Wisconsin Department of Natural Resources
SWIMS Project Summary

General Project Information

Project ID: NKE54

Name: Lake Winnebago East PWS Plan - Nine Key Element Plan

Type: Water Quality Planning

Subtype: Priority Watershed Plan

Status: COMPLETE

Start Date: 1/1/1994

End Date: 12/31/2014

Purpose: Lake Winnebago is a highly eutrophic lake caused to a large degree from excessive nutrient and sediment loading from urban and rural nonpoint sources. Excessive algal growth have reduced sunlight penetration which negatively impacts rooted aquatic plants. The loss of those plants further impacts other forms of life dependent upon them including aquatic insects, fish, waterfowl and other wildlife. The present lake habitat favors an unbalanced fish community and reduces fish diversity.

Serious nitrate contamination of groundwater is not a widespread problem in the Lake Winnebago East Watershed. Well water samples obtained as part of the rural land use inventory and other well water sampling studies do reveal however, that groundwater is being contaminated from nitrogen-containing materials in 27-42% of the samples obtained. Fecal coliform bacteria have also been detected in 25% of well water samples from certain areas of the watershed.

The Lake Winnebago East Priority Watershed Project plan assesses the nonpoint sources of pollution in the Lake Winnebago East Watershed and guides the implementation of nonpoint source control measures. These control measures are needed to meet specific water resource objectives for Lake Winnebago and its tributaries. The purpose of this project is to reduce the amount of pollutants originating from nonpoint sources that reach surface water and groundwater within the Lake Winnebago East Priority Watershed Project area.

Objective: The primary objective of the project is to reduce nonpoint source pollution to the surface water and groundwater, and to enhance and protect the water quality of streams in the Lake Winnebago East Watershed.

Comments:

Outcome: To improve water quality in Lake Winnebago and the tributary streams, this plan calls for:

1) A 50% reduction in the sediment reaching Lake Winnebago

2) A 50-70% reduction in nonpoint source phosphorus loading to the watershed streams is needed to reduce the nutrients which cause excessive weed and algae growth in Lake Winnebago

3) For the City of Fond du Lac, urban nonpoint source reduction level targets have been established:
a. A 50% reduction in the sediment reaching Lake Winnebago,
b. A 0-60% reduction of the 1990 heavy metal load (as measured in zinc or copper) to reduce the potential of violating the state water quality standards in the stormwater from existing urban areas (the percent reduction varies for each stormwater drainage basin),
c. A 45-60% reduction in the heavy metal load (as measured in zinc or copper) from the City's planned urban growth area to reduce the potential of violating the state water quality standards in this stormwater.

Study Design: http://dnr.wi.gov/topic/nonpoint/documents/9kep/expired/LakeWinnebagoEast.pdf

QA Measures:

People

Name	Role	Status	Start Date	End Date	Organization	Comments

Project Statuses

Date	Reported By	Status	Comments

Actions

Wisconsin Department of Natural Resources
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Action	Detailed Description	Start Date	End Date	Status
Nine Key Element Plan	Lake Winnebago East PWS Plan - Nine Key Element Plan - The Lake Winnebago East Priority Watershed Project plan assesses the nonpoint sources of pollution in the Lake Winnebago East Watershed and guides the implementation of nonpoint source control measures. These control measures are needed to meet specific water resource objectives for Lake Winnebago and its tributaries. The purpose of this project is to reduce the amount of pollutants originating from nonpoint sources that reach surface water and groundwater within the Lake Winnebago East Priority Watershed Project area.	1/1/1994	12/31/2014	COMPLETE

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

Monitoring Stations

Station ID	Name	Comments

Assessment Units

WBIC	Segment	Local Name	Official Name
131100	1	Lake Winnebago	Lake Winnebago

Lab Account Codes

Account Code	Description	Start Date	End Date

Forms

Form Code	Form Name

Methods

Method Code	Method Description

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Fieldwork Events

Start Date	Status	Field ID	Station ID	Station Name

Documents

Title	Description	Author	Published	Comments
Nonpoint Source Control Plan for the Lake Winnebago East Priority Watershed Project	The Lake Winnebago East Priority Watershed Project plan assesses the nonpoint sources of pollution in the Lake Winnebago East Watershed and guides the implementation of nonpoint source control measures. These control measures are needed to meet specific water resource objectives for Lake Winnebago and its tributaries. The purpose of this project is to reduce the amount of pollutants originating from nonpoint sources that reach surface water and groundwater within the Lake Winnebago East Priority Watershed Project area.https://dnr.wi.gov/topic/nonpoint/documents/9kep/expired/LakeWinnebagoEast.pdf		1/1/1994	

Budget

Combined Budgets:

Combined WSLH:

Combined Total: $0.00

Funding

Organization	Source	Type	Amount	Start Date	End Date