

Wisconsin Department of Natural Resources SWIMS Project Summary

General Project Information

Project ID: CO_01_CMP11

Name: Statewide Blue Green Algae Toxins 2010-2011

Type: Targeted Monitoring

Subtype: Newly Proposed

Status: INACTIVE

Start Date: 07/01/2010

End Date: 06/30/2011

Purpose: This project supports the issue of Blue Green Algae Toxins in Wisconsin Waters. We currently lack information about the frequency and spatial extent of toxic blue-green algae blooms and conditions that lead to the production of toxins. In addition the Department of Health Services (DHS) has obtained a 5 year grant to gather information and document illnesses and deaths of animals and humans into a CDC database. There is 4/3 years remaining on their grant. This project would support their activities and allow our field staff to 1 to 4 target lake samples in their region that have a history of blue green blooms, so we can learn more about when toxins exist at levels that may impact people and/or animals, before or as these incidents occur.

Objective:

1. Analyze up to 30 - 120 water samples around the state in response to reports of potential toxic algae blooms on undocumented waters for the presence of Blue Green Algae species and subsequent toxin analysis if warranted with a rapid assessment tool. The screening lab analysis will be conducted by a seasonal LTE Staff Member or Field Staff and the toxin samples taken and sent to the State Lab based on an approve of DHS.
2. Hold and distribute as needed DHS test kits for Blue Green Algae incidents of animals or human suspected exposure.
3. Purchase 6 sets of Field Tests and 6 standards kits for Microcystin LR Toxins one for each DNR Region and one for the central office for evaluation of usefulness as a rapid assessment tool.

Comments: Currently this issue was identified by the public as a high priority during the Triennial Standards Review, and is being used as the basis for proposed phosphorus standards. The Assessment Methodology also identifies blue-green algae cell counts as a potential indicator of recreational use impairment.

Outcome: Project Category 4: New Projects
Implement a program to enhance the DNR staff's knowledge of when toxins exist, relative to other field measurements of water quality. This will help improve our prediction of when toxins may exist in the lakes.

Document of up to 5 - 30 new lakes statewide for the presence/absence of Blue Green Algae species with toxins.

Assist the Department of Health Services with their project to track and document illnesses and deaths of animals and humans due to exposure to algae toxins.

Submit statewide end of year monitoring data to SWIMS and report on Blue Green Algae toxin kits evaluation and lake studies to supervisors and Bureau Staff.

Study Design:

QA Measures:

People

Name	Role	Status	Start Date	End Date	Organization	Comments
Asplund, Timothy R	COORDINATOR	ACTIVE	07/01/2010	06/30/2011	Wisconsin DNR	
LaLiberte, Gina D	COORDINATOR	COMPLETE	07/01/2010	06/30/2011	Wisconsin DNR	
VENNIE III, JAMES G	COORDINATOR	INACTIVE	07/01/2010	06/30/2011	Wisconsin DNR	

Project Statuses

Date	Reported By	Status	Comments
03/05/2010	MOLLI MACDONALD	Proposed	
12/07/2010	MOLLI MACDONALD	Progress: 0-25% Complete	No stations or field work events. Need January status update.
02/01/2011	Timothy Asplund	Progress: 25-50% Complete	The Strip tests kits were purchased and distributed to our Regional Staff by end of July 2010. They were asked to use them on Blue Green waters and determine how useful they might be.

Jim Kreitlow - DNR, Rhinelander, did some tests and said he

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Date	Reported By	Status	Comments
			<p>would do a write up. He said that in the case of dense Bloom there was some problems with them. They were of more use in water that were less dense blooms.</p> <p>This project covered the travel cost and mailing cost of samples kits for Blue green bloom samples taken in conjunction with Department of Health Services based on reports of exposure. The lab cost and results went into SWIMMS from the State Lab. They paid for chemistry, ID of species of algae, toxin testing, and counts of numbers of BGA cells.</p> <p>The most activity occurred on Petenwell, Lake Camelot and Castle Rock followed by Lake Menomin, Tainter, and LONG LAKE.</p> <p>In the southern part; the Big Green Lake, Madison Lakes and Lake KEGONSA. The activity was lighter in 2010 than prior years. Many less beach closures due to BGA. This was due to cloud cover, wind mixing events, and zebra mussels in Lake Winnebago.</p>
07/12/2011	Timothy Asplund	Progress: 75-100% Complete	<p>James Vennie Feb 2011 Meetings with DHS staff were held in May to review 2010 results and plan for 2011 season. Gina LaLiberte took over from Jim Vennie as project coordinator and Statewide BGA specialist, and charged her time to this project for work completed through June 2011. Communication strategy, BGA website, and HAB response plan were all updated for 2011 season. Also responded to Natural Resources Board inquiry about an article linking BMAA in cyanobacteria to incidences of ALS-type diseases. Will be presenting to NRB at August meeting.</p>
01/11/2012	Gina LaLiberte	Progress: 75-100% Complete	<p>A summary of 2010 HAB data has been uploaded. Stations and field work events have been moved out of work table status or established as needed. A final report will be prepared when 2011 toxin results are ready, and will encompass the 2010-2011 sampling seasons.</p> <p>A total of 6 HAB samples were collected in 2010 (one in FY2010, five in FY2011). Two samples (Lake Kegonsa and a tributary to Castle Rock Lake) had cell counts in excess of WHO levels for likely adverse health effects, and toxin analysis revealed that these samples also contained microcystin-LR at detectable levels above the WHO standard for drinking water. All other toxins were not found at detectable levels in these and other samples.</p>
08/15/2012	Gina LaLiberte	Progress: 75-100% Complete	<p>This project has been continued into the 2012 algal bloom season. All 2011 data have been received and are being compiled into a final report for the 2011 season.</p>
10/11/2013	RUTH PERSON	Progress: 75-100% Complete	<p>This project was continued as CO_20_CMP13.</p>

