#### **General Project Information**

Project ID: SCR\_01\_CMP12 ATTAINS

Name: Blue River 303d Evaluation

Type: TMDL/303d Projects

**Subtype:** Determine Pollutants or Impairments

Status: COMPLETE

**Start Date:** 7/1/2011 **End Date:** 6/30/2012

Purpose: This project follows a general assessment, and is a more specific assessment of the Blue River WBIC: 1211000, at SWIMS

Stations: 10021058 and 10021311, 10022507, 10022585, and 10033437. Field work will include Fish IBI's, Macroinvertebrate collections, flow, quantitative habitat for all 5 sites, and water quality - ammonia, nitrogen series, kjeldahl, phosphorus, and suspended solids at one upper site, one middle site, and one lower site. SCR staff will conduct fieldwork to assess the 303 d

segment in the upper portion of the watershed to verify if the listing is accurate.

**Objective:** General assessment previously conducted (2007) results for FIBI indicated very poor at both sites, MIBI & HIBI Fair. Appears

that lack of habitat and nutrients from excessive agriculture may be negatively impacting the stream.

This specific assessment will verify the latter plus give additional data necessary for evaluating whether the impaired water

listing is accurate.

Comments: Category 2: 303(d) Impaired Waters List

Outcome: Performance Measures:

1) Five sample sites are associated with the project.

2) Number of sampling events associated with project: 9

3) Estimated date when sample collection will be complete is November 2011.

4) Estimated date when most data will be entered into SWIMS & Fisheries databases is December 2011, except for

macroinvert data - November 2012

5) Estimated date hen final report will be complete March 2012, except for macronvert data.

#### Study Design:

#### **QA Measures:**

People People						
Name	Role	Status	Start Date	End Date	Organization	Comments
Patterson, Kevin	TEAM_MEMBER	ACTIVE	6/20/2011			
Tackett, Thor	TEAM_MEMBER	ACTIVE	6/20/2011			
UNMUTH, JEAN M	COORDINATOR	COMPLETE	7/1/2011	6/30/2012	Wisconsin DNR	

Project Statuses					
Date	Reported By	Status	Comments		
1/12/2011	JEAN UNMUTH	Progress: 25-50% Complete			
2/27/2012	JEAN UNMUTH	Progress: 75-100% Complete	A single May sample for water chemistry must be collected in 2012, to complete the dataset. Macroinvertebrate data has not been received. Once the data is completed a final report will be drafted, and an impaired waters document will be attached to SWIMS and WATERS		

3/24/2012	Lisa Helmuth	Complete	Swims Station: 10021311 Blue River 2cnd white gate N. of 825 Willow Springs Rd. Natural Community (LYONS) is Cold Headwater. Fish IBI rating 0 (very poor).  Swims Station: 10020556. Location: Unnamed Trib Blue River 825 Willow Springs Rd. Natural Community is Cold Headwater No fish were captured during 100 meters of electrofishing. MIBI/HBI was 4.6/3.4 (fair)  Swims Station: 10021058 Blue River Edgington Rd. Natural Community is Cool-Cold Transition Headwater. No fish were captured during 100 meters of electrofishing. HBI/MIBI was 4.2/4.3 (fair).  General Assessment completed. It does not appear that stream temperature is a problem, Agriculture appears to be causing excess nutrients – there is overgrazing of stream banks and in the woods and cows in the stream, evidence of manure in the stream at both of the Blue River sites, but the unnamed trib. site appears to have been set aside and is beginning to heal from overgrazing. The unnamed tributary has no migrational connection with the Blue River that is approx. 700 feet downstream of the site due to a culvert perched 0.90 m above the stream surface under Willow Springs Rd. Blue River site at Edgington Rd. may lake in habitat as it was extremely shallow and no real pools evident for holding fish.  Recommendations: Follow up with a specific assessment Sample 2 sites previously sampled - repeat Fish IBI at both sites, repeat Macroinvert IBI both sites for total of 2 yrs of data. Collect flows, quantitative habitat, 6 monthly (may-oct at baseflow) TP & TSS plus a single Nitrogen series, Kjeldhal, Ammonia, and Transparency. Work with TUDARE and the township to replace the perched culvert on the unnamed tributary of Willow Springs Rd
1/25/2013	JEAN UNMUTH	Progress: 75-100% Complete	The above notes from 03/24/2012 reported by Helmuth were taken from UNMUTH's interim report from 2011 placed under the documents tab of SWIMS. All data has been entered and proofed, however the final report is in draft at this time.
9/17/2013	JEAN UNMUTH	Progress: 75-100% Complete	Project is off schedule. Final report is in draft, and should be completed by January 2014.
5/16/2014	JEAN UNMUTH	Progress: 75-100% Complete	
12/11/2014	JEAN UNMUTH	Complete	

