#### **General Project Information**

Project ID: SCR\_04\_CMP13

Name: Silver Spring PI Project - Water Chemistry

Type: TMDL/303d Projects

Subtype: Monitor Listed Waters

Status: COMPLETE

**Start Date:** 5/1/2012

End Date: 10/31/2012

**Purpose:** Silver Spring Creek in Lafayette County is on the state's list of impaired waters due to habitat degradation from sediment. in 2010, a project was initiated to monitor phosphorus and sediment loads entering the stream. Soil P samples have been

taken. High PI fields have been identified. Landowners are being contacted to engage them in implementing BMPs to reduce sediment and P loads to the stream. Water chem sampling was conducted in 2011. This project would be a continuation of the 2011 project to create a more robust database to determine if implementation of on-land practices can influence stream concentrations. In the absence of a gauging station, the most effective way to detect a change in the water

column concentration is through taking more samples.

**Objective:** Since there is no USGS gauging station on this stream, water chemistry data will be necessary to determine the degree of

success of this project. This proposal continues the collection of water chemistry data in accordance with WisCALM guidance

and in order to create a more robust data set that will be capable of detecting change in water column concentrations.

**Comments:** New. Was funded last year with plans to continue for 2 more years after this one to gain necessary pre-implementation data.

Outcome: 5 sites will be assessed once per month during the growing season (May - October). Total suspended sediment, phosphorus,

and the nitrogen series will be analyzed. Data will be entered into SWIMS

Study Design: Grab water chemistry samples will be taken at 5 sites once per month during the growing season. In 2011, 6 samples per

site were taken. Another 6 samples will increase the power of analysis to detect change in water column concentrations.

QA Measures: Samples will be collected and preserved according to generally accepted field protocols for nutrient sampling.

People						
Name	Role	Status	Start Date	End Date	Organization	Comments
AMRHEIN, JAMES F	PROJECT_LEA D	COMPLETE	1/6/2012	12/31/2013	Wisconsin DNR	Samples will be collected by a volunteer monitor.

Project Sta	Project Statuses						
Date	Reported By	Status	Comments				
3/15/2012	MOLLI MACDONALD	Proposed					
8/16/2012	JAMES AMRHEIN	Progress: 50-75% Complete	All water chems collected in growing season, 2012. Samples being collected in growing season 2013.				
1/23/2013	JAMES AMRHEIN	Progress: 75-100% Complete	All water chemistry samples have been collected. A report will be drafted in winter/spring 2013.  Unfortunately, due to difficulties at the county level, it is unsure at this time if the county will be able to pursue any kind of remedial action in the watershed.				
2/18/2013	JAMES AMRHEIN	Complete	Final Report added to SWIMS and WATERS which documents and summarizes the results of this sampling.				
Astions							

#### **Actions**

Action	Detailed Description	Start Date	End Date	Status
Monitor or Propose 303(d) Listing	This project would be a continuation of the 2011 project to create a more robust database to determine if implementation of on-land practices can influence stream concentrations. In the absence of a gauging station, the most effective way to detect a change in the water column concentration is through taking more samples.	5/1/2012	10/31/2012	COMPLETE
Water Quality Planning	This project would be a continuation of the 2011 project to create a more robust database to determine if implementation of on-land practices can influence stream concentrations. In the absence of a gauging station, the most effective way to detect a change in the water column concentration is through taking more samples.	5/1/2012	10/31/2012	COMPLETE

Details: Parameter Value/Amount Units Comments

Total Nitrogen

Total Phosphorus

**Total Suspended Solids** 

<b>Monitoring Stati</b>	Monitoring Stations					
Station ID	Name	Comments				
10014194	Silver Spring Creek Baseline (at Walnut Rd)					
10014238	Silver Spring Creek-Baseline Lower (at Silver Spring Rd)					
10031346	Unnamed Tributary (5040863) to Silver Spring Creek					
10031345	Unnamed Tributary (917800) to Silver Spring Creek at Tish Rd					
10031350	Unnamed Tributary (917900) to Silver Spring Creek S of Walnut Road					

