

Wisconsin Department of Natural Resources SWIMS Project Summary

General Project Information

Project ID: NOR_13_CMP13

Name: 2,4-D sediment sampling in conjunction with sediment pore water sampling on two herbicide treatment lakes - Little St. Germain Lake

Type: Lake Water Quality Monitoring

Subtype: Lake Research and Special Projects

Status: COMPLETE

Start Date: 3/12/2012

End Date: 6/30/2012

Purpose: Sediment pore water samples were collected on Little St. Germain Lake last year. The only sampling period where 2, 4-d concentrations were elevated was within the 12 days after treatment sampling period. All of the other sampling periods (pre treatment and post 56 days treatment) had low levels of 2,4-d. The purpose of this study is to do more intensive sampling of the sediment pore water and the sediment itself right after a herbicide treatment.

Objective: We are trying to determine the fate or how long 2,4-D remains in the environment right after granular herbicide application. We will intensively sample the sediment pore water and the sediment on two lakes that have had a history of 2,4-D herbicide application (including upcoming season). Sediment and pore water samples will be collected 2, 4, 6 and 8 days post treatment. Sediment pore water (2,4-D Immuno-assay) will be analysed by the US ARMY CORP under the CRADA agreement. Sediment samples will be analysed by the SLOH for Total 2,4-D, 2,4-d Acid and 2,4-D Ester.

Comments: Is this a New or Continuing project?
Both

Outcome: We will learn how long 2,4-D remains in the sediment and sediment pore water in the first 8 days after treatment. If 2,4-D concentrations remain high in the lake sediments after 8 days, we will implement another field study in the late summer fall (See other proposed 2,4-d sampling project).

Study Design: Sites TBD. Two lakes will be selected (Little St. Germain Lake plus one more yet to be determined) that have had a history of 2,4-D herbicide treatment. Three sediment pore water samplers will be placed at each herbicide treatment site in each of the two lakes. Pore water samplers will be set the day of treatment and sampled and re-deployed on day 2, 4, 6 and 8 after treatment. A sediment sample will also be collected on the same days using an ekman dredge or core tube. If using an ekman dredge, 3 samples will be collected and composited into one sample. Samples will be collected by scuba diving.

QA Measures:

People

Name	Role	Status	Start Date	End Date	Organization	Comments
Gauthier, Kevin J	TEAM_MEMBER	COMPLETE	3/12/2012	6/30/2012	Wisconsin DNR	
Kreitlow, James D	PROJECT_LEADER	COMPLETE	3/12/2012	6/30/2012	Wisconsin DNR	

Project Statuses

Date	Reported By	Status	Comments
3/20/2012	James Kreitlow	Proposed	
7/5/2012	MOLLI MACDONALD	Active	Not sure what is going on with this project. Left message with Kreitlow. Possibly this project was just for the month of June 2012?
8/23/2012	James Kreitlow	Progress: 75-100% Complete	Field work completed. waiting for pore water results from Army Corp. Sediment samples are being analysed at SLOH. Once I get all the data a final report will be written providing conclusions or summary of the two years of monitoring.
9/13/2013	James Kreitlow	Complete	
8/18/2014	RUTH PERSON	Complete	Continued as project NOR_21_CMP13B

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Actions				
Action	Detailed Description	Start Date	End Date	Status
Monitor Water Quality or Sediment	The purpose of this study is to do more intensive sampling of the sediment pore water and the sediment itself right after a herbicide treatment.	3/12/2012	6/30/2012	COMPLETE
APM Chemical Permit Request	The purpose of this study is to do more intensive sampling of the sediment pore water and the sediment itself right after a herbicide treatment.	3/12/2012	6/30/2012	COMPLETE

