#### **General Project Information**

Project ID: NOR\_16\_CMP10

Name: Flambeau River Flowage Sediment Monitoring - NOR16\_10

Type: Targeted Monitoring

Subtype: Watershed Project

Status: COMPLETE

**Start Date:** 7/1/2009 **End Date:** 6/30/2010

Purpose: Sediment testing of the Flambeau River Flowages downstream from Park Falls in 1989 found high concentrations of mercury

and heavy metals present. Twenty years have passed since this was done. In recent years the Flambeau Mine near Ladysmith has been operated and Dairyland Flowage upstream of Ladysmith was drawn down in 2008. Significant mercury concentrations were present in the Dairyland Flowage at the time of drawdown and may have been partially transported downstream. There are 7 flowages to assess (Upper P.F., Lower P.F., Pixley, Crowley, Big Falls, Dairyland, Ladysmith, Thornapple). A single core from the deepest spot in each flowage would be collected and partitioned into 4 segments.

Samples would be tested for a range of metals and related parameters.

**Objective:** The objective is to update our knowledge of mercury and heavy metal contamination in the Flambeau River flowages. This

information can be used to assess concerns related to future flowage drawdowns or other actions which could mobilize these

contaminants.

Comments: Needs methods

Outcome: A report will be produced.

Study Design:

**QA Measures:** 

People						
Name	Role	Status	Start Date	End Date	Organization	Comments
AARTILA, THOMAS P	COORDINATOR	COMPLETE	7/1/2009	6/30/2010	Wisconsin DNR	
Roesler, Craig P	COORDINATOR	COMPLETE	7/1/2009	6/30/2010	Wisconsin DNR	

Project Statuses					
Date	Reported By	Status	Comments		
1/31/2011	Craig Roesler	Progress: 75-100% Complete	Field work completed and draft report prepared. Report needs to be edited to respond to comments, and entered into SWIMS.		
2/11/2011	Craig Roesler	Complete	Final report complete and entered into SWIMS		

roject Status Detail	
Answer Set: DEFAULT	
Question	Answer
1. Project Category (SP 12 (Measure W); 303(d) Waters; Continuation (TMDL, Use Designation); New Projects; Wetlands, CBSM	New Project
2. Regional Priority by Category (ex: SP12-1, SP12-2, etc.)	
3. Number of Sample Sites (Enter the station IDs if you know them).	7
4. Number of Sample Events (Indicate how many trips into the field you anticipate for this project).	3
5. Proposed Dates for Sample Collection	winter 2009-10
6. List applicable databases and who will enter data?	SWIMS, lab results will automatically be entered
7. FTE Hours (Funds) Needed	80
8. LTE Hours (Funds) Needed	0
9. Supplies - Describe in Detail	postage = \$100
10. Describe Travel Needed	meals and mileage = \$245
11. UWSP Macroinvertebrate Samples (How Many?)	0
12. Additional Contractual dollars - Who? What? and How much?	0
13. Equipment - What is needed and Why? (New Equipment, Cost?)	misc. coring equipment = \$200
14. Capital Equipment >\$5,000 - Describe needed equipment [Note: Federal funds cannot be used to purchase capital equipment].	
15. State Lab of Hygiene Analyses: Describe the number, type of parameters - See Worksheet	0
16. Partner Contributions: Describe any funding provided by other DNR programs or non-DNR contributions.	0
17. Total Year 1 (Please itemize: \$LTE + \$SLOH + \$Equipment + \$Travel + \$UWSP Lab + \$Other) =	TBD need sed. analysis cost
18. Total Year 2 (Please itemize: \$LTE + \$SLOH + \$Equipment + \$Travel + \$UWSP Lab + \$Other) =	0
19. Project Total (Please itemize: \$LTE + \$SLOH + \$Equipment + \$Travel + \$UWSP Lab + \$Other) =	TBD
20. Additional Comments	
21. Did you receive special projects funding during FY 2009?	no
22. If yes to question 17, did you complete the projects including data entry and reports? If not, why not?	
23. Reviewer Notes: Identify questions or issues with project (use during review period)	
24. Reviewer Decision: Is this project recommended for funding?	