Assessment Units					
WBIC	Segment	Local Name	Official Name		
873200	1	Unnamed water to the Pecatonica River	Unnamed		
888600	1	Bloody Lake	Bloody Lake		
888700	1	Horseshoe Lake	Horseshoe Lake		
888800	1	Un Lake	Unnamed		
888900	1	Un Lake	Unnamed		
889000	1	Un Lake	Unnamed		
889100	1	Pecatonica River	Pecatonica River		
889100	2	Pecatonica River	Pecatonica River		
889100	3	Pecatonica River	Pecatonica River		
893700	1	Local Water	Unnamed		
894100	1	Local Water	Unnamed		

897800	1	E. Br. Pecatonica River	East Branch Pecatonica River
897800	2	E. Br. Pecatonica River	East Branch Pecatonica River
897800	5	E. Br. Pecatonica River	East Branch Pecatonica River
898000	1	Unnamed Stream	Unnamed
898500	1	Cherry Branch	Cherry Br
898800	1	Cherry Branch Trib	Unnamed
898900	1	Cherry Branch	Unnamed
899000	1	Cherry Branch Trib	Unnamed
899400	1	Trotter Branch	Trotter Br
899500	1	Jockey Hollow Creek	Unnamed
899700	1	Whiteside Creek	Whiteside Creek
899700	2	Whiteside Creek	Whiteside Creek
899700	3	Whiteside Creek	Whiteside Creek
899800	1	Apple Branch	Apple Branch
899800	3	Apple Branch	Apple Branch
900700	1	Braezels Branch	Braezels Br
901000	1	Dougherty Creek	Dougherty Creek
902200	1	Local Water	Unnamed
902300	1	Mud Branch	Mud Br
902300	2	Mud Branch	Mud Br
902300	4	Mud Branch	Mud Br
902400	1	Local Water	Unnamed
902500	1	Yellowstone River	Yellowstone River
902500	2	Yellowstone River	Yellowstone River
902500	3	Yellowstone River	Yellowstone River
902500	4	Yellowstone River	Yellowstone River
902700	1	Mc Clintock Creek	McClintock Creek
903400	1	Unnamed Lake	Unnamed
903450	1	Hidden Valley Lake	Hidden Valley Lake 1
903700	1	Yellowstone Lake	Yellowstone Lake
903700	2	Yellowstone Lake State Park Swim Beach, Yellowstone Lake	Yellowstone Lake
904000	1	Steiner Branch	Steiner Br
904000	3	Steiner Branch	Steiner Br
904200	1	Unnamed Trib to Steiner Br	Unnamed
904400	1	Unnamed Trib to Steiner Branch	Unnamed

904500	1	Cannon Creek	Canon Creek
904700	1	Local Water	Unnamed
904800	1	Local Water	Unnamed
904800	2	Local Water	Unnamed
905000	1	Local Water	Unnamed
905700	1	Brennan Creek	Brennan Creek
905700	2	Brennan Creek	Brennan Creek
905900	1	Local Water	Unnamed
906000	1	Sawmill Creek	Sawmill Creek
906000	2	Sawmill Creek	Sawmill Creek
906200	1	Erickson Creek	Erickson Creek
906800	1	Local Water	Unnamed
906900	1	Local Water	Unnamed
907000	1	Local Water	Unnamed
907100	1	Local Water	Unnamed
907200	1	Local Water	Unnamed
907300	1	Gordon Creek (Big Spring Cr Or Blue Mounds Cr)	Gordon Creek
915600	1	Spafford Creek	Spafford Creek
915700	1	Local Water	Unnamed
915800	1	Turtle Creek	Turtle Creek
915900	1	Brown Branch	Brown Br
915900	3	Brown Branch	Brown Br
916000	1	Unnamed Stream	Unnamed
916100	1	Unnamed Stream	Unnamed
916300	1	Unnamed Stream	Unnamed
916500	1	Unnamed Stream	Unnamed
916700	1	Local Water	Unnamed
916800	1	Local Water	Unnamed
917400	1	Feather Branch	Feather Br
917400	2	Feather Branch	Feather Br
917700	1	Silver Spring Creek	Silver Spring Creek
917800	1	Local Water	Unnamed
917900	1	Local Water	Unnamed
918000	1	Wolf Creek	Wolf Creek
918000	2	Wolf Creek	Wolf Creek

