#### **General Project Information**

Project ID: NER\_08\_CMP13B

Name: Grand River 303(d) Assessment - NER\_08\_CMP13B

**Type:** Competitive Projects

Subtype: Impaired Water Assessment

Status: COMPLETE

**Start Date:** 1/1/2013 **End Date:** 12/31/2013

**Purpose:** This project proposes to monitor and assess the impacts of point and non-point discharges to the Grand River and determine

if the river meets the criteria for 2016 impaired waters listing. Samples collected in 2012 for WPDES phosphorus limits calculations (Project Id WCR\_13\_CMP13), and historic water quality data, indicates that Total Phosphorous (TP) well exceeds the listing threshold of 0.075 mg/L upstream of the Grand River Marsh. Samples were found to contain

concentrations of TP between 0.1 to 0.9 mg/L. Historical TP data for the stretch of stream below the Grand River Marsh and upstream of the Fox River were found to have lower concentrations, 0.049 and 0.077 mg/L, and impairment is not as likely. Water quality samples and biological assessments will be accomplished, for both stretches of stream, to complete WisCALM

requirements for impaired water identification.

**Objective:** This project will identify whether the Grand River (WBIC 159300) meets the requirements for 303(d) listing. Water quality

sampling will include two TP samples collected in May and June 2013, macroinvertebrate sampling during October of 2013, and fish survey during the summer of 2013 at Fairwater (Station ID 10022781), Markesan (Station ID 10037822), and Kingston (Station ID 10037823). Previous WPDES phosphorus limits sampling efforts, in 2012, collected 4 monthly samples at sampling locations upstream of Fairwater (Station ID 10037821), Markesan (Station ID 10037822), and Kingston (Station ID 10037823) WWTFs. This project would complete collection of the 6 samples required and biological assessment needed

for impaired waters listing. An additional site will be located downstream of Grand River Marsh to determine if the downstream stretch of the river also meets impaired water criteria. This site will require 6 monthly TP samples to be collected

May thru Oct 2013, macroinvertebrate sampling during October of 2013, and fish survey during the summer of 2013.

Comments: Received macroinvert sample results from UWSP 06/2014. The data needs to be evaluated and compared to the water

sample results. A final report will then be written.

Outcome: Impairment status of the Grand River will be assessed and data will be used for TMDL requirements in the Fox-Wolf

Watershed.

Number of sample sites: 4
 Number of sampling events: 8

3) Estimated date of sample collection completion: October 31, 2013

4) Estimated date when data will be entered into appropriate database: November 31, 2013

5) Estimated date when final report will be complete: December 31, 2014

6) What Database will be used for data storage: SWIMS

7) Who will be responsible for entering data into database: Sue Larson

#### Study Design:

#### **QA Measures:**

People						
Name	Role	Status	Start Date	End Date	Organization	Comments
BOLHA, DAVID A	COORDINATOR	COMPLETE	1/1/2013	12/31/2013	Wisconsin DNR	
LARSON, SUSAN M	COORDINATOR	ACTIVE	1/1/2013	12/31/2013	Wisconsin DNR	
McLennan, Robin	COORDINATOR	COMPLETE	1/1/2013	12/31/2013	Wisconsin DNR	
SELNER, BRANDON J	COORDINATOR	COMPLETE	1/1/2013	12/31/2013	Wisconsin DNR	

#### **Project Statuses**

Date	Reported By	Status	Comments
1/15/2013	SUSAN LARSON	Proposed	
9/30/2013	SUSAN LARSON	Progress: 75-100% Complete	All sampling is complete except macroinvert sampling which is scheduled for Oct 2013. Project report should be uploaded by Dec 2013.
6/20/2014	SUSAN LARSON	Progress: 75-100% Complete	Received macroinvert sample results from UWSP 06/2014. The data needs to be evaluated and compared to the water sample results. A final report will then be written.

