategy Report Lower St. Croix River-Major Watershed	Assessed nutrient loads and identified implementation projects for Sunfish Lake (impaired), Eagle Point Lake, Lake Edith, Silver Lake (impaired), and Horseshoe Lake, and assessed bacteria source and identified implementation projects for Kelle's Creek	Minnesota Pollution Control Agency Valley Branch Watershed District Watershed Restoration and Protection Strategy (WRAPS) Report (state.mn.us)

There are a variety of pollution reduction estimation tools available to analyze different types of projects. In general, the following types of projects will be analyzed with the listed estimation tools.

- Urban stormwater BMPs: MIDS calculator for volume, total suspended solids, and total phosphorus (particulate and dissolved)
- Agricultural runoff BMPs: PTMApp, SWMM, RUSLE2, Simple method, ACPF or BWSR Pollutant Reduction Estimator
- Gully stabilization BMPs or streambank/shoreline restoration BMPs: BWSR Pollutant Reduction Estimator or an alternate method agreed to by the Steering Committee
- Wetland Restoration for Pollutant Reduction: Estimation via outflow monitoring or other methods agreed to by the Steering Committee
- In-lake internal loading treatment: Internal loading analysis

Some proposed activities, such as habitat restoration or land protection, will not be able to be analyzed for pollutant reductions. In those cases, it will take a discussion of the proposed project's merits and the opportunity it offers to address issues and meet the goals and outcomes of this Plan to determine if WBIFs are warranted during that fiscal year.

When possible, proposed projects that meet the gatekeeper criteria, should be scored using the targeting criteria and scoring matrix (Appendix C). Resulting scores for projects, such as best management practices in urban and agricultural areas, will be used as guidance by the Steering Committee to compare and contrast various projects being considered for inclusion in the annual work plan. Components of the targeting criteria and scoring matrix include:

- Cost benefit
- Proximity to stream or river
- Reduction of total phosphorus in highest priority lakes on Minnesota's Lake Phosphorus Sensitivity Significance List
- Multiple benefits such as groundwater protection, flood reduction, habitat improvements, and educational opportunities
- Project readiness and urgency
- Partnerships and funding leveraged

Barr Footer: ArcGIS 10.8.1, 2022-09-27 17:19 File: I:\Projects\23\13\1011\Maps\Reports\1W1P_2022Update\Figure 5-2 Regionally Significant Rivers and Streams.mxd User: mbs2

Kanabec County
Pine County
Kanabec County
Isanti County
Pine County
Chisago County
Rock Creek
Rush Creek
Goose Creek
Burnett County
Polk County
Chisago County
Isanti County
Sunrise River, North Branch
Sunrise River
Isanti County
Anoka County
Sunrise River, West Branch
Lawrence Creek
Sunrise River, South Branch
Chisago County
Washington County
WISCONSIN
Anoka County
Washington County
Polk County
St Croix County
Anoka County
Hennepin County
Anoka County
Ramsey County
Brown's Creek
Ramsey County
Hennepin County
Ramsey County
Washington County
Valley Creek
Kelle's Creek
Trout Brook
St Cr
Pier
Dakota County
Washington County
Hennepin County
Scott County
Dakota County

Lower St. Croix Watershed
Regionally Significant Rivers and Streams for Priority Locations 2 and 14 (Tables 5-1 and 5-2)
Regionally Significant Small Unnamed Streams Priority Locations 2 and 14 (Tables 5-1 and 5-2)
PWI Watercourse
Lake, Pond or Reservoir
County Boundary

N

0 5
Miles

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REGIONALLY SIGNIFICANT RIVERS AND STREAMS

FIGURE 5-2