

## Wisconsin Department of Natural Resources SWIMS Project Summary

### General Project Information

**Project ID:** West\_04\_CMP19

**Name:** 319 project funded - 2020 Mill Creek TP Monitoring for 9KE Plan

**Type:** Targeted Watershed Approach

**Subtype:** Planning (WQ, Nine Key Element)

**Status:** ACTIVE

**Start Date:** 01/01/2020

**End Date:** 06/30/2021

**Purpose:** Wood County LCD and the Mill Creek Farmer-led Group are working to develop a 9KE Plan for the Mill Creek Watershed. This project is to support lab costs for baseline TP data at 6 points in the HUC 10 (Mill Creek HUC 0707000302) watershed. The County will find volunteers to collect samples. This will identify baseline TP data for the watershed, and help identify reduction goals for their watershed plan, as well as establish natural variability for the sites. This monitoring began in 2019, and this will be second year of monitoring TP concentrations in the watershed.

**Objective:** Collect baseline growing season median total phosphorous concentrations at six locations of the Mill Creek Watershed, for their nine key element plan. GSM monitoring began in 2019, this would be year two of anticipated three years of TP concentration data, to account for natural and climactic variability. Baseline water chemistry for 9 key element plan.

**Comments:** New, but will be three years to account for natural and climactic variability. Baseline water chemistry for 9 key element plan.

**Outcome:** Baseline TP concentrations for county to help identify reduction goals, as well as natural baseline concentrations over three years, for 9-key element plan. Project will last three years to account for natural and climactic variability ending in October of 2021. Data will be managed in the SWIMS database.

**Study Design:** Growing season TP sampling at six locations in the Mill Creek watershed. Wood County will find volunteers to collect the water samples at the four pour points. Six samples will be collected per year during the growing season and will continue to be collected until the end of the growing season in 2021. Water chemistry sample sites at Robin Road, Cardinal Road, CTH PP, CTH O, CTH K, and CTH F(WBIC 1398600).

**QA Measures:**

### People

Name	Role	Status	Start Date	End Date	Organization	Comments
BRUHN, CAMILLE M	TEAM_MEMBER	INACTIVE	01/01/2019	06/30/2021	Wisconsin DNR	
HASZ, TAYLOR M	TEAM_MEMBER	ACTIVE	01/01/2019	06/30/2021	Wisconsin DNR	
HAZUGA, MARK J	SUPERVISOR	ACTIVE	01/01/2019	06/30/2021	Wisconsin DNR	
Lepsch, Jodi A	TEAM_MEMBER	ACTIVE	01/01/2019	06/30/2021	Wisconsin DNR	
OLDENBURG, PATRICK S	TEAM_MEMBER	ACTIVE	01/01/2020	06/30/2021	Wisconsin DNR	
RALEIGH, MYCAL C	TEAM_MEMBER	ACTIVE	01/01/2019	06/30/2021	Wisconsin DNR	
RATHBUN, KRISTEN E	TEAM_MEMBER	ACTIVE	01/01/2019	06/30/2021	Wisconsin DNR	
SCHNEYER, ANDREW J	TEAM_MEMBER	ACTIVE	01/01/2019	06/30/2021	Wisconsin DNR	
Selle, Alexander J	TEAM_MEMBER	ACTIVE	01/01/2019	06/30/2021	Wisconsin DNR	
WILLGER, CHRISTOPHER J	COORDINATOR	ACTIVE	01/01/2019	06/30/2021	Wisconsin DNR	
WILLGER, CHRISTOPHER J	PROJECT_LEAD	INACTIVE	01/01/2019	06/30/2021	Wisconsin DNR	

### Project Statuses

Date	Reported By	Status	Comments
01/15/2019	CAMILLE BRUHN	Proposed	Proposed project to support development of 9KE Plan.
01/14/2020	CHRISTOPHER WILLGER	Active	Year one TP data collected. Proposed year two.

### 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	

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Question	Answer
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 in the previous year?	
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)	
8. Reviewer Decision: Is this project recommended for funding?	

### Actions

Action	Detailed Description	Start	End Date	Status
Nine Key Element Plan	Support of 9key plan	01/01/2019	06/30/2021	IN_PROGRESS
<b>Details:</b>	<b>Parameter</b>	<b>Value/Amount</b>	<b>Units</b>	<b>Comments</b>
	BMP Implementation			
	Degraded Biological Community I & E Activities			
	Permit Modification			
	Products Developed: Stormwater Plan Report Writeup			
	Stormwater Goals Addressed: Reduce TSS Streambank & Shoreline Protection: Pollutant load reduction Total Nitrogen Total Phosphorus Total Suspended Solids Watershed Outreach, Planning			