#### **Project Status Detail**

Answer	Set:	DEF/	<b>AULT</b>

Question	Answer
1. Number of Sample Sites (Enter the station IDs if you know them).	4; Fairwater (Station ID 10022781), Markesan (Station ID 10037822), Kingston (Station ID 10037823) and another site downstream of Grand River Marsh to be determined.
2. Number of Sample Events (Indicate how many trips into the field you anticipate for this project).	8 Sample Events: 6 Phosphorus, 1 Macroinvertebrates, and 1 Fish. Fish and bug sampling at 4 locations will take multiple day trips to complete.
3. Proposed Dates for Sample Collection	May-October 2013 Total Phosphorus Sampling (1/month), Fish Sampling Mid-Summer 2013, and Bug Sampling in October 2013.
4. List applicable databases and who will enter data?	Sue Larson will enter data in 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	

Reviewer Notes: Identify questions or issues with project (use during review period)

<sup>8.</sup> Reviewer Decision: Is this project recommended for funding?

Actions						
ction	Detailed Description	Start Date	End Date	Status		
ivers Management Grant	This project proposes to monitor and assess the impacts of point and non-point discharges to the Grand River and determine if the river meets the criteria for 2016 impaired waters listing. Samples collected in 2012 for WPDES phosphorus limits calculations (Project Id WCR_13_CMP13), and historic water quality data, indicates that Total Phosphorous (TP) well exceeds the listing threshold of 0.075 mg/L upstream of the Grand River Marsh. Samples were found to contain concentrations of TP between 0.1 to 0.9 mg/L. Historical TP data for the stretch of stream below the Grand River Marsh and upstream of the Fox River were found to have lower concentrations, 0.049 and 0.077 mg/L, and impairment is not as likely. Water quality samples and biological assessments will be accomplished, for both stretches of stream, to complete WisCALM requirements for impaired water identification.	1/1/2013	12/31/2013	COMPLETE		
Details: Parameter	Value/Amount Units	Coi	mments			

Details. Farailleter	value/Amount	Ullits	Comments
Temperature			
Total Nitrogen			

Total Suspended Solids

### Wisconsin Department of Natural Resources SWIMS Project Summary

Details: Parameter Value/Amount Units Comments

Total Phosphorus

Monitoring Stations					
Station ID	Name	Comments			
10022781	Fairwater Bridge				
243015	Grand River at Cth H Near Kingston WI	fish and bug collection location			
10037823	Grand River upstream Kingston WWTF Grand Marsh Road				
10037822	Grand River upstream Markesan WWTF Highway 44				

.000.022				
Assessment Units				
WBIC	Segment	Local Name	Official Name	
103700	1	Heart Lake	Heart Lake	
111600	1	Un Lake	Unnamed	
111700	1	Un Lake	Unnamed	
112200	1	Un Lake	Unnamed	
112300	1	Un Lake	Unnamed	
112500	1	Un Lake	Unnamed	
112600	1	Un Lake	Unnamed	
112800	1	Un Lake	Unnamed	
112900	1	Un Lake	Unnamed	
113000	1	Un Lake	Unnamed	
113100	1	Un Lake	Unnamed	
113200	1	Un Lake	Unnamed	
116800	1	Un Spring	Un Spring	
117900	7	Fox River	Fox River	
117900	8	Fox River	Fox River	
117900	10	Fox River	Fox River	
117900	11	Fox River	Fox River	
117900	12	Fox River	Fox River	
117900	13	Fox River	Fox River	
143300	1	Barnes Creek	Barnes Creek	
143700	1	Harrington Creek	Harrington Creek	
144400	1	Town Drain	Town Drain	
144500	1	Local Water	Unnamed	
144800	1	Un Lake	Unnamed	

