

## Wisconsin Department of Natural Resources SWIMS Project Summary

### General Project Information

<b>Project ID:</b>	NOR_13_CMP15
<b>Name:</b>	Additional Assessment and Planning for St. Croix Headwaters Lakes Proposed for 2014 Impaired Waters List - NOR_13
<b>Type:</b>	Competitive Projects
<b>Subtype:</b>	Impaired Water Assessment
<b>Status:</b>	PROPOSED
<b>Start Date:</b>	12/01/2013
<b>End Date:</b>	12/31/2015
<b>Purpose:</b>	This project will CONTINUE to build on substantial monitoring and planning efforts in the St. Croix Headwaters Watershed in Douglas and Bayfield Counties. Regional and research staff will work together and with local partners to further understand and assess the following lakes that exceed or may exceed TP thresholds: Upper, Middle, and Lower Eau Claire, George, and Pickerel. The results will be shared with the local community and watershed stakeholders for integration into action and implementation plans.
<b>Objective:</b>	<p>2015 UPDATE: this project does not seek new or additional funds but rather carries over unspent balances from the previously-funded project.</p> <p>The project will confirm whether the five lakes should be listed as impaired waters in 2014 and beyond. Specifically, we plan to collect paleolimnological information that will help us understand if the lakes are anthropogenically impaired and do a historical data review, including assessing hypolimnetic oxygen changes over the data record (estimated 30 years).</p> <p>2015 UPDATE: The project will continue water quality assessment work on lakes that "may exceed" impairment thresholds and complete delisting proposals for those lakes that should no longer be listed.</p> <p>Top/bottom paleo cores were collected at the deep hole on the five following lakes:  ~ Upper Eau Claire (2742700) 2015 UPDATE: this is a "may exceeds" lake for 2-story fishery TP and needs additional assessment work.  ~ Middle Eau Claire (2742100) 2015 UPDATE: not impaired. Write justification to for removal from impaired water list.  ~ Lower Eau Claire (2741600) 2015 UPDATE: not impaired. Write justification to for removal from impaired water list.  ~ Pickerel (2489200) 2015 UPDATE: not impaired. Write justification to NOT add to impaired list should it be suggested.  ~ George (2465700) 2015 UPDATE: this is a "may exceeds" lake for 2-story fishery TP and needs additional assessment work.</p> <p>The project also includes some outreach, planning, and capacity building in anticipation of management remedies that are focused on land use, with an emphasis on the riparian ring, since the watershed is heavily forested. 2015 UPDATE: the majority of the outreach and planning work will be completed via a 319 project.</p>
<b>Comments:</b>	This project is proposed for continuation (formerly project ID NOR_13_CMP14). This project continues ongoing watershed monitoring, assessment, and planning work that was previously WDNR lake protection grant- and federally-funded.
<b>Outcome:</b>	The project outcome is a better understanding of natural (i.e. pre-European settlement) conditions that can be shared with the local community and integrated into ongoing planning and implementation efforts.
<b>Study Design:</b>	<p>Project deliverables include: paleolimnological study reports, historical data assessment report, and planning/outreach summary.</p> <p>Research Scientist Paul Garrison collected a sediment core were taken from near the deep area of each of the five lakes using a gravity corer. Samples from the top of the core (0-1 cm) and a section (45-47 cm) deeper in the core will be kept for analysis. It is assumed that the upper sample represents present conditions while the deeper sample is indicative of water quality conditions at least 100 years ago. An LTE will analyze the cores for diatoms, and SLOH will analyze for Pb210. Garrison will complete reports for individual lakes and share the results at broader watershed- and community-based meetings.</p> <p>LTE Rachel Peacher will continue to analyze the lakes' water quality data record. There is a possibility additional monitoring will be completed on Upper Eau Claire Lake and George Lake. This monitoring may include bi-weekly temp/DO profiles and top and bottom TP samples.</p>
<b>QA Measures:</b>	

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### People

Name	Role	Status	Start Date	End Date	Organization	Comments
Garrison, Paul J	INVESTIGATOR	ACTIVE	12/01/2014	12/01/2016	Wisconsin DNR	
HAGEN, CHERIE L	SUPERVISOR	ACTIVE	12/01/2013	12/31/2015	Wisconsin DNR	
OLSON, FLORENCE A	OTHER	ACTIVE	12/01/2014	12/01/2016	Wisconsin DNR	
PEACHER, RACHEL D	OTHER	ACTIVE	06/01/2014	12/31/2015	Wisconsin DNR	LTE technical assistance
Toshner, Pamela J	PROJECT_LEAD	ACTIVE	12/01/2014	12/01/2016	Wisconsin DNR	

