

Wisconsin Department of Natural Resources SWIMS Project Summary

General Project Information

Project ID:	South_TWA_4_2017
Name:	Beaver Creek (Beaver Dam Watershed) TWA/WQ Plan, Columbia and Dodge Counties
Type:	Targeted Watershed Approach
Subtype:	Evaluation (TP SSC, Stressor, Bioassess)
Status:	COMPLETE
Start Date:	7/1/2017
End Date:	6/30/2018
Purpose:	This is HUC12 evaluation of Beaver Creek is in the Beaver Dam Lake Watershed. Beaver Dam Lake is a 319 eligible area till 2018. Beaver Creek is HUC number 070900010903 and is located in Columbia (70%) and Dodge (30%) counties. This is be a biological evaluation since there is very limited and outdated biological information. Beaver Creek Targeted Watershed Assessment: A Water Quality Report to Restore Wisconsin Watersheds TWA WQ Plan Online
Objective:	Project is necessary to collect updated biological data for this HUC 12. There are two unnamed waters of interest they include (5030365 & 836550) along with Beaver Creek WBIC (836500). This study investigates the following WBICs and Sites (5030365-1 site, 836550-3 sites, and 836500- 9 sites). The following was conducted: Fish IBI- up to 13 sites Macroinvertebrate Samples- up to 10 sites DNI sampling- 5 sites Flow- collected at all sites. Qualitative Habitat Evaluation- collected at all Sites sampled.
Comments:	
Outcome:	This project involved collecting new and updated biological data on Beaver Creek and two of its main tributaries. Biological data is outdated and limited at best. The study will result in: biological data will collected for Fish (IBI), Macroinvertebrates (HBI, MIBI), Diatoms- DNI samples, FLOW, and Qualitative Habitat Evaluations. Data is entered into SWIMS, and FHDB SWIMS stations established for all new stations Final report is the Beaver Creek TWA WQ Monitoring Report
Study Design:	Systems will be evaluated for biological data, flow data, and habitat. There is limited biological data for these three systems. Therefore it is necessary to go out and inventory these systems. Fish, Macroinvertebrates, Diatoms, flow, and habitat will be evaluated at up 13 sites in this HUC12, in the past only three sites have been evaluated and data goes back into the mid 1990's. This area has a UW-Madison Water Resources Management Practicum of 17 students also evaluating Beaver Dam Lake, Beaver Creek, and adjacent wetlands and uplands. This will be a great opportunity to also educate the practicum students. The data will also be shared with both Dodge and Columbia counties for watershed planning activities. Data with
QA Measures:	This monitoring will follow established protocols for the following: Fish IBI- Methods outline by Lyons et al for IBI assessments. Macroinvertebrates- HBI/IBI methods outlined by Hilsenhoff and Weigel. DNI- Methods outline by Science Services. FLOW- updated methods from Stream Tech Team 2015-16. Qualitative Habitat Evaluation- Simonson, Lyons et al Data entry, all data will be entered into SWIMS and FHDB.

People

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Name	Role	Status	Start Date	End Date	Organization	Comments
AMRHEIN, JAMES F	BACKUP TEAM MEMBER	COMPLETE	7/1/2017	6/30/2018	Wisconsin DNR	
Helmuth, Lisa D	COORDINATOR	INACTIVE	11/23/2019	12/28/2022	Wisconsin DNR	
SORGE, MICHAEL J	PROJECT_LEAD	ACTIVE	7/1/2017	6/30/2018	Wisconsin DNR	

Project Statuses

Date	Reported By	Status	Comments
1/20/2017	MICHAEL SORGE	Active	This is a proposed project for 2017.
3/28/2018	JAMES AMRHEIN	Progress: 75-100% Complete	Fish Collected Waiting for bugs Started draft of report.
1/14/2019	JAMES AMRHEIN	Progress: 75-100% Complete	Draft of final report is complete. Awaiting review by fellow biologist. Once that is completed, report will be finalized and entered in SWIMS and WATERS.
2/6/2019	JAMES AMRHEIN	Complete	Final Report has been uploaded to SWIMS