145100	1	Unnamed Stream	Unnamed
145200	1	Puchyan River	Puchyan River
145200	2	Puchyan River	Puchyan River
145300	1	Snake Creek	Snake Creek
145300	2	Snake Creek	Snake Creek
145300	3	Snake Creek	Snake Creek
145300	4	Snake Creek	Snake Creek
145700	1	Unnamed Lake	Unnamed
145900	1	Puchyan Millpond	Puchyan Millpond
146100	1	Green Lake (Big Green)	Green Lake
146100	2	Aba Beach, Green Lake	Green Lake
146100	3	Camp Grow Beach, Green Lake	Green Lake
146100	4	Dodge County Park Beach, Green Lake	Green Lake
146100	5	Hattie Sherwood Beach, Green Lake	Green Lake
146100	6	Pilgrim Center Beach, Green Lake	Green Lake
146100	7	Silver Creek Spaulding Road, Green Lake	Green Lake
146100	8	Sunset County Park, Green Lake	Green Lake
146100	9	Green Lake (Northern Lobe)	Green Lake
146100	10	Green Lake	Green Lake
146200	1	Hill Creek	Hill Creek
146400	1	Little Twin Lake	Little Twin Lake
146500	1	Big Twin Lake	Big Twin Lake
146515	1	Local Water	Unnamed
146600	1	White Creek	White Creek
146700	1	Dakin Creek	Dakin Creek
146800	1	Silver Creek	Silver Creek
146800	3	Silver Creek Mouth	Silver Creek
146800	5	Silver Cr Spaulding, Kmart Beach	Silver Creek
146900	1	Unnamed Trib to Silver Creek	Unnamed
147000	1	Unnamed Trib to Silver Creek	Unnamed
147200	1	Un Lake	Unnamed
148000	1	Spring Creek	Spring Creek
148100	1	Spring Lake (Spirit)	Spring Lake
148200	1	Roy Creek	Roy Creek
148300	1	Wuerches Creek	Unnamed

148350	1	Unnamed Stream	Unnamed
148500	1	White River	White River
148600	1	Sucker Creek	Sucker Creek
154000	1	Black Creek	Black Creek
154400	1	Mill Race	Mill Race
158700	1	Puckaway Lake	Puckaway Lake
158800	1	Local Water	Unnamed
159300	1	Grand River	Grand River
159300	2	Grand River	Grand River
159900	1	Grand River Marsh	Grand River Marsh*
160000	1	Belle Fountain Creek	Belle Fountain Creek
160160	1	South Branch Belle Fountain Creek	South Branch Belle Fountain Creek
160170	1	North Branch Belle Fountain Creek	North Branch Belle Fountain Creek
160300	1	Spring Creek	Spring Creek
160600	1	Spring Lake	Spring Lake
160700	1	Local Water	Unnamed
160800	1	Dog Lake	Dog Lake
161100	1	Grand Lak (Millpond)	Grand Lake (Millpond)
161300	1	Unnamed Creek	Unnamed
161800	1	Local Water	Unnamed
161900	1	Maria Lake	Lake Maria
162200	1	Manchester Millpond	Mill Pond
162500	1	Little Green Lake	Little Green Lake
869800	2	Rock River, South Branch	South Branch Rock River
871200	1	Local Water	Unnamed
3000091	1	Assembly Creek	Assembly Creek
3000500	1	Unnamed Stream	Unnamed
3000504	1	Local Water	Unnamed
3000511	1	Unnamed Stream	Unnamed
3000512	1	Local Water	Unnamed
3000531	1	Local Water	Unnamed
5025336	1	Unnamed Trib to Fox R	Unnamed
5025406	1	Unnamed Stream	Unnamed
5025649	1	Unnamed Stream	Unnamed
5025698	1	Unnamed Stream	Unnamed