### **Project Status Detail**

### **Answer Set: DEFAULT**

Question Answer

- 1. Number of Sample Sites (Enter the station IDs if you know them).
- 2. Number of Sample Events (Indicate how many trips into the field you anticipate for this project).
- 3. Proposed Dates for Sample Collection
- 4. List applicable databases and who will enter data?
- 5. Did you receive competitive projects funding during FY 2010?
- 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)

Actions	Actions				
Action	Detailed Description	Start Date	End Date	Status	
Watershed Mapping or Assessment	specific assessment of the Blue River WBIC: 1211000, at SWIMS Stations: 10021058 and 10021311, 10022507, 10022585, and 10033437. Field work will include Fish IBI's, Macroinvertebrate collections, flow, quantitative habitat for all 5 sites, and water quality - ammonia, nitrogen series, kjeldahl, phosphorus, and suspended solids at one upper site, one middle site, and one lower site. SCR staff will conduct fieldwork to assess the 303 d segment in the upper portion of the watershed to verify if the listing is accurate.	7/1/2011	6/30/2012	COMPLETE	

Details: Parameter	Value/Amount	Units	Comments	
Total Nitrogen				
Total Phosphorus				
Total Suspended Solids				

Monitor or Propose 303(d) Listing	Monitor listed impaired waters for water quality changes over time. Field work will include Fish IBI's, Macroinvertebrate collections,flow, quantitative habitat for all 5 sites, and water quality - ammonia, nitrogen series, kjeldahl, phosphorus, and suspended solids at one upper site, one middle site, and one lower site. SCR staff will conduct fieldwork to assess the 303 d segment in the upper portion of the	7/1/2011	IN_PROGRESS
	the 303 d segment in the upper portion of the watershed to verify if the listing is accurate.		

<b>Monitoring Stati</b>	Monitoring Stations				
Station ID	Name	Comments			
10021311	Blue River At 2nd White Gate North Of 825 Willow Springs Rd	Access off of tributary			
10021058	Blue River At Edgington Road				
10022585	Blue River Blue River Rd 100m Upstream				
10034148	Blue River Meyer Property West of Willow Springs Rd.				

10022507	Blue River Station 2 At Snowbottom Rd (Swse0206n01w)	
10033437	Blue River at Shemak Road	

Assessment Units			
WBIC	Segment	Local Name	Official Name
1211000	1	Blue River	Blue River
1211000	2	Blue River	Blue River
1211000	3	Blue River	Blue River
1211000	4	Blue River	Blue River
1212800	1	Sixmile Branch	Sixmile Br
1213200	1	Big Rock Branch	Big Rock Br
1213200	2	Big Rock Branch	Big Rock Br
1213200	4	Big Rock Branch	Big Rock Br
1213400	1	Creek 31-4	Unnamed
1213600	1	Bronson Creek	Bronson Creek
1213700	1	Unnamed Trib To Blue River (Montford T6, R1w, S12)	Unnamed
1213900	1	Badger Hollow	Badger Hollow Creek
1214000	1	Unnamed Stream	Unnamed
1214200	1	Unnamed	Unnamed
5035474	1	Unnamed Stream	Unnamed
5035654	1	Unnamed Stream	Unnamed
5035674	1	Unnamed Stream	Unnamed
5035836	1	Unnamed Stream	Unnamed
5036014	1	Unnamed Stream	Unnamed
5036068	1	Unnamed Stream	Unnamed
5036149	1	Unnamed Stream	Unnamed
5036155	1	Unnamed Stream	Unnamed
5036250	1	Unnamed Stream	Unnamed

Lab Account Codes				
Account Code	Description	Start Date	End Date	
WT142	303D/TMDL MONITORING	5/3/2011	6/30/2012	