918000	3	Wolf Creek	Wolf Creek
918000	4	Wolf Creek	Wolf Creek
918100	1	Trout Brook (Slawther Creek)	Trout Brook
918100	2	Trout Brook (Slawther Creek)	Trout Brook
918200	1	Unnamed Stream	Unnamed
919600	1	Trib To Wolf Creek	Unnamed
919800	1	Copper Creek	Copper Creek
919800	4	Copper Creek	Copper Creek
920700	1	Lovetts Creek	Lovett Creek
920700	2	Lovetts Creek	Lovett Creek
921100	1	Thunder Branch	Thunder Br
921200	1	Ames Branch	Ames Br
921400	1	Local Water	Unnamed
922800	1	N. Fork Ames Branch	North Fork Ames Br
923100	1	S. Fork Ames Branch	South Fork Ames Br
923300	1	Otter Creek	Otter Creek
923400	1	Gravel Run Creek	Gravel Run Creek
923400	2	Gravel Run Creek	Gravel Run Creek
924000	1	Local Water	Unnamed
924100	1	Unnamed Trib To Otter Creek (T3nr3es24)	Unnamed
924800	1	Local Water	Unnamed
925300	1	Local Water	Unnamed
925500	1	Unnamed Trib to Otter Cr at CTH S	Unnamed
925750	1	Un Lake	Unnamed
925900	1	Vinegar Branch	Vinegar Br
926300	1	Wood Branch	Wood Br
926600	1	Unnamed Trib to Wood Branch	Unnamed
927000	1	Bonner Branch	Bonner Br
927100	1	Cottage Inn Branch	Cottage Inn Branch
927100	2	Cottage Inn Branch	Cottage Inn Branch
927300	1	Whiteside Branch	Whiteside Br
927800	1	Unnamed Trib To Pecatonica R (T3nr3es05)	Unnamed
927900	1	Mineral Point Branch	Mineral Point Br
928000	1	Furnace Creek/Brewery Creek	Furnace Creek
928000	2	Furnace Creek/Brewery Creek	Furnace Creek

928300	1	Unnamed	Unnamed
931800	1	Jones Branch	Jones Br
933500	1	Apple River	Apple River
933600	1	Clear Cr	Clear Creek
934200	1	Kentucky Creek	Kentucky Creek
934700	1	Unnamed Stream	Unnamed
935300	1	Unnamed Trib to Apple R	Unnamed
935500	1	Gelena River	Fever River
935500	2	Galena River	Fever River
935600	2	East Fork Galena River	East Fork Galena River
936300	1	Scrabble Creek	Scrabble Br
936400	1	Bull Branch	Bull Br
936500	1	Coon Branch	Coon Br
936500	2	Coon Branch	Coon Br
936500	3	Coon Branch	Coon Br
936500	4	Coon Branch	Coon Br
936600	1	Kelsey Br	Kelsey Br
936600	2	Kelsey Br	Kelsey Br
936800	1	Diggings Creek	Diggings Creek
936900	1	Ellis Branch	Ellis Br
937000	1	Shullburg Creek	Shullsburg Br
937200	1	Spring Br	Spring Br
937700	1	Shullsburg Trib	Unnamed
937800	1	Un Tr To Shullsburg Br	Unnamed
937800	2	DUPLICATE	Unnamed
938200	1	Local Water	Unnamed
938500	1	Local Water	Unnamed
938600	1	Blacks Creek	Blacks Creek
938900	1	Local Water	Unnamed
939100	1	Madden Br	Madden Br
939200	1	Local Water	Unnamed
939300	1	Local Water	Unnamed
939400	1	Local Water	Unnamed
939700	1	Local Water	Unnamed
939800	1	Pats Creek	Pats Creek

939900	1	Local Water	Unnamed
940100	1	Un Trib To Galena River (Elk Grove)	Unnamed
944500	1	Blockhouse Creek	Blockhouse Creek
946000	3	Rountree Br	Rountree Br
947100	1	Mounds Branch	Mounds Br
947100	2	Mounds Branch	Mounds Br
947700	1	Local Water	Unnamed
3000517	1	Local Water	Unnamed
3000630	1	TRIBUTARY TO SHULLSBURG BRANCH	Unnamed
4000020	1	Lake Joy	Lake Joy 2
5038836	1	Unnamed Stream	Unnamed
5038860	1	Unnamed Stream	Unnamed
5038864	1	Local Water	Unnamed
5039109	1	Unnamed Trib to Mineral Point Br	Unnamed
5039704	1	Local Water	Unnamed
5039752	1	Local Water	Unnamed
5039775	1	Local Water	Unnamed
5039789	1	Local Water	Unnamed
5039798	1	Local Water	Unnamed
5039800	1	Local Water	Unnamed
5039908	1	Local Water	Unnamed
5039942	1	Local Water	Unnamed
5039958	1	Local Water	Unnamed
5039967	1	Local Water	Unnamed
5039975	1	Local Water	Unnamed
5039976	1	Local Water	Unnamed
5040044	1	Local Water	Unnamed
5040059	1	Local Water	Unnamed
5040081	1	Local Water	Unnamed
5040087	1	Unnamed Stream	Unnamed
5040136	1	Local Water	Unnamed
5040863	1	Unnamed Tributary to Silver Spring Creek	Unnamed
5040896	1	Local Water	Unnamed
5041212	1	Unnamed Stream	Unnamed
5041500	1	Unnamed Stream	Unnamed

