455 HAYWARD AVENUE, OAKDALE, MINNESTOA 55082 Phone 651.330.8220 x22 fax 651.330.7747 www.mscwmo.org

Regular Meeting of the Middle St. Croix Watershed Management Organization Bayport Public Library, Bayport, MN Thursday, September 14, 2017 6:00PM

- 1. Call to Order 6:00PM
- 2. Approval of Minutes
 - a) Draft minutes- July 13, 2017 -pg. 1-3
- 3. Treasurer's Report
 - a. Report of savings account, assets for September 14, 2017
 - b. Approve payment of bills for September 14, 2017
- 4. Public Comments
- Old Business
 - a. 2018 MSCWMO Final Budget -pg. 4-5
- 6. New Business
- 7. Grant and Cost Share Applications
 - a. Penny Anderson Native Garden Application, Afton -pg. 6
 - b. Jeanne Riley Native Shoreline Restoration Reimbursement, Lakeland -pg. 7
 - c. Andersen Windows Parking Lot Improvements and Filtration Basin Application, Bayport –pg. 8-9
 - d. St. Francis of Assisi Raingarden Application, Lakeland -pg. 10
- 8. Plan Reviews/Submittals
 - a. Andersen Windows Paving and Filtration Basin, Bayport-Information Only -pg. 11
 - b. 125 Lakeland Shores Road N Single Lot Residential Project Review-Information Only -pg. 12-18
 - c. Crosby Hotel, Stillwater-Information Only -pg. 19-28
- 9. Administrator's Report -pg. 29-30
- 10. Adjourn



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Minutes of the Middle St. Croix Watershed Management Organization Bayport Public Library, Bayport, MN Thursday, July 13, 2017 6:00PM

Present: Brian Zellar, Lakeland Shores; Doug Menikheim, Stillwater; John Fellegy, Baytown; Mike Runk, Oak Park Heights; Nancy Karras-Anderson, St. Mary's Point; Annie Perkins, Afton; Tom McCarthy, Lake St. Croix Beach; Patrick McGann, Bayport; Richard Glasgow, Lakeland; Dan Kyllo, West Lakeland; Michael Mayer\Administrator Mike Isensee.

1. Call to Order - 6:00PM

The meeting was called to order by Brian Zeller at 6:00pm.

2. Approval of Minutes

a) Draft minutes April 13, 2017
 Motion to approve the minutes was made by Mike Runk, seconded by Tom McCarthy.
 Motion carried.

3. Treasurer's Report

- a. Report of savings account, assets for July 13, 2017
- b. Approve payment of bills for July 13, 2017

The treasurer's report was presented by Dan Kyllo.

June: The remaining checking account balance is \$219,056.49. First State Bank CDs are valued at \$32,094.13. The ending balance in the RBC savings account is \$48,660.17.

Bills to be approved this month are:

Peterson Company: \$2,000.00
Washington Conservation District (Administration) \$2,920.00;
Washington Conservation District (Technical Services) \$5,723.14;
Washington Conservation District (EMWREP); \$1,750.00;

Total: \$12,393.14

Tom McCarthy moved to approve the treasurer's report and pay the bills presented, seconded by Mike Runk, and the motion carried.

4. Public Comments

None.

5. Old Business

None.

6. New Business

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a. 2018 Water Monitoring Plan

Information only.

1. 2018 monitoring of Lily Lake

Administrator Isensee recommended 2018 condition monitoring be continue on Lily Lake and targeted monitoring continue on the outflow from Brick Pond to Lily Lake.

The board discussed the best approach to reducing phosphorous loads to Lily Lake. Administrator Isensee explained the low concentration of phosphorous and large volume of water from Brick Pond catchment (22% of load), makes treatment very difficult and expensive. However, the high concentration and small volumes of stormwater from Greely Street area (35% of load) and three other catchments draining directly to Lily Lake are the most cost effective way to reduce phosphorous to the lake.