### Monitoring Stations

Station ID	Name	Comments
10052488	Bear Creek @ Cardinal Rd	Monitored by county
10009456	Mill Creek At Cth K	Monitored by county, need to create new station. Site
10029069	Mill Creek at CTH F	Monitored by WAV
10012666	Mill Creek at CTH PP bridge	Monitored by county
503022	Mill Creek at Cth O	Monitored by county
10053858	Mill Creek at Maple Road	
10052186	Mill Creek at Robin Road	Monitored by county

### Assessment Units

WBIC	Segment	Local Name	Official Name
1398600	1	Mill Creek	Mill Creek
1398600	2	Mill Creek	Mill Creek
1398600	3	Mill Creek	Mill Creek
1398700	1	Bear Creek	Bear Creek

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### Lab Account Codes

Account Code	Description	Start Date	End Date
WQ015	LOCAL NEEDS PROJECTS	04/22/2015	12/31/2099
WQ043	319 PROJECT FUNDED TWA	05/07/2020	06/30/2021

### Forms

Form Code	Form Name
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### Methods

Method Code	Description
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### Fieldwork Events

Start Date	Status	Field ID	Station ID	Station Name
05/20/2019 10:30	COMPLETE	MC-SITE 5	10012666	Mill Creek at CTH PP bridge
05/20/2019 10:58	COMPLETE	MC-SITE 4	10052186	Mill Creek at Robin Road
05/20/2019 11:19	COMPLETE	MC-SITE 3	10052488	Bear Creek @ Cardinal Rd
05/20/2019 11:52	COMPLETE	MC-SITE 2	503022	Mill Creek at Cth O
05/20/2019 12:17	COMPLETE	MC-SITE 1	10053858	Mill Creek at Maple Road
05/31/2019 15:00	COMPLETE	MCF-2019-MAY	10029069	Mill Creek at CTH F
06/17/2019 09:00	COMPLETE	SITE 5	10012666	Mill Creek at CTH PP bridge
06/17/2019 09:21	COMPLETE	SITE 4	10052186	Mill Creek at Robin Road
06/17/2019 09:38	COMPLETE	SITE 3	10052488	Bear Creek @ Cardinal Rd
06/17/2019 09:57	COMPLETE	SITE 2	503022	Mill Creek at Cth O
06/17/2019 10:27	COMPLETE	SITE 1	10053858	Mill Creek at Maple Road
06/30/2019 14:00	COMPLETE	MCF-2019-JUNE	10029069	Mill Creek at CTH F
07/15/2019 08:17	COMPLETE	MILL CREEK AT RC	10052186	Mill Creek at Robin Road
07/15/2019 08:30	COMPLETE	MILL CREEK AT CT	10012666	Mill Creek at CTH PP bridge
07/15/2019 08:40	COMPLETE	CARDINAL	10052488	Bear Creek @ Cardinal Rd
07/15/2019 08:59	COMPLETE	2	503022	Mill Creek at Cth O
07/15/2019 09:40	COMPLETE	1	10053858	Mill Creek at Maple Road
07/31/2019 15:00	COMPLETE	MCF-2019-JULY	10029069	Mill Creek at CTH F
08/19/2019 08:12	COMPLETE	SITE 1	10053858	Mill Creek at Maple Road
08/19/2019 08:40	COMPLETE	NA	503022	Mill Creek at Cth O
08/19/2019 09:00	COMPLETE	NA	10052488	Bear Creek @ Cardinal Rd
08/19/2019 09:10	COMPLETE	NA	10012666	Mill Creek at CTH PP bridge
08/19/2019 09:25	COMPLETE	NA	10052186	Mill Creek at Robin Road
08/26/2019 14:00	COMPLETE	MCF-2019-AUGUST	10029069	Mill Creek at CTH F
09/15/2019 10:40	COMPLETE	#1	10053858	Mill Creek at Maple Road
09/15/2019 11:15	COMPLETE		503022	Mill Creek at Cth O
09/15/2019 11:40	COMPLETE	MILL CREEK AT RC	10052186	Mill Creek at Robin Road
09/15/2019 11:50	COMPLETE	MILL CREEK AT CT	10012666	Mill Creek at CTH PP bridge
09/15/2019 12:05	COMPLETE	BEAR CREEK @ C/	10052488	Bear Creek @ Cardinal Rd
09/16/2019 14:45	COMPLETE	MCF-2019-SEPTEMBER	10029069	Mill Creek at CTH F
10/21/2019 08:00	COMPLETE	1	10053858	Mill Creek at Maple Road
10/31/2019 07:00	COMPLETE	MCF-2019-OCTOBER	10029069	Mill Creek at CTH F
06/23/2020	COMPLETE	SITE 1	10053858	Mill Creek at Maple Road
06/23/2020	COMPLETE	SITE 2	503022	Mill Creek at Cth O
06/23/2020	COMPLETE	SITE 3	10052488	Bear Creek @ Cardinal Rd
06/23/2020	COMPLETE	SITE 4	10052186	Mill Creek at Robin Road