Project Status Detail

Answer Set: DEFAULT

Question	Answer
1. Number of Sample Sites (Enter the station IDs if you know them).	5 -30
2. Number of Sample Events (Indicate how many trips into the	30

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Question	Answer
field you anticipate for this project).	
3. Proposed Dates for Sample Collection	jul-oct,2010 jun 2011
4. List applicable databases and who will enter data?	swims regional staff
5. Did you receive competitive projects funding in the previous year?	No
6. If yes to question 5, did you complete the projects including data entry and reports as necessary? If not, why not?	
7. Reviewer Notes: Identify questions or issues with project (use during review period)	
8. Reviewer Decision: Is this project recommended for funding?	

Actions

Action	Detailed Description	Start	End Date	Status
Monitor to Evaluate Projects	Lakes with Blue Green Blooms will be sampled with Test Kits and based on DHS approval or Toxins found in a field test will be collected and sent to the State Lab for Analysis	07/01/2010	06/30/2011	PROPOSED

Monitoring Stations

Station ID	Name	Comments
10034894	Green Lake -- Emerald Shores	
10031571	Harmful Bluegreen Algae sampling 2010 near Norwich Ct	
10031508	Lake Kegonsa SE side of lake	
10017496	Petenwell Lake - Wisconsin River -- Barnum Bay	
10031625	Unnamed Trib S of 18th Dr	

Assessment Units

WBIC	Segment	Local Name	Official Name
146100	1	Green Lake (Big Green)	Green Lake
802600	1	Lake Kegonsa	Lake Kegonsa
1346200	2	Unnamed Trib to Castle Rock Lake	Unnamed
1377100	1	Petenwell Flowage	Petenwell Lake
1378100	1	Lake Camelot, North Lobe	Camelot Lake
1378100	2	Camelot Lake, South Lobe	Camelot 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
2010 HAB Data Summary	A summary of data for: 1. occurrence of HAB taxa in 2010 samples; 2. algal cell densities in 2010 HAB samples and associated detected toxins; 3. complete toxin results for 2010 samples; 4. all HAB sample data summarized in one worksheet.	Gina LaLiberte	01/11/2012	
FY11 Activity Status	Download from WisMART showing expenses charged to WTIE	Tim Asplund	02/01/2011	

Budget

Budget Description: Budget for CO 01_11 - Statewide Blue Green Algae Toxins 2010 **Start Date:** 07/01/2010 **End Date:** 06/30/2011

Code	Description	Quantity	Units	Unit Cost	Total Cost	Comments
FTE	FTE Hours	1533	Hours	\$0.00	\$0.00	
LTE SAL	LTE Salary	300	Hours	\$13.00	\$3,900.00	
LTE FR	LTE Fringe				\$963.30	
LTE IND	LTE Indirect				\$786.40	
LTE TOT	LTE Total Cost				\$5,649.70	
SUPPLY	Supplies	5		\$100.00	\$500.00	\$100 per region
MILEAGE	Mileage		Miles	\$0.72	\$0.00	
MEAL	Meals		Meals	\$9.00	\$0.00	
LODGE	Lodging	1		\$2,000.00	\$2,000.00	Travel expenses - not detailed
TRAVEL	Travel Total				\$2,000.00	
BUG	Bug Contracts				\$0.00	
OTHER	Other Contracts	1		-\$2,000.00	-\$2,000.00	Subtraction of \$2000 from LTE wages
EQUIP	Equipment	1		\$4,000.00	\$4,000.00	6 kits microcystin 20 test and 6 standard kitys
USGS	USGS Costs				\$0.00	
TOTAL	Total Cost (excludes SLOH)				\$10,149.70	

Test Code	Description	Test Group	# Planned	Unit Cost	Total Cost
Total SLOH Lab Costs:				\$0.00	
Total Budget:				\$10,149.70	
Combined Budgets:				\$10,149.70	
Combined SLOH:				\$0.00	
Combined Total:				\$10,149.70	

Funding

Organization	Source	Type	Amount	Start Date	End Date
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