Project Status Detail

Answer Set: DEFAULT

Question	Answer
1. Number of Sample Sites (Enter the station IDs if you know them).	10-13 sites, will have to create 10 new sites in SWIMS if we are doing 13 stations. Current SWIMS stations are (10007664, 143120, and 10030028.
2. Number of Sample Events (Indicate how many trips into the field you anticipate for this project).	Fish- 7 days 13 sites Bugs- 2 days 10 sites DNI- 1 day 5 sites
3. Proposed Dates for Sample Collection	TBD
4. List applicable databases and who will enter data?	SWIMS FHDB
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?	still working on final reports
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 Date	End Date	Status
Monitor Aquatic Biology	Fish IBI Macroinvertebrates MIBI DNI Habitat and Flow	7/1/2017	6/30/2018	COMPLETE

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	The monitoring in 2017 indicate water quality in the tributaries of the Lake Weyauwega sub-watershed ranges from poor to excellent. Some of the land use characteristics observed during the 2017 monitoring project that can have a negative impact to the water quality of the tributaries to the Waupaca River were limited buffer protection along the stream corridors, wetland ditching, eroding stream banks, cropland erosion, channelization, cattle access, tile drainage, presence of aquatic invasive species, and sedimentation of fish and aquatic life habitat	7/1/2017	6/30/2018	PROPOSED
Water Quality Planning	collect information on Beaver Creek for tables and naratives	7/1/2017	6/30/2018	COMPLETE
Monitor Targeted Watershed Area (TWA)	TWA/319 for Beaver Creek HUC 12	7/1/2017	6/30/2018	COMPLETE

Monitoring Stations

Station ID	Name	Comments
10021222	Beaver Creek At Cth Cd	
143120	Beaver Creek at CTH G	
10048829	Beaver Crk at CTH A	
10048826	Beaver Crk at CTH C	
10048828	Beaver Crk at CTH G (upper crossing)	
10048825	Beaver Crk at Hollnagel Rd	
10020833	Randolph Unnamed Trib At Hwy 73	
10010079	Trib To Beaver Creek - Cd Xing	
10048827	Unnamed Trib (5030365) to Beaver Crk at Jung Rd	
10032589	Unnamed Tributary to Beaver Creek at Hwy. G	

Assessment Units

WBIC	Segment	Local Name	Official Name
835100	1	Beaver Dam Lake	Beaver Dam Lake
836500	1	Beaver Creek	Beaver Creek
836550	1	Tributary to Beaver Creek	Unnamed
836550	2	Local Water	Unnamed
5030365	1	Tributary to Beaver Creek	Unnamed

Lab Account Codes

Account Code	Description	Start Date	End Date
WQ002	TARGETED WATERSHED ASSESSMENTS	3/26/2014	12/31/2099

Forms

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Form Code	Form Name
FIELD CHEMISTRY FORM	Field Chemistry Form
INORGANIC	Inorganic Lab - Field Data
CBSM-TEST	Macroinvertebrate Field Data
QUAL_FISH_HAB_LESS10	Qualitative Fish Habitat Less Than 10 M
QUAL_FISH_HAB_MORE10	Qualitative Fish Habitat More Than 10 M

Methods	
Method Code	Method Description
FISH SURVEY BASELINE PROTOCOLS	Fish Survey Baseline Protocols 2004
HABITAT SURVEY BASELINE QUANTITATIVE	Habitat Baseline Survey Quantitative 2004
MACROINVERTEBRATE BASELINE PROTOCOLS	Macroinvertebrate Baseline D-frame Kick Net 2004
GRAB SAMPLE	Water Grab Sample Guidelines and Procedures 2005

Fieldwork Events				
Start Date	Status	Field ID	Station ID	Station Name
5/24/2017 14:00	COMPLETE	BCG-2017-MAY	143120	Beaver Creek at CTH G
6/26/2017 14:00	COMPLETE	BCG-2017-JUNE	143120	Beaver Creek at CTH G
7/25/2017 19:00	COMPLETE	BCG-2017-JULY	143120	Beaver Creek at CTH G
8/31/2017	COMPLETE	BCG-2017-AUGUST	143120	Beaver Creek at CTH G
9/25/2017 16:00	COMPLETE	BCG-2017-SEPTEMBER	143120	Beaver Creek at CTH G
10/10/2017	COMPLETE	20171010-11-01	10021222	Beaver Creek At Cth Cd
10/10/2017	RECEIVED	20171010-11-02	10048825	Beaver Crk at Hollnagel Rd
10/10/2017	COMPLETE	20171010-11-03	10048827	Unnamed Trib (5030365) to Beaver Crk at Jung Rd
10/10/2017	COMPLETE	20171010-11-04	10032589	Unnamed Tributary to Beaver Creek at Hwy. G
10/10/2017	COMPLETE	20171010-14-01	143120	Beaver Creek at CTH G
10/10/2017	COMPLETE	20171010-14-02	10048826	Beaver Crk at CTH C
10/10/2017	COMPLETE	20171010-14-03	10010079	Trib To Beaver Creek - Cd Xing
10/10/2017	COMPLETE	20171010-14-04	10020833	Randolph Unnamed Trib At Hwy 73
10/25/2017 12:00	COMPLETE	BCG-2017-OCTOBER	143120	Beaver Creek at CTH G