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Start Date	Status	Field ID	Station ID	Station Name
06/23/2020	COMPLETE	SITE 5	10012666	Mill Creek at CTH PP bridge
07/28/2020 08:45	COMPLETE	SITE 1	10053858	Mill Creek at Maple Road
07/28/2020 09:20	COMPLETE	SITE 2	503022	Mill Creek at Cth O
07/28/2020 10:00	COMPLETE	SITE 3	10052488	Bear Creek @ Cardinal Rd
07/28/2020 10:10	COMPLETE	SITE 5	10012666	Mill Creek at CTH PP bridge
07/28/2020 10:25	COMPLETE	SITE 4	10052186	Mill Creek at Robin Road
08/25/2020 09:10	COMPLETE	SITE 2	503022	Mill Creek at Cth O
08/25/2020 09:32	COMPLETE	SITE 1	10053858	Mill Creek at Maple Road
08/25/2020 09:42	COMPLETE	SITE 3	10052488	Bear Creek @ Cardinal Rd
08/25/2020 09:57	COMPLETE	SITE 5	10012666	Mill Creek at CTH PP bridge
08/25/2020 10:10	COMPLETE	SITE 4	10052186	Mill Creek at Robin Road
09/22/2020	COMPLETE	SITE 4	10052186	Mill Creek at Robin Road
09/22/2020	COMPLETE	SITE 5	10012666	Mill Creek at CTH PP bridge
09/22/2020 08:45	COMPLETE	SITE 1	10053858	Mill Creek at Maple Road
09/22/2020 09:45	COMPLETE	SITE 2	503022	Mill Creek at Cth O
09/22/2020 10:15	COMPLETE	SITE 3	10052488	Bear Creek @ Cardinal Rd
10/27/2020 09:22	COMPLETE	SITE 1	10053858	Mill Creek at Maple Road
10/27/2020 09:52	COMPLETE	SITE 2	503022	Mill Creek at Cth O
10/27/2020 10:25	COMPLETE	SITE 3	10052488	Bear Creek @ Cardinal Rd
10/27/2020 10:35	COMPLETE	SITE 5	10012666	Mill Creek at CTH PP bridge
10/27/2020 10:45	COMPLETE	SITE 4	10052186	Mill Creek at Robin Road
	SCHEDULED		10029069	Mill Creek at CTH F
	SCHEDULED		10029069	Mill Creek at CTH F
	SCHEDULED		10029069	Mill Creek at CTH F
	SCHEDULED		10029069	Mill Creek at CTH F
	SCHEDULED		10029069	Mill Creek at CTH F

### Documents

Title	Description	Author	Published	Comments
2019 Total Phosphorus Monitoring Report - Mill Creek at CTH F	The overall goal of this project is to evaluate the success of the Mead Lake TMDL and determine if additional TP load reductions are needed from the watershed. There are multiple objectives of this project. 1) Data collected will be used to determine if the installation of BMPs have reduced TP loading from the watershed and if water quality conditions improved in Mead Lake. The data will help evaluate the accuracy of the TP load reduction goal developed in the 2008 TMDL. The information may help in assessing new TP sources in the watershed. 2) Data collected will provide a baseline to document current water quality conditions and will allow for a comparison following additional BMP installation. This study will allow for an overall watershed and a site specific evaluation.	Ilana Haimes	02/14/2020	
MILL CREEK NONPOINT SOURCE WATERSHED	Mill Creek is a 47-mile tributary of the Wisconsin River. The stream	Wood County Land Conservation Dept	05/01/2019	

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Title	Description	Author	Published	Comments
IMPLEMENTATION PLAN	<p>originates in the City of Marshfield and has minimal stream flow in the upper reaches. The Marshfield WWTP discharges to the headwaters of Mill Creek and contributes more than 90% of the stream flow at the point of discharge. The upper 14 miles of the stream is listed in NR 104 as a Limited Aquatic Life variance stream and the lower 33 miles is classified as Fish and Aquatic life waters. Mill Creek is also listed as an impaired water body on EPA's 303d list for low dissolved oxygen, which required the Department to develop a TMDL for the stream. The stream is impacted by storm water run-off from Marshfield, sedimentation, barnyard and cropland run-off, flashy stream flow, channel ditching, stream bank erosion, ammonia toxicity and nutrient enrichment. Large volumes of storm water scours streambeds erode streams banks, and carries sediment, nutrients, and other pollutants to surface waters. August 2000 HBI results suggest there is a significant organic loading to the stream. Water samples collected in the winter of 2000 (before the new treatment plant was built) found ammonia concentrations high enough to cause chronic toxicity to aquatic life based on EPA criteria. Since Mill Creek is currently classified as Limited Aquatic Life, the WWTP in Marshfield has no ammonia limit. This plan provides an overview of the physical characteristics of the Mill Creek watershed including land use and land management. The plan will also summarize the several environmental studies and programs that increased the understanding of the causes of water quality degradation, past conservation initiatives and investments aimed at reducing agricultural runoff, and program outcomes. The intent of the background information is to provide a historical perspective of water quality and quantity issues for the watershed which will serve as a basis for developing a long range plan for the river system. Success is achieved when the long term use of soil and water resources are balanced with the safety, health and prosperity of the community. At the time of the Mill Creek watershed plan submission (2019), the Total Maximum Daily Load (TMDL) plan for the Wisconsin River basin has been submitted to EPA for review and approval. Wood County</p>			