Forms	
Form Code	Form Name
CONTINUOUS	Continuous Data Upload

Methods	
Method Code	Method Description

Fieldwork Events					
Start Date	Status	Field ID	Station ID	Station Name	
6/2/2011 10:00	COMPLETE	BR2	10021058	Blue River At Edgington Road	
6/2/2011 11:00	COMPLETE	BR1	10022585	Blue River Blue River Rd 100m Upstream	
6/2/2011 11:30	COMPLETE	BR3	10033437	Blue River at Shemak Road	
6/27/2011 9:00	COMPLETE		10021058	Blue River At Edgington Road	
7/7/2011 9:30	COMPLETE	BR3	10033437	Blue River at Shemak Road	
7/7/2011 9:30	COMPLETE		10033437	Blue River at Shemak Road	
7/7/2011 14:10	COMPLETE	BR1	10022585	Blue River Blue River Rd 100m Upstream	
7/7/2011 15:00	COMPLETE	BR2	10021058	Blue River At Edgington Road	
8/17/2011 10:00	COMPLETE	BR3	10033437	Blue River at Shemak Road	
8/17/2011 10:50	COMPLETE	BR1	10022585	Blue River Blue River Rd 100m Upstream	
8/17/2011 11:20	COMPLETE	BR2	10021058	Blue River At Edgington Road	
9/14/2011 15:10	COMPLETE	BR1	10022585	Blue River Blue River Rd 100m Upstream	
9/14/2011 15:25	COMPLETE	BR2	10021058	Blue River At Edgington Road	
9/14/2011 15:40	COMPLETE	BR3	10033437	Blue River at Shemak Road	
10/24/2011 8:00	COMPLETE	20111024-22-01	10021058	Blue River At Edgington Road	
10/24/2011 9:00	COMPLETE	20111024-25-01	10022507	Blue River Station 2 At Snowbottom Rd (Swse0206n01w)	
10/24/2011 10:00	COMPLETE	20111024-22-02	10034148	Blue River Meyer Property West of Willow Springs Rd.	
10/24/2011 11:00	COMPLETE	20111024-25-02	10033437	Blue River at Shemak Road	
10/24/2011 11:20	COMPLETE	BR3	10033437	Blue River at Shemak Road	
10/24/2011 13:15	COMPLETE	BR1	10022585	Blue River Blue River Rd 100m Upstream	
10/24/2011 14:00	COMPLETE	20111024-22-03	10022585	Blue River Blue River Rd 100m Upstream	
10/24/2011 14:30	COMPLETE	BR2	10021058	Blue River At Edgington Road	

Documents					
Title	Description	Author	Published	Comments	
Blue River 303 d Impaired Waters Proposed Delisting Report		Jean Unmuth	12/11/2014		
Blue River 303 d Update	2007 Recommendations for specific assessment	Unmuth, Jean	1/10/2011		
Blue River Final Report	Final Report with data and graphs summarized	Jean Unmuth	12/11/2014		

### Budget

Budget De	escription: Budget for Blue River 303 d Eva	aluation SCR_01_CMP12	Start Date:	7/1/2011	End Date:	6/30/2012
Code	Description Q	uantity Units	Unit Cost	Total Cost	Comments	
FTE	FTE Hours	100 Hours	\$0.00	\$0.00	Includes sampling summary, report	g, Data
LTE SAL	LTE Salary	50 Hours		\$0.00	2 Interns from UV	/-Platteville
LTE FR	LTE Fringe			\$0.00		
LTE IND	LTE Indirect			\$0.00		
LTE TOT	LTE Total Cost			\$0.00		
SUPPLY	Supplies	18	\$12.00	\$216.00	Mailing samples t	o SLOH
MILEAGE	Mileage	500 Miles	\$0.72	\$360.00		
MEAL	Meals	14 Meals	\$4.00	\$56.00	Includes 2 interns Platteville	from UW-
LODGE	Lodging			\$0.00		
TRAVEL	Travel Total			\$416.00		
BUG	Bug Contracts	5	\$165.00	\$825.00		
OTHER	Other Contracts			\$0.00		
EQUIP	Equipment			\$0.00		
USGS	USGS Costs			\$0.00		
TOTAL	Total Cost (excludes SLOH)			\$1,457.00		
Test Code	Description	Test Group	#	Planned	Unit Cost	Total Cos
I440NLD	AMMONIA (AS N), DISS (EPA 350.1)	INORGANIC CHEMISTRY		3	\$25.89	\$77.67
I460GLT	NITRATE + NITRITE (AS N) (EPA 353.2	2) INORGANIC CHEMISTRY		3	\$27.00	\$81.00
I470DLT	TOTAL KJELDAHL NITROGEN (AS N) (EPA 351.2)	INORGANIC CHEMISTRY		3	\$32.99	\$98.97
I520PLT	TOTAL PHOSPHORUS (AS P) (EPA 36	55.1) INORGANIC		18	\$23.60	\$424.80

Total WSLH Lab Costs: \$1,089.84
Total Budget: \$2,546.84

160.2)

DISS REACTIVE PHOSPHORUS AS P

SUSPENDED SOLIDS (EPA METHOD

(ORTHO-P) (SM 4500PE)

I530CLD

1650JLT

Combined Budgets:\$1,457.00Combined WSLH:\$1,089.84Combined Total:\$2,546.84

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

**CHEMISTRY** 

**INORGANIC** 

CHEMISTRY

**INORGANIC** 

**CHEMISTRY** 

3

18

\$23.00

\$18.80

\$69.00

\$338.40