

Wisconsin Department of Natural Resources SWIMS Project Summary

General Project Information

Project ID: NKE33

Name: Lake St. Croix Nutrient Total Maximum Daily Load - Nine Key Element Plan

Type: Water Quality Planning

Subtype: Nine Key Element Plan

Status: ACTIVE

Start Date: 10/1/2017

End Date: 12/31/2025

Purpose: The St. Croix River, its tributary streams and rivers, and Lake St. Croix are highly valued resources that provide exceptional recreational opportunities and support diverse wildlife in and out of the water. However, over the years eutrophication, or nutrient enrichment, has occurred in Lake St. Croix due to increasing amounts of phosphorus entering the lake from the watershed. The elevated level of phosphorus in Lake St. Croix results in algae blooms which diminish the enjoyment and use of the lake and impact the ecologic integrity. Elevated phosphorus levels not only impact Lake St. Croix, but also impact tributary streams, rivers, and lakes throughout the watershed. While progress has been made in recent years to understand and reduce the amount of phosphorus finding its way into streams and lakes, much work remains.

Objective: Lake St. Croix was first listed on both the Minnesota and the Wisconsin 2008 303(d) Impaired Waters List due to eutrophication (excess phosphorus). A TMDL for phosphorus in Lake St. Croix was developed through a collaborative effort among the Minnesota Pollution Control Agency (MPCA), Wisconsin Department of Natural Resources (WDNR) and the Basin Team. The Lake St. Croix Nutrient TMDL has undergone public notice, review and comment and agency approval (approved by EPA in August, 2012).

Comments:

Outcome: This Implementation Plan represents an important step in the improvement of Lake St. Croix, and the entire St. Croix River Basin, by establishing a path forward for achieving the needed reduction in the loading of phosphorus from the watershed.

The Implementation Plan has been developed to meet the Lake St. Croix Nutrient Total Maximum Daily Load (TMDL). Section 303(d) of the federal Clean Water Act and EPA's Water Quality Planning and Management Regulations (40 CFR Part 130) require states to develop TMDLs for water bodies that are not meeting water quality standards. The TMDL process establishes the allowable loading of pollutants for a water body based on the relationship between pollution sources and conditions in the water body. By following the TMDL process, states can establish water quality-based controls to reduce pollution and restore and maintain the quality of their water resources.

Study Design:

QA Measures:

People

Name	Role	Status	Start Date	End Date	Organization	Comments
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Project Statuses

Date	Reported By	Status	Comments
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Actions

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Action	Detailed Description	Start Date	End Date	Status
Nine Key Element Plan	Lake St. Croix Nutrient Total Maximum Daily Load Nine Key Element Plan - The St. Croix River, its tributary streams and rivers, and Lake St. Croix are highly valued resources that provide exceptional recreational opportunities and support diverse wildlife in and out of the water. However, over the years eutrophication, or nutrient enrichment, has occurred in Lake St. Croix due to increasing amounts of phosphorus entering the lake from the watershed. The elevated level of phosphorus in Lake St. Croix results in algae blooms which diminish the enjoyment and use of the lake and impact the ecologic integrity. Elevated phosphorus levels not only impact Lake St. Croix, but also impact tributary streams, rivers, and lakes throughout the watershed. While progress has been made in recent years to understand and reduce the amount of phosphorus finding its way into streams and lakes, much work remains.	10/1/2017	12/31/2025	IN_PROGRESS

Details: Parameter	Value/Amount	Units	Comments
Total Nitrogen			
Total Phosphorus			
Total Suspended Solids			

Nine Key Element Plan	Lake St. Croix Nutrient Total Maximum Daily Load Nine Key Element Plan - The St. Croix River, its tributary streams and rivers, and Lake St. Croix are highly valued resources that provide exceptional recreational opportunities and support diverse wildlife in and out of the water. However, over the years eutrophication, or nutrient enrichment, has occurred in Lake St. Croix due to increasing amounts of phosphorus entering the lake from the watershed. The elevated level of phosphorus in Lake St. Croix results in algae blooms which diminish the enjoyment and use of the lake and impact the ecologic integrity. Elevated phosphorus levels not only impact Lake St. Croix, but also impact tributary streams, rivers, and lakes throughout the watershed. While progress has been made in recent years to understand and reduce the amount of phosphorus finding its way into streams and lakes, much work remains.	10/1/2017	12/31/2025	IN_PROGRESS
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Details: Parameter	Value/Amount	Units	Comments
BMP Implementation			
Degraded Biological Community			
I & E Activities			
Permit Modification			
Report Writeup			
Total Nitrogen			
Total Phosphorus			

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Details: Parameter	Value/Amount	Units	Comments
Total Suspended Solids			
Watershed Outreach, Planning			

Monitoring Stations

Station ID	Name	Comments
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Assessment Units

WBIC	Segment	Local Name	Official Name
2601400	1	St Croix River	Saint Croix River
2601500	1	St. Croix Lake	Lake Saint Croix

Lab Account Codes

Account Code	Description	Start Date	End Date
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Forms

Form Code	Form Name
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Methods

Method Code	Method Description
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Fieldwork Events

Start Date	Status	Field ID	Station ID	Station Name
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Documents

Title	Description	Author	Published	Comments
Lake St. Croix TMDL Implementation Plan - 2015	The St. Croix River, its tributary streams and rivers, and Lake St. Croix are highly valued resources that provide exceptional recreational opportunities and support diverse wildlife in and out of the water. However, over the years eutrophication, or nutrient enrichment, has occurred in Lake St. Croix due to increasing amounts of phosphorus entering the lake from the watershed. The elevated level of phosphorus in Lake St. Croix results in algae blooms which diminish the enjoyment and use of the lake and impact the ecologic integrity. Elevated phosphorus levels not only impact Lake St. Croix, but also impact tributary streams, rivers, and lakes throughout the watershed. While progress has been made in recent years to understand and reduce the amount of phosphorus finding its way into streams and lakes, much work remains.		1/1/2015	

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	essential components of a watershed based plan to restore and protect Lake St. Croix and its tributary streams from the impacts of excessive phosphorus loadings.			
Lake St. Croix TMDL implementation Plan - 9 element plan- addendum	Addendum to Lake St. Croix TMDL implementation plan	St. Croix Basin Water Resources Planning Team	6/1/2014	

Budget

Combined Budgets:

Combined WSLH:

Combined Total: \$0.00

Funding

Organization	Source	Type	Amount	Start Date	End Date
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