5025727	1	Local Water	Unnamed
5026125	1	Unnamed Stream	Unnamed
5026248	1	Local Water	Unnamed
5026283	1	Unnamed Stream	Unnamed
5026290	1	Unnamed Stream	Unnamed
5026316	1	Unnamed Trib to Fox River	Unnamed
5026355	1	Unnamed Stream	Unnamed
5026379	1	Unnamed Stream	Unnamed
5026410	1	Unnamed Stream	Unnamed
5026476	1	Unnamed Stream	Unnamed
5026636	1	Unnamed Stream	Unnamed
5026724	1	Unnamed Stream	Unnamed
5026909	1	Unnamed Stream	Unnamed
5026951	1	Unnamed Stream	Unnamed
5026951	2	Unnamed Stream	Unnamed
5027017	1	Unnamed Stream	Unnamed
5027048	1	Unnamed Stream	Unnamed
5027058	1	Unnamed Stream	Unnamed
5027092	1	Unnamed Stream	Unnamed
5027115	1	Unnamed Stream	Unnamed
5027123	1	Unnamed Stream	Unnamed
5027140	1	Unnamed Stream	Unnamed
5027202	1	Unnamed Stream	Unnamed
5027219	1	Unnamed Trib to Hill Creek	Unnamed
5027225	1	Unnamed Stream	Unnamed
5027236	1	Unnamed Stream	Unnamed
5027243	1	Unnamed Trib to White Creek	Unnamed
5027249	1	Unnamed Stream	Unnamed
5027278	1	Unnamed Stream	Unnamed
5027344	1	Unnamed Stream	Unnamed
5027496	1	Unnamed Stream	Unnamed
5027574	1	Unnamed Trib to Wuerches Creek	Unnamed
5027591	1	Unnamed Stream	Unnamed
5027609	1	Unnamed Stream	Unnamed
5027690	1	Unnamed Stream	Unnamed

5027717	1	Unnamed Stream	Unnamed
5027805	1	Unnamed Stream	Unnamed
5027809	1	Unnamed Stream	Unnamed
5027834	1	Unnamed Stream	Unnamed
5027950	1	Unnamed Stream	Unnamed
5028029	1	Unnamed Stream	Unnamed
5028071	1	Unnamed Stream	Unnamed
5028181	1	Unnamed Stream	Unnamed
5028204	1	Unnamed Stream	Unnamed
5028245	1	Unnamed Stream	Unnamed
5028256	1	Unnamed Stream	Unnamed
5028985	1	Local Water	Unnamed
5559194	1	Local Water	Unnamed
5559402	1	Local Water	Unnamed
5559431	1	Local Water	Unnamed
5559477	1	Local Water	Unnamed
5559518	1	Local Water	Unnamed
5559533	1	Local Water	Unnamed
5559643	1	Local Water	Unnamed
5559823	1	Local Water	Unnamed
5559863	1	Local Water	Unnamed
5560362	1	Local Water	Unnamed
5560444	1	Local Water	Unnamed
5560467	1	Local Water	Unnamed
5560961	1	Local Water	Unnamed
5561091	1	Local Water	Unnamed
5561177	1	Local Water	Unnamed
5561336	1	Local Water	Unnamed
5561443	1	Local Water	Unnamed
5561471	1	Local Water	Unnamed
5561558	1	Green Lake - Canal North	Unnamed
5561664	1	Local Water	Unnamed
5561797	1	Local Water	Unnamed
5561985	1	Local Water	Unnamed
5562086	1	Local Water	Unnamed

5562408	1	Green Lake - Beyers Cove; West Channel	Unnamed
5562494	1	Local Water	Unnamed
5562499	1	Local Water	Unnamed
5562513	1	Local Water	Unnamed
5562589	1	Local Water	Unnamed
5562724	1	Local Water	Unnamed
5562826	1	Local Water	Unnamed
5562997	1	Local Water	Unnamed
5563183	1	Local Water	Unnamed
5563234	1	Local Water	Unnamed
5563251	1	Local Water	Unnamed
5563266	1	Unnamed	Unnamed
5563268	1	Local Water	Unnamed
5563281	1	Local Water	Unnamed
5563766	1	Local Water	Unnamed
5563819	1	Local Water	Unnamed
5563838	1	Local Water	Unnamed
5564544	1	Local Water	Unnamed
5564648	1	Local Water	Unnamed
5564668	1	Local Water	Unnamed
5564712	1	Local Water	Unnamed
5587868	1	Local Water	Unnamed

Lab Account Codes						
Account Code	Description	Start Date	End Date			
WT142	303D/TMDL MONITORING	5/3/2011	6/30/2014			

Forms	
Form Code	Form Name
STREAM_MON	Stream Monitoring (Temp, DO, Trans, Flow)