Details: Parameter	Value/Amount	Units	Comments
24D Granular, # Acres			
24D Granular, # Pounds			
24D Liquid, # Acres			
24D Liquid, # Pounds			
Aquashade, # Acres			
Aquashade, # Pounds			
Biological, # Pounds			
Biologicals, # Acres			
Copper Granular, # Acres			
Copper Granular, # Pounds			
Copper Liquid, # Acres			
Copper Liquid, # Gallons			
Cutrine +, # Acres			
Cutrine +, # Gallons			
Cutrine, # Acres			
Cutrine, # Gallons			
Diquat, # Acres			
Diquat, # Pounds			
Endothall Granular, # Acres			
Endothall Granular, # Pounds			
Endothall Liquid, # Acres			
Endothall Liquid, # Pounds			
Floridone Granular, # Acres			
Floridone Granular, # Pounds			
Floridone Liquid, # Acres			
Floridone Liquid, # Pounds			
Glyphosate, # Acres			
Glyphosate, # Pounds			
Herbicide Treatment and Water Use Restriction Signs Posted in Accordance with NR 107?			
Nautique, # Acres			
Nautique, # Gallons			

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Details: Parameter	Value/Amount	Units	Comments
Navigate, # Acres			
Navigate, # Pounds			
Onsite Supervision Present?			
Reward, # Acres			
Reward, # Gallons			
Rodeo, # Acres			
Rodeo, # Gallons			

Monitoring Stations

Station ID	Name	Comments
10037222	LSG-SED.1(Little Saint Germain Lake)	
10037223	LSG-SED.2 (Little Saint Germain Lake)	
10037224	LSG-SED.3 (Little Saint Germain Lake)	
10037225	LSG-Sed.4 (Little Saint Germain Lake)	
10037386	Little St. Germain Lake sediment sampling (5/2012)	

Assessment Units

WBIC	Segment	Local Name	Official Name
1596300	1	Little Saint Germain Lake West Lobe	Little Saint Germain Lake

Lab Account Codes

Account Code	Description	Start Date	End Date
WT092	RIVERS LONG TERM TREND NETWORK	5/17/2007	6/30/2014

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
5/21/2012 10:00	COMPLETE		10037386	Little St. Germain Lake sediment sampling (5/2012)
5/23/2012 10:00	COMPLETE		10037386	Little St. Germain Lake sediment sampling (5/2012)
5/25/2012 10:00	COMPLETE		10037386	Little St. Germain Lake sediment sampling (5/2012)
5/27/2012 10:00	COMPLETE		10037386	Little St. Germain Lake sediment sampling (5/2012)

Documents

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Title	Description	Author	Published	Comments
Little St. Germain Lake Sediment Pore water sampling 2011-2012 Presentation	Little St. Germain Lake Sediment Pore Water Sampling for Herbicide Residue. Presentation to summarize work conducted in 2011-2012 and planned work in 2013.	James Kreitlow	3/5/2013	

Budget			
Budget Description: 2,4-D sediment sampling (pore water and sediment)		Start Date: 3/16/2012	End Date: 6/30/2012

Code	Description	Quantity	Units	Unit Cost	Total Cost	Comments
FTE	FTE Hours	80	Hours	\$0.00	\$0.00	
LTE SAL	LTE Salary	40	Hours	\$13.00	\$520.00	
LTE FR	LTE Fringe				\$128.44	
LTE IND	LTE Indirect				\$104.85	
LTE TOT	LTE Total Cost				\$753.29	
SUPPLY	Supplies	1		\$300.00	\$300.00	
EQUIP	Equipment				\$0.00	
MILEAGE	Mileage	800	Miles	\$0.72	\$576.00	
MEAL	Meals	24	Meals	\$9.00	\$216.00	
LODGE	Lodging				\$0.00	
TRAVEL	Travel Total				\$792.00	
BUG	Bug Contracts				\$0.00	
OTHER	Other Contracts	10		\$350.00	\$3,500.00	SLOH sediment 2,4-d analysis
USGS	USGS Costs				\$0.00	
TOTAL	Total Cost (excludes SLOH)				\$5,345.29	SLOH costs need to be determined for 10 sediment samples.Approximate cost \$3,500.

Test Code	Description	Test Group	# Planned	Unit Cost	Total Cost
I495ELT	PARTICLE SIZE (UW-EXT SOILS LAB; NON-CERTIFIED)	INORGANIC CHEMISTRY	10	\$51.84	\$518.40

Total WSLH Lab Costs: \$518.40

Total Budget: \$5,863.69

Combined Budgets: \$5,345.29

Combined WSLH: \$518.40

Combined Total: \$5,863.69

Funding					
Organization	Source	Type	Amount	Start Date	End Date