5041775	1	Unnamed Stream	Unnamed
5041776	1	Unnamed Stream	Unnamed
5041857	1	Local Water	Unnamed
5041924	1	Unnamed Stream	Unnamed
5041933	1	Unnamed Stream	Unnamed
5042082	1	Unnamed Stream	Unnamed
5042127	1	Unnamed Stream	Unnamed
5042179	1	Unnamed Stream	Unnamed
5042229	1	Unnamed Stream	Unnamed
5577959	1	Local Water	Unnamed
5578005	1	Local Water	Unnamed
5578053	1	Local Water	Unnamed
5578208	1	Local Water	Unnamed
5578256	1	Local Water	Unnamed
5578314	1	Local Water	Unnamed
5578337	1	Local Water	Unnamed
5578394	1	Local Water	Unnamed
5578529	1	Local Water	Unnamed
5578723	1	Local Water	Unnamed
5578736	1	Local Water	Unnamed
5579404	1	Local Water	Unnamed
5579524	1	Local Water	Unnamed
5579660	1	Local Water	Unnamed
5579675	1	Local Water	Unnamed
5579720	1	Local Water	Unnamed
5579828	1	Local Water	Unnamed
5580001	1	Local Water	Unnamed
5580019	1	Local Water	Unnamed
5580050	1	Local Water	Unnamed
5580233	1	Local Water	Unnamed
5580273	1	Local Water	Unnamed
5580570	1	Local Water	Unnamed
5580815	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

**Methods** 

Method Code Method Description

Fieldwork Ever	nts						
Start Date	Status	Field ID	Station ID	Station Name			
5/15/2012 6:00	COMPLETE	051501	10031350	Unnamed Tributary (917900) to Silver Spring Creek S of Walnut Road			
5/15/2012 6:10	COMPLETE	051502	10014194	Silver Spring Creek Baseline (at Walnut Rd)			
5/15/2012 6:30	COMPLETE	051503	10031346	Unnamed Tributary (5040863) to Silver Spring Creek			
5/15/2012 6:50	COMPLETE	051504	10031345	Unnamed Tributary (917800) to Silver Spring Creek at Tish Rd			
5/15/2012 7:00	COMPLETE	051505	10014238	Silver Spring Creek-Baseline Lower (at Silver Spring Rd)			
6/30/2012 17:00	COMPLETE	SS10630	10031350	Unnamed Tributary (917900) to Silver Spring Creek S of Walnut Road			
6/30/2012 17:20	COMPLETE	SS20630	10014194	Silver Spring Creek Baseline (at Walnut Rd)			
6/30/2012 17:35	COMPLETE	SS30630	10031346	Unnamed Tributary (5040863) to Silver Spring Creek			
6/30/2012 17:50	COMPLETE	SS40630	10031345	Unnamed Tributary (917800) to Silver Spring Creek at Tish Rd			
6/30/2012 18:00	COMPLETE	SS50630	10014238	Silver Spring Creek-Baseline Lower (at Silver Spring Rd)			
7/31/2012 6:00	COMPLETE	1731	10031350	Unnamed Tributary (917900) to Silver Spring Creek S of Walnut Road			
7/31/2012 6:15	COMPLETE	2731	10014194	Silver Spring Creek Baseline (at Walnut Rd)			
7/31/2012 6:30	COMPLETE	4731	10031345	Unnamed Tributary (917800) to Silver Spring Creek at Tish Rd			
7/31/2012 6:40	COMPLETE	3731	10014238	Silver Spring Creek-Baseline Lower (at Silver Spring Rd)			
8/30/2012 6:05	COMPLETE	SSC1	10031350	Unnamed Tributary (917900) to Silver Spring Creek S of Walnut Road			
8/30/2012 6:20	COMPLETE	SSC2	10014194	Silver Spring Creek Baseline (at Walnut Rd)			
8/30/2012 6:35	COMPLETE	SSC3	10031345	Unnamed Tributary (917800) to Silver Spring Creek at Tish Rd			
8/30/2012 6:50	COMPLETE	SSC4	10014238	Silver Spring Creek-Baseline Lower (at Silver Spring Rd)			
9/26/2012 6:10	COMPLETE	SS-1	10031350	Unnamed Tributary (917900) to Silver Spring Creek S of Walnut Road			
9/26/2012 6:25	COMPLETE	SS-2	10014194	Silver Spring Creek Baseline (at Walnut Rd)			
9/26/2012 6:40	COMPLETE	SS-3	10031345	Unnamed Tributary (917800) to Silver Spring Creek at Tish Rd			
9/26/2012 6:55	COMPLETE	SS-4	10014238	Silver Spring Creek-Baseline Lower (at Silver Spring Rd)			
10/30/2012 6:00	COMPLETE	SS-1	10031350	Unnamed Tributary (917900) to Silver Spring Creek S of Walnut Road			