Methods	
Method Code	Method Description

Fieldwork Events						
Start Date	Status	Field ID	Station ID	Station Name		
5/15/2013 11:35	COMPLETE	02	10037822	Grand River upstream Markesan WWTF Highway 44		
5/15/2013 12:05	COMPLETE	03	10037823	Grand River upstream Kingston WWTF Grand Marsh Road		

6/12/2013 10:45	COMPLETE	01	10022781	Fairwater Bridge
6/12/2013 11:20	COMPLETE	02	10037822	Grand River upstream Markesan WWTF Highway 44
6/12/2013 12:50	COMPLETE	03	10037823	Grand River upstream Kingston WWTF Grand Marsh Road
11/22/2013	COMPLETE		10022781	Fairwater Bridge
11/22/2013	COMPLETE		10037822	Grand River upstream Markesan WWTF Highway 44
11/22/2013	COMPLETE		10037823	Grand River upstream Kingston WWTF Grand Marsh Road

Documents						
Title	Description	Author	Published	Comments		
Grand River Total Phosphorus Report		Sue Larson	12/11/2012			

Budget						
Budget De	scription: Jan-Jun 2013		Start Da	<b>te:</b> 1/1/2013	End Date	: 6/30/2013
Code	Description	Quantity Units	Unit Cost	Total Cost	Comments	
FTE	FTE Hours	50 Hours	\$0.00	\$0.00		
LTE SAL	LTE Salary	20 Hours	\$15.00	\$300.00		
LTE FR	LTE Fringe			\$74.10		
LTE IND	LTE Indirect			\$60.49		
LTE TOT	LTE Total Cost			\$434.59		
SUPPLY	Supplies			\$0.00		
EQUIP	Equipment			\$0.00		
MILEAGE	Mileage	1100 Miles	\$0.62	\$682.00		
MEAL	Meals	8 Meals	\$9.00	\$72.00		
LODGE	Lodging			\$0.00		
TRAVEL	Travel Total			\$754.00		
BUG	Bug Contracts			\$0.00		
OTHER	Other Contracts			\$0.00		
USGS	USGS Costs			\$0.00		
TOTAL	Total Cost (excludes SLOH)			\$1,188.59		
Test Code	Description	Test Group		# Planned	Unit Cost	Total Cos
I520PLT	TOTAL PHOSPHORUS (AS P) (EF	PA 365.1) INORGANIC CHEMISTRY		8	\$23.60	\$188.8

**Total WSLH Lab Costs:** \$188.80 **Total Budget:** \$1,377.39

<b>Budget Des</b>	cription: Jul-Dec 2013		Start Da	te: 7/1/2013	End Date:	12/31/2013
Code	Description	Quantity Units	Unit Cost	Total Cost	Comments	
FTE	FTE Hours	40 Hours	\$0.00	\$0.00		
LTE SAL	LTE Salary	Hours	\$15.00	\$0.00		
LTE FR	LTE Fringe			\$0.00		
LTE IND	LTE Indirect			\$0.00		
LTE TOT	LTE Total Cost			\$0.00		
SUPPLY	Supplies			\$0.00		
EQUIP	Equipment			\$0.00		
MILEAGE	Mileage	560 Miles	\$0.62	\$347.20		
MEAL	Meals	4 Meals	\$9.00	\$36.00		
LODGE	Lodging			\$0.00		
TRAVEL	Travel Total			\$383.20		
BUG	Bug Contracts	4	\$180.00	\$720.00		
OTHER	Other Contracts			\$0.00		
USGS	USGS Costs			\$0.00		
TOTAL	Total Cost (excludes SLOH)			\$1,103.20		
Test Code	Description	Test Group		# Planned	Unit Cost	Total Cost
I520PLT	TOTAL PHOSPHORUS (AS P) (EPA 3	65.1) INORGANIC CHEMISTRY		4	\$23.60	\$94.40

**Total WSLH Lab Costs:** \$94.40 **Total Budget:** \$1,197.60

Combined Budgets:\$2,291.79Combined WSLH:\$283.20Combined Total:\$2,574.99

Funding						
Organization	Source	Туре	Amount	Start Date	End Date	