

Wisconsin Department of Natural Resources
SWIMS Project Summary

General Project Information

Project ID: Jump River and Main Creek

Name: Jump River and Main Creek

Type: TMDL/303d Projects

Subtype: Refine Load Estimates

Status: COMPLETE

Start Date: 2/8/2008

End Date: 12/31/2008

Purpose: Jump River and Main Creek watersheds and implications for total phosphorus load reductions to the Jump River Embayment of the Holcombe Flowage

Objective: The Jump River Embayment of the Holcombe Flowage is located in Rusk and Chippewa Counties. The embayment is a 303d listed water due to high phosphorus concentrations and severe summer algae blooms. The Jump River and Main Creek watersheds provide the water and nutrient loading to the embayment. Monitoring by the U.S. Army Engineer Waterways Experiment Station (USAEWES) in 1995 and 1996 (James et al. 1998) documented the nutrient and sediment loads delivered to the embayment by these two streams. Both stream watersheds had an average total phosphorus (TP) export rate of 0.31 kilograms per hectare per year (kg/ha/yr).

Comments:

Outcome: Watersheds with more developed land usually require a higher level of monitoring effort to estimate TP export rates (Robertson and Roerish 1999). However, these are minimally developed subwatersheds where the magnitude of TP fluctuation is low and TPs tend to be poorly correlated with streamflow. Also, multiple subwatersheds have been simultaneously assessed and composited. This makes it likely that reasonable estimates of TP export rates have been obtained.

High groundwater TPs are undoubtedly one reason for the high TP export rates in these areas (see Groundwater Monitoring TP results below). Poor TP retention by some softwater wetlands might also be a contributing factor (see Dissolved Oxygen discussion below). An Ontario study in an undeveloped area of Precambrian bedrock (like this study area) found that watershed TP export increased with increasing watershed wetland percentage (Paterson, et al. 2006).

Study Design:

QA Measures:

People						
Name	Role	Status	Start Date	End Date	Organization	Comments
Roesler, Craig P	COORDINATOR	COMPLETE	2/8/2008	12/31/2099	Wisconsin DNR	

Project Statuses			
Date	Reported By	Status	Comments

Actions	
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Action	Detailed Description	Start Date	End Date	Status
Monitor Targeted Area	September 2005 through September 2006. The Jump River Embayment of the Holcombe Flowage is located in Rusk and Chippewa Counties. The embayment is a 303d listed water due to high phosphorus concentrations and severe summer algae blooms. The Jump River and Main Creek watersheds provide the water and nutrient loading to the embayment. Monitoring by the U.S. Army Engineer Waterways Experiment Station (USAEWES) in 1995 and 1996 (James et al. 1998) documented the nutrient and sediment loads delivered to the embayment by these two streams. Both stream watersheds had an average total phosphorus (TP) export rate of 0.31 kilograms per hectare per year (kg/ha/yr).	9/1/2005	9/1/2006	COMPLETE

Monitoring Stations

Station ID	Name	Comments
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Assessment Units

WBIC	Segment	Local Name	Official Name
2187000	1	Jump River (Lower Main Stem)	Jump River

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
Jump River and Main Creek Final Report	Final Report for Jump River and Main Creek Special Project (303d waters)	Roesler, Craig	2/1/2007	

Budget

Combined Budgets:

Combined WSLH:

Combined Total: \$0.00

Funding

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Organization	Source	Type	Amount	Start Date	End Date
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