10/30/2012 6:10	COMPLETE	SS-2	10014194	Silver Spring Creek Baseline (at Walnut Rd)
10/30/2012 6:25	COMPLETE	SS-3	10031345	Unnamed Tributary (917800) to Silver Spring Creek at Tish Rd
10/30/2012 7:00	COMPLETE	SS-4	10014238	Silver Spring Creek-Baseline Lower (at Silver Spring Rd)

Documents					
Title	Description	Author	Published	Comments	
Silver Spring Creek Water Chemistry Sampling Project 2011-2012	This report summarizes the water chemistry sampling conducted during the 2011 and 2012 growing season on Silver Spring Creek (WBIC = 917700) and tributaries.	James Amrhein	2/18/2013		
Silver Springs Mailing List	List of landowners and Operators		1/30/2012		

#### Budget

Budget De	scription: Silver Spring Creek PI Project -	Water Chemistry Samplin	ng Start Da	ite:	End Date	:
Code	Description Q	uantity Units	Unit Cost	Total Cost	Comments	
FTE	FTE Hours	Hours	\$0.00	\$0.00		
LTE SAL	LTE Salary	Hours	\$13.00	\$0.00		
LTE FR	LTE Fringe			\$0.00		
LTE IND	LTE Indirect			\$0.00		
LTE TOT	LTE Total Cost			\$0.00		
SUPPLY	Supplies	6	\$40.00	\$240.00	To cover shipping	ng of samples
EQUIP	Equipment			\$0.00		
MILEAGE	Mileage	Miles	\$0.72	\$0.00		
MEAL	Meals	Meals	\$9.00	\$0.00		
LODGE	Lodging			\$0.00		
TRAVEL	Travel Total			\$0.00		
BUG	Bug Contracts			\$0.00		
OTHER	Other Contracts			\$0.00		
USGS	USGS Costs			\$0.00		
TOTAL	Total Cost (excludes SLOH)			\$240.00		
Test Code	Description	Test Group		# Planned	Unit Cost	Total Cost
I440NLD	AMMONIA (AS N), DISS (EPA 350.1)	INORGANIC CHEMISTRY		30	\$25.89	\$776.70
I460GLT	NITRATE + NITRITE (AS N) (EPA 353.2	P) INORGANIC CHEMISTRY		30	\$27.00	\$810.00
1470DLT	TOTAL KJELDAHL NITROGEN (AS N) (EPA 351.2)	INORGANIC CHEMISTRY		30	\$32.99	\$989.70
I520PLT	TOTAL PHOSPHORUS (AS P) (EPA 36	5.1) INORGANIC CHEMISTRY		30	\$23.60	\$708.00
1650JLT	SUSPENDED SOLIDS (EPA METHOD 160.2)	INORGANIC CHEMISTRY		30	\$18.80	\$564.00

Total WSLH Lab Costs: \$3,848.40
Total Budget: \$4,088.40

Combined Budgets:\$240.00Combined WSLH:\$3,848.40Combined Total:\$4,088.40

Funding						
Organization	Source	Туре	Amount	Start Date	End Date	