Documents

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Title	Description	Author	Published	Comments
2017 Total Phosphorus Monitoring Report - Beaver Creek at CTH G	This is a HUC12 evaluation of Beaver Creek which is in the Beaver Dam Lake Watershed. Beaver Dam Lake is a 319 eligible area till 2018. Beaver Creek is HUC number 070900010903. It is located in Columbia (70%) and Dodge (30%) counties. This will be a biological evaluation since there is very limited and outdated biological information.	Ilana Haimes	2/19/2018	
BEAVER CREEK OERW EVALUATION	Sauk Co., entire stream listed nd approved in code NR102 as a ERW	Van Dyck, Gene	1/24/1989	
Beaver Creek Photograph	Beaver Creek downstream of Beaver Creek Road	Jean Unmuth	9/25/2015	
Beaver Creek TWA Monitoring Report (2017)	Beaver Creek Watershed Monitoring Report (2017) Columbia and Dodge counties. Encompasses HUC 12 (070900010903).	James Amrhein, Wisconsin DNR; Michael Sorge	3/1/2017	
Beaver Creek Targeted Watershed Assessment: A Water Quality Report to Restore Wisconsin Watersheds	The TWA/WQ Monitoring Report of the 2017 assessment of the Beaver Creek Watershed in Columbia and Dodge counties. Encompasses HUC 12 (070900010903).	James Amrhein, Michael Sorge	2/1/2019	
Beaver Creek at CTH A in the Fall (Amrhein Photo, 2017)	Beaver Creek at CTH A in the Fall (Amrhein Photo, 2017)	Amrhein, Jim	1/1/2017	
Beaver Creek at CTH C (Amrhein Photo, 2017)	Beaver Creek at CTH C (Amrhein Photo, 2017)	Amrhein, Jim	1/1/2017	
Beaver Creek at CTH C (Amrhein Photo, 2017)	Beaver Creek at CTH C (Amrhein Photo, 2017)	Amrhein, Jim	1/1/2017	
Beaver Creek at CTH C (Amrhein Photo, 2017)	Beaver Creek at CTH C (Amrhein Photo, 2017)	Amrhein, Jim	1/1/2017	
Beaver Creek at County Highway Trunk A (Photo by Jim Amrhein, 2017)	Beaver Creek at CTH A (Amrhein Photo, 2017)	Amrhein, Jim	1/1/2017	

Budget

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Budget Description: Biological Data Collection (Fish IBI / Macorinvertebrate). **Start Date:** 7/1/2017 **End Date:** 11/30/2017

Code	Description	Quantity	Units	Unit Cost	Total Cost	Comments
FTE	FTE Hours	200	Hours	\$0.00	\$0.00	Fish- 120+Bugs-32 + Data-40=192
LTE SAL	LTE Salary	80	Hours	\$13.00	\$1,040.00	Fish 56+ Data entry- 24= 80
LTE FR	LTE Fringe				\$256.88	
LTE IND	LTE Indirect				\$209.71	
LTE TOT	LTE Total Cost				\$1,506.59	
SUPPLY	Supplies				\$0.00	
EQUIP	Equipment				\$0.00	
MILEAGE	Mileage	950	Miles	\$0.72	\$684.00	
MEAL	Meals	25	Meals	\$4.00	\$100.00	
LODGE	Lodging				\$0.00	
TRAVEL	Travel Total				\$784.00	
BUG	Bug Contracts	10		\$180.00	\$1,800.00	
OTHER	Other Contracts	5		\$300.00	\$1,500.00	DNI- 5 samples 300\$ each 1500\$
USGS	USGS Costs				\$0.00	
TOTAL	Total Cost (excludes SLOH)				\$5,590.59	

Total WSLH Lab Costs: \$0.00
Total Budget: \$5,590.59

Combined Budgets: \$5,590.59
Combined WSLH: \$0.00
Combined Total: \$5,590.59

Funding					
Organization	Source	Type	Amount	Start Date	End Date