2. 2018 monitoring of Perro Creek

Monitoring of <u>Perro Pond</u> outlets showed low phosphorous contributions. Phosphorous concentrations increased between Perro Pond and the Perro Creek diversion structure.

Administrator Isensee recommend establishing long term monitoring at Perro Creek Diversion in 2018 since the flow goes to the St. Croix from there.

Board requested the changes be incorporated into the 2018 MSCWMO Budget for consideration.

b. 2018 Clean Water Fund Grant Application

Administrator Isensee recommended the MSCWMO apply for phase 3 Lake St. Croix Direct grant of \$150,000.

Motion by Brian Zeller, seconded by Mike Runk, to approve the Lake St. Croix Direct Discharge application for 2018 Clean Water Grant Funds. Motion carried.

c. <u>Washington County 2017 Clean Water Fund Grant Subsurface Sewage Treatment System</u> (SSTS) Records Project and Risk Assessment

Washington County awarded clean water fund grant for the assessment of septic systems to establish goals, criteria, and data for dealing with at risk septic systems. The board discussed Washington County's past efforts and the interest free septic load program. They did not have any additional items to consider for the upcoming meeting.

d. One Watershed One Plan Update

The Board of Managers discussed the project to create a coordinated plan, from all the existing plans, for the Lower St. Croix. Felt this was a redundant planning exercise, but wanted to ensure they county and watersheds continued to be well positioned to apply for and receive funding to support local water resource management priorities.

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e. 25 by 25 brainstorm

- Governor Dayton wants to increase water quality from 8% improvement to 25% improvement by 2025
- ii. Meeting looks for input on measures to be taken to achieve this goal.
- iii. <u>Participate by</u>: SHOWING UP and ID that we are part of local water management since most of the implementation is done through local organizations.

7. Grant and Cost Share Applications

a. Meyers Native Prairie Restoration, Baytown Township

Motion by Brian Zeller, seconded by John Fellegy, to award \$250 Landscaping for Habitat Grant for a 8,000 square foot turf to prairie restoration at 3491 Pete Miller Avenue, Baytown Township. Motion Carried.

b. Meyer Infiltration Basin SCRA Grant Agreement

- i. \$1000-\$1500 cost share to create a 0 discharge site with landowner.
- ii. City to fix the road drainage issue causing water to bypass infiltration basin and go through aforementioned property.
- iii. Motion by Mike Runk, seconded by Tom McCarthy. Motion Carried.

8. Plan Reviews/Submittals

- a. 2017 Stillwater Streets Conditional Approval
 - 1. Provide an additional 785 cubic feet of retention in the Lake St. Croix Direct Discharge Subwatershed.
 - 2. Submit Plans for Raingardens #1, #2, #3, in the Lily Lake Subwatershed.
 - 3. Change CFS to inches per hour for RG5 in the stormwater calculations.
 - ii. Motion by Doug Menikheim, seconded by Nancy Karras-Anderson. Motion Carried.

9. Administrator's Report page

Administrator Isensee gave a report including updates of current projects.

- a. Fixed gully at Brick Pond
- b. Correctional Facility Parking Lot in the process of installing a raingarden and excited about it.

10. Adjourn

The motion to adjourn was made by Brian Zeller, seconded by John Fellegy. The motion carried and the meeting was adjourned at 7:30p.m.