### Project Statuses

Date	Reported By	Status	Comments
01/07/2014	Pamela Toshner	Proposed	
06/11/2014	Pamela Toshner	Progress: 0-25% Co	
01/29/2015	RUTH PERSON	Proposed	Proposed for continuation.
01/29/2015	Pamela Toshner	Progress: 50-75% C	Paleo core work is completed and final reports will be available spring 2015. I am requesting continuation through the 2015 calendar year to complete additional water quality assessment work on lakes (i.e. Upper Eau Claire and George) that may exceed impairment thresholds and to complete de-listing (Lower and Middle Eau Claire) and don't-list (Pickerel) reports for those that are not impaired.

### Project Status Detail

Answer Set: DEFAULT

Question	Answer
1. Number of Sample Sites (Enter the station IDs if you know them).	2
2. Number of Sample Events (Indicate how many trips into the field you anticipate for this project).	2
3. Proposed Dates for Sample Collection	We haven't got this far yet.
4. List applicable databases and who will enter data?	SWIMS
5. Did you receive competitive projects funding in the previous year?	Yes
6. If yes to question 5, did you complete the projects including data entry and reports as necessary? If not, why not?	Yes
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 or Propose 303(d) Listing	Paleolimnological cores File review/data assessment	*****	12/01/2016	COMPLETE
Watershed Planning	Communicate results to local community for integration into existing planning and implementation efforts	*****	12/01/2016	IN_PROGRESS
Monitor or Propose 303(d) Listing	Assess data and complete reports justifying removal or addition to impaired waters list.	*****	12/31/2015	IN_PROGRESS

### Monitoring Stations

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<b>Station ID</b>	<b>Name</b>	<b>Comments</b>
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<b>Assessment Units</b>
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<b>WBIC</b>	<b>Segment</b>	<b>Local Name</b>	<b>Official Name</b>
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<b>Lab Account Codes</b>
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<b>Account Code</b>	<b>Description</b>	<b>Start Date</b>	<b>End Date</b>
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<b>Forms</b>
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<b>Form Code</b>	<b>Form Name</b>
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<b>Methods</b>
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<b>Method Code</b>	<b>Description</b>
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<b>Fieldwork Events</b>
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<b>Start Date</b>	<b>Status</b>	<b>Field ID</b>	<b>Station ID</b>	<b>Station Name</b>
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<b>Documents</b>
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<b>Title</b>	<b>Description</b>	<b>Author</b>	<b>Published</b>	<b>Comments</b>
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<b>Budget</b>
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<b>Budget Description:</b> Additional Assessment and Planning for St. Croix Headwaters Lakes Proposed for 2014 Impaired Waters List	<b>Start Date:</b> 07/01/2015	<b>End Date:</b> 12/31/2015
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<b>Code</b>	<b>Description</b>	<b>Quantity</b>	<b>Units</b>	<b>Unit Cost</b>	<b>Total Cost</b>	<b>Comments</b>
FTE	FTE Hours	80	Hours	\$0.00	\$0.00	
LTE SAL	LTE Salary	120	Hours	\$13.00	\$1,560.00	Data review, field assistance, and outreach/planning
LTE FR	LTE Fringe				\$385.32	
LTE IND	LTE Indirect				\$314.56	
LTE TOT	LTE Total Cost				\$2,259.88	
EQUIP	Equipment	1		\$1,000.00	\$1,000.00	Rugged field tablet
MILEAGE	Mileage	500	Miles	\$0.72	\$360.00	5 trips to watershed (100 miles/trip)
MEAL	Meals	5	Meals	\$9.00	\$45.00	
LODGE	Lodging				\$0.00	
TRAVEL	Travel Total				\$405.00	
BUG	Bug Contracts				\$0.00	
OTHER	Other Contracts			\$750.00	\$0.00	Potential SLOH - couldn't get the portal to work
USGS	USGS Costs				\$0.00	
<b>TOTAL</b>	<b>Total Cost (excludes SLOH)</b>				<b>\$3,664.88</b>	

<b>Test Code</b>	<b>Description</b>	<b>Test Group</b>	<b># Planned</b>	<b>Unit Cost</b>	<b>Total Cost</b>
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**Total SLOH Lab Costs:** \$0.00

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**Combined Budgets:** \$3,664.88

**Combined SLOH:** \$0.00

### Funding

Organization	Source	Type	Amount	Start Date	End Date
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