Wisconsin Department of Natural Resources
SWIMS Project Summary

General Project Information

Project ID: NKE35

Name: A Water Quality Strategy for the Land and Waters of the Red Cedar River Basin - Nine Key Element Plan

Type: Water Quality Planning

Subtype: Nine Key Element Plan

Status: ACTIVE

Start Date: 7/1/2015

End Date: 12/31/2026

Purpose: The Red Cedar River Watershed covers most of Barron and Dunn Counties, and parts of several others.1,900 square miles includes many smaller sub watersheds. A nine key element plan is in development in 2018. Because the Total Maximum Daily Load (TMDL) for the Red Cedar River watershed (HUC 07050007) was written specifically for Lakes Tainter and Menomin near the bottom of the watershed, this strategy will focus on the portion of the entire Red Cedar River watershed that drains to these two lakes. https://fyi.uwex.edu/redcedar/files/2017/08/150312RedCedarConfImpPlan.pdf

Objective: In 2012 a TMDL was approved for Tainter and Menomin Lakes and the Red Cedar River that recommends a 65 percent reduction in phosphorus inputs to the lakes. Tainter Lake and Lake Menomin are hypereutrophic and experience severe summer algae blooms and very poor water clarity. Recreational use of both lakes during the summer is greatly limited by poor water quality. Blue green algae were found in abundance in both lakes during surveys conducted in 2004 and 2005. Lakes in the ecoregion are typically eutrophic and have summer total phosphorus concentrations greater than 50 µg/L.

Comments:

Outcome: Through regulations as well as modifications installed at many of these point sources, phosphorus from these discharges declined to an average of 12,900 lbs/yr during the period 2010-2014. Prior to the adoption of the TMDL, individual permits on these facilities would have authorized increases over time up to about 29,000 lbs/yr. The goal for point source load to Tainter Lake is set at 20,100 lbs/yr.

Study Design:

QA Measures:

People

Name	Role	Status	Start Date	End Date	Organization	Comments
Barron Co. Soil & Water Conser	TEAM_MEMBER	ACTIVE	7/1/2015	12/31/2026	Barron Co. Soil & Water Conservation	
City of Menomonie,	TEAM_MEMBER	ACTIVE	7/1/2015	12/31/2026	City of Menomonie	
Desair Lake Restoration, Inc.,	TEAM_MEMBER	ACTIVE	7/1/2015	12/31/2026	Desair Lake Restoration, Inc.	
Dunn County Land Conservation	TEAM_MEMBER	ACTIVE	7/1/2015	12/31/2026	Dunn County Land Conservation Department	
Helmuth, Lisa D	COORDINATOR	INACTIVE	7/1/2015	12/31/2026	Wisconsin DNR	
Tainter/Menomin Lake Improveme	TEAM_MEMBER	ACTIVE	7/1/2015	12/31/2026	Tainter/Menomin Lake Improvement Association	
UW-Stout Biology Dept.,	TEAM_MEMBER	ACTIVE	7/1/2015	12/31/2026	UW-Stout Biology Dept.	
UWEX,	TEAM_MEMBER	ACTIVE	7/1/2015	12/31/2026	University of Wisconsin-Cooperative Extension	
WEST WISCONSIN LAND TRUST,	TEAM_MEMBER	ACTIVE	7/1/2015	12/31/2026	WEST WISCONSIN LAND TRUST	

Project Statuses

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Date	Reported By	Status	Comments
3/19/2018	Lisa Helmuth	Active	Nine Key Element Plan to implement the Phosphorus Total Maximum Daily Loads (TMDLs) Tainter Lake and Lake Menomin, Dunn County, Wisconsin.

Actions

Action	Detailed Description	Start Date	End Date	Status
Water Quality Planning	A Plan for Water Quality Improvement in the Red Cedar River Nine Key Element Plan	7/1/2015	12/31/2026	IN_PROGRESS

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

Action	Detailed Description	Start Date	End Date	Status
Nine Key Element Plan	The TMDL recommends a 65 percent reduction in phosphorus inputs to the lakes.	7/1/2015	12/31/2026	IN_PROGRESS

Details:	Parameter	Value/Amount	Units	Comments
	BMP Implementation	Y	Y/N	
	I & E Activities	Y	Y/N	
	PCBs			
	Permit Modification			
	Products Developed: Stormwater Plan			
	Report Writeup	Y	Y/N	
	Stormwater Goals Addressed: Reduce TSS			
	Streambank & Shoreline Protection: Pollutant load reduction			
	Total Nitrogen	Y	Y/N	
	Total Phosphorus	Y	Y/N	
	Total Suspended Solids	Y	Y/N	
	Watershed Outreach, Planning			

Monitoring Stations

Station ID	Name	Comments

Assessment Units

WBIC	Segment	Local Name	Official Name
2063500	1	Red Cedar River	Red Cedar River

Lab Account Codes

Account Code	Description	Start Date	End Date

Forms

Form Code	Form Name

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Methods

Method Code	Method Description

Fieldwork Events

Start Date	Status	Field ID	Station ID	Station Name

Documents

Title	Description	Author	Published	Comments
A Plan for Water Quality Improvement in the Red Cedar River Watershed Presentation	https://fyi.uwex.edu/redcedar/files/2017/08/150312RedCedarConfImpPlan.pdf	Dan Zerr	4/12/2018	
A Water Quality Strategy for the Land and Waters of the Red Cedar River Basin	https://dnr.wi.gov/topic/nonpoint/documents/9kep/RedCedar-Plan.pdf	Red Cedar River Water Quality Partnership	7/1/2015	
Paleoecological Study of Tainter Lake, Dunn County	PUB-SS-1075 2010. In order to understand water quality changes in Tainter Lake, three sediment cores were taken from different areas in the lake. The core from the main basin was used to estimate changes that have occurred in the general lake basin. Cores were also collected near the inlets of the Red Cedar and Hay rivers to estimate the contribution from each of the rivers. Since the cores were collected in 1995 and 1997, their information does not include any changes that have occurred in the last 13 years.	Paul Garrison	12/1/2010	
Tainter and Menomin Lakes TMDL EPA Decision Document		USEPA	9/14/2012	
Tainter and Menomin Lakes Total Phosphorus TMDL		WDNR	5/31/2012	

Budget

Combined Budgets:

Combined WSLH:

Combined Total: $0.00

Funding

Organization	Source	Type	Amount	Start Date	End Date