Actions					
Action	Detailed Description	Start Date	End Date	Status	
Sediment Remediation Phase 2 - Extent Assessment	Assessment of the extent of metal sediment contamination in Flambeau River Flowages.	7/1/2009	6/30/2010	COMPLETE	
Monitor to Evaluate Projects		7/1/2009	6/30/2010	PROPOSED	

#### **Monitoring Stations**

Station ID	Name	Comments
10031188	Big Falls Flowage lower end	
10031189	Big Falls Flowage middle area	
10031181	Crowley Flowage lower end	
10031180	Crowley Flowage middle area	
10031191	Dairyland Flowage lower end	
10031190	Dairyland Flowage middle area	
10031193	Ladysmith Flowage lower end N of 10th St	
10031192	Ladysmith Flowage middle area E of Hwy 8	
10031176	Lower Park Falls Flowage upper end	
10031179	Pixley Flowage lower end	
10031178	Pixley Flowage middle area	
10031194	Thornapple Flowage lower end	
10031195	Thornapple Flowage middle area	
10031177	Upper Park Falls Flowage lower end	

Assessment Units				
WBIC	Segment	Local Name	Official Name	
2227500	1	Thornapple Flowage	Thornapple Flowage	
2228700	1	Ladysmith Flowage	Ladysmith Flowage	
2229200	1	Dairyland Reservoir (Flambeau)	Dairyland Reservoir (Flambeau)	
2230100	1	Big Falls Flowage	Big Falls Flowage	
2287200	1	Crowley Flowage	Crowley Flowage 802	
2288900	1	Pixley Flowage	Pixley Flowage	
2290100	1	Park Falls Flowage, Lower	Lower Park Falls Flowage 762	

Lab Account Codes					
Account Code	Description	Start Date	End Date		
WT107	Watershed Special Projects	5/27/2009	6/30/2010		

Forms	
Form Code	Form Name

Methods	
Method Code	Method Description

Fieldwork Events					
Start Date Status Field ID Station ID				Station Name	
4/9/2010 23:55	COMPLETE	LLPF_0-0.35	10031177	Upper Park Falls Flowage lower end	

4/9/2010 23:55	COMPLETE	ULPF_0-0.35	10031176	Lower Park Falls Flowage upper end
4/20/2010 23:55	COMPLETE	LC35	10031181	Crowley Flowage lower end
4/20/2010 23:55	COMPLETE	LP35	10031179	Pixley Flowage lower end
4/20/2010 23:55	COMPLETE	MC35	10031180	Crowley Flowage middle area
4/20/2010 23:55	COMPLETE	MP35	10031178	Pixley Flowage middle area
4/23/2010	COMPLETE	BFL5	10031188	Big Falls Flowage lower end
4/23/2010	COMPLETE	BFM3	10031189	Big Falls Flowage middle area
4/23/2010	COMPLETE	DL5	10031191	Dairyland Flowage lower end
4/23/2010	COMPLETE	DM5	10031190	Dairyland Flowage middle area
4/23/2010	COMPLETE	LL3	10031193	Ladysmith Flowage lower end N of 10th St
4/23/2010	COMPLETE	LM3	10031192	Ladysmith Flowage middle area E of Hwy 8
4/26/2010	COMPLETE	TL4	10031194	Thornapple Flowage lower end
4/26/2010	COMPLETE	TM4	10031195	Thornapple Flowage middle area

Documents					
Title	Description	Author	Published	Comments	
Flambeau River Flowages Sediment Assessment 2010	Sediment samples from 7 flowages were collected in April of 2010. More current data will be useful for future management of these contaminated sediments and allow any changes in sediment chemistry in the last 20 years to be identified.	Craig Roesler	2/10/2011		
NOR16_10		Craig Roesler	2/26/2009		
NOR16_10		Craig Roesler	2/26/2009		
PROPOSED BUDGET	Master Spreadsheet for Project Budget 2010 Projects	Arneson, Ron	2/3/2009		

### Budget

**Combined Budgets:** Combined WSLH:

Combined Total: \$0.00

Funding					
Organization	Source	Туре	Amount	Start Date	<b>End Date</b>