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Title	Description	Author	Published	Comments
	acknowledges that the pollutant reduction goals and allocation limits developed to address the current resource concerns in both streams and flowages in the Mill Creek Watershed are forthcoming. Wood and Portage County also acknowledge that once the Wisconsin River Basin TMDL report is complete, this plan may need to be modified to be consistent with the TMDL report.			
Mill Creek 1688500 Impaired Waters Listing Documentation 2008	Data Documentation	Mark Hazuga		
Mill Creek TWA 2020 Watershed Map	Mill Creek TWA 2020 Watershed Map (319 project-funded) (2022 WQMPLAN)	Lisa Kosmond Helmuth	01/17/2020	

### Budget

**Budget Description:** FY20 Budget

**Start Date:** 04/01/2020

**End Date:** 06/30/2020

Code	Description	Quantity	Units	Unit Cost	Total Cost	Comments
FTE	FTE Hours	10	Hours	\$0.00	\$0.00	Assisting county
LTE SAL	LTE Salary	10	Hours	\$17.00	\$170.00	Training volunteers, providing supplies
LTE FR	LTE Fringe				\$41.99	
LTE IND	LTE Indirect				\$34.28	
LTE TOT	LTE Total Cost				\$246.27	
SUPPLY	Supplies				\$0.00	
EQUIP	Equipment				\$0.00	
MILEAGE	Mileage	200	Miles	\$0.72	\$144.00	
MEAL	Meals	1	Meals	\$10.00	\$10.00	
LODGE	Lodging				\$0.00	
TRAVEL	Travel Total				\$154.00	
BUG	Bug Contracts				\$0.00	
OTHER	Other Contracts				\$0.00	
USGS	USGS Costs				\$0.00	
TOTAL	Total Cost (excludes SLOH)				\$400.27	

Test Code	Description	Test Group	# Planned	Unit Cost	Total Cost
ICC52010	PHOSPHORUS TOTAL	INORGANIC CHEMISTRY	12	\$26.00	\$312.00
ICC65000	SUSPENDED SOLIDS	INORGANIC CHEMISTRY	12	\$23.00	\$276.00

**Total SLOH Lab Costs:** \$588.00

**Total Budget:** \$988.27

**Budget Description:** FY21 Budget

**Start Date:** 07/01/2020

**End Date:** 06/30/2021

Code	Description	Quantity	Units	Unit Cost	Total Cost	Comments
FTE	FTE Hours	10	Hours	\$0.00	\$0.00	Assistance to county
LTE SAL	LTE Salary	10	Hours	\$17.00	\$170.00	Training volunteers
LTE FR	LTE Fringe				\$41.99	

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Code	Description	Quantity	Units	Unit Cost	Total Cost	Comments
LTE IND	LTE Indirect				\$34.28	
LTE TOT	LTE Total Cost				\$246.27	
SUPPLY	Supplies				\$0.00	
EQUIP	Equipment				\$0.00	
MILEAGE	Mileage	300	Miles	\$0.72	\$216.00	
MEAL	Meals	1	Meals	\$10.00	\$10.00	
LODGE	Lodging				\$0.00	
TRAVEL	Travel Total				\$226.00	
BUG	Bug Contracts				\$0.00	
OTHER	Other Contracts				\$0.00	
USGS	USGS Costs				\$0.00	
TOTAL	Total Cost (excludes SLOH)				\$472.27	

Test Code	Description	Test Group	# Planned	Unit Cost	Total Cost
ICC52010	PHOSPHORUS TOTAL	INORGANIC CHEMISTRY	24	\$26.00	\$624.00
ICC65000	SUSPENDED SOLIDS	INORGANIC CHEMISTRY	24	\$23.00	\$552.00

**Total SLOH Lab Costs:** \$1,176.00  
**Total Budget:** \$1,648.27

**Combined Budgets:** \$872.54  
**Combined SLOH:** \$1,764.00  
**Combined Total:** \$2,636.54

### Funding

Organization	Source	Type	Amount	Start Date	End Date
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