

Wisconsin Department of Natural Resources SWIMS Project Summary

General Project Information

Project ID: LPL-599
Name: CITY OF EAU CLAIRE: Half Moon Lake Assessment - Task One
Type: Lakes Grant
Subtype: Large Scale Lake Planning
Status: COMPLETE
Start Date: 04/01/1999
End Date: 12/31/2000
Purpose: The City of Eau Claire proposes to examine the water quality and nutrient budget of Half Moon Lake. Task One project activities include: 1) storm sewer gaging, 2) stormwater sampling, 3) lake outflow gaging, 4) outflow sampling, and 5) construction of hydrologic and nutrient loading budgets. The Department of Natural Resources will be provided with both a paper copy and an electronic copy of the final report. The project results will be made available to the public through radio, television and newspaper articles, through public meetings, through presentations to community groups, and through a special mailing of the final report.
Objective:
Comments:
Outcome:
Study Design:
QA Measures:

People

Name	Role	Status	Start Date	End Date	Organization	Comments
City of Eau Claire,	GRANT_RECIP	ACTIVE	04/01/1999	12/31/2000	City of Eau Claire	

Project Statuses

Date	Reported By	Status	Comments
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Actions

Action	Detailed Description	Start	End Date	Status
Grant Awarded	The City of Eau Claire proposes to examine the water quality and nutrient budget of Half Moon Lake. Task One project activities include: 1) storm sewer gaging, 2) stormwater sampling, 3) lake outflow gaging, 4) outflow sampling, and 5) construction of hydrologic and nutrient loading budgets. The Department of Natural Resources will be provided with both a paper copy and an electronic copy of the final report. The project results will be made available to the public through radio, television and newspaper articles, through public meetings, through presentations to community groups, and through a special mailing of the final report.	04/01/1999		COMPLETE
Informational Meetings		04/01/1999	12/31/2000	PROPOSED
Issue News/Media Release		04/01/1999	12/31/2000	PROPOSED
Nutrient Budget Development	10100484	04/01/1999		PROPOSED

Monitoring Stations

Station ID	Name	Comments
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Assessment Units

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WBIC	Segment	Local Name	Official Name
2125400	1	Half Moon Lake	Halfmoon Lake

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	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
HALF MOON LAKE ASSESSMENT - TASK ONE Phosphorus Budget and Management Strategies for an Urban Wisconsin Lake [2002 Research Paper]	Lakes Planning Report	Grant Recipient	12/31/2000	
	Multiple external and internal phosphorus (P) sources to an urban lake, Half Moon Lake in Wisconsin, were examined during the summer of 1999 in order to develop management strategies for effective P control and reversal of eutrophication (Trophic State Index=74). Internal recycling of P accounted for 80% of the summer P budget of the lake. Flux of P from the sediment accounted for most of the internal P loading (42% of total budget). However, decomposition of Potamogeton crispus and recycling of macrophyte P during the middle of the summer growing season, and P resuspension due to motor boat activity, accounted for 20% and 17% of the P budget, respectively, representing additional important sources to be controlled. In contrast, summer P loading via the watershed (storm sewers and precipitation) was much less. Using a water quality model (Bath tub), we found that reduction of internal P sources could substantially reduce by greater than 70% the high concentrations of algae in the lake (mean summer chlorophyll = 82 mg μ m ³). Suggested internal P control measures included a sediment chemical treatment to bind P, greater harvesting of P. crispus to reduce the macrophyte P pool at the time of senescence, and limiting motor boat activity when the lake is weakly stratified.	William F. James, John W. Barko, Harry L. Eakin (U.S. Army Engineers) & Patrick W. Sorge (WDNR)	01/01/2002	

Budget

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Combined Budgets:

Combined SLOH:

Combined Total:

Funding

Organization	Source	Type	Amount	Start Date	End Date
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