MSCWMO 2018 Draft Budget				
		CWMO Budget	2018 MSCWMO Budget	% CHANGE
	ISTRATION		T .	
Administration - General	\$	29,200.00	\$ 29,200.00	0.00%
Accounting	\$	1,500.00	\$ 1,500.00	0.00%
Legal Fees - General	\$	1,000.00	\$ 1,000.00	0.00%
Audit	\$	1,900.00	\$ 1,900.00	0.00%
Insurance & Bonds	\$	3,000.00	\$ 3,000.00	0.00%
Office supplies/equipment/postage	\$	750.00	\$ 750.00	0.00%
Minutes/Clerical	\$	1,100.00	\$ 1,100.00	0.00%
Copying/printing/reproduction/minutes	\$	750.00	\$ 750.00	0.00%
Admin Total	\$	39,200.00	\$ 39,200.00	0.00%
PROJE	CT FLINIDC			
	CT FUNDS	2,000,00	L	0.000/
Project Contingency	\$	2,000.00	\$ 2,000.00	0.00%
Engineering - Project	\$	5,400.00	\$ 5,400.00	0.00%
Development Plan Reviews	\$	4,800.00	\$ 4,800.00	0.00%
Erosion Monitoring Program	\$	2,250.00	\$ 2,250.00	0.00%
BMP Cost-Share (general)	\$	19,500.00	\$ 15,500.00	-20.51%
BMP TA & Admin	\$	25,859.00	\$ 25,521.00	-1.31%
Community TA	\$	3,000.00	\$ 3,000.00	0.00%
Water Resource Educator	\$	6,000.00	\$ 6,000.00	0.00%
Website	\$	750.00	\$ 750.00	0.00%
Inspection and Tracking Database	\$	900.00	\$ 900.00	0.00%
Project Total	\$	70,459.00	\$ 66,121.00	-6.157%
WATER N	ONITORIN	IG		
Water Monitoring	\$	16,411.00	\$ 20,749.00	26.43%
Water Monitoring Total		16,411.00	\$ 20,749.00	26.433%
water Monitoring Total	7	10,411.00	20,743.00	20.433/0
LONG TERM P	ROJECT SA	VINGS		
Water Monitoring - Set aside for equipment rep	\$	1,000.00	\$ 1,000.00	0.00%
WMP Update	\$	6,000.00	\$ 6,000.00	0.00%
Savings Total	\$	7,000.00	\$ 7,000.00	0.00%
MSCWMO Member Contribution Budget	\$	133,070.00	\$ 133,070.00	0.00%
MSCWINO Member Contribution Budget	,	133,070.00	\$ 155,070.00	0.00%
MSCWMO 2018 Draft Grant Budget				
	ANTS			
Lily Phase III	\$	86,600.00		
Targeted Monitoring	\$	7,100.00		+
Lake St. Croix Direct Phase I	\$	94,500.00		
Lake St. Croix Direct Phase II	\$	40,000.00	\$ 110,000.00	1
Perro Creek Phase I	\$		\$ 110,000.00	
	\$	12,000.00	\$ 60,000.00	
Lily Lake Final 45 Feasibility Grants Total		240,200.00	\$ 220,000.00	
Grants Total	Ş	240,200.00	220,000.00	

MSCWMO 2018 Draft Budget

	2017 MSCWMO Budget	2018 MSCWMO Budget	% CHANGE
ADMINI	STRATION		
Administration - General	\$ 29,200.00	\$ 29,200.00	0.00%
Accounting	\$ 1,500.00	\$ 1,500.00	0.00%
Legal Fees - General	\$ 1,000.00	\$ 1,000.00	0.00%
Audit	\$ 1,900.00	\$ 1,900.00	0.00%
Insurance & Bonds	\$ 3,000.00	\$ 3,000.00	0.00%
Office supplies/equipment/postage	\$ 750.00	\$ 750.00	0.00%
Minutes/Clerical	\$ 1,100.00	\$ 1,100.00	0.00%
Copying/printing/reproduction/minutes	\$ 750.00	\$ 750.00	0.00%
Admin Total	\$ 39,200.00	\$ 39,200.00	0.00%
220.5			
	CT FUNDS	1.000.00	0.000/
Project Contingency	\$ 2,000.00	\$ 2,000.00	0.00%
Engineering - Project	\$ 5,400.00	\$ 5,400.00	0.00%
Development Plan Reviews	\$ 4,800.00	\$ 4,800.00	0.00%
Erosion Monitoring Program	\$ 2,250.00	\$ 2,250.00	0.00%
BMP Cost-Share (general)	\$ 19,500.00	\$ 15,500.00	-20.51%
BMP TA & Admin	\$ 25,859.00	\$ 25,521.00	-1.31%
Community TA	\$ 3,000.00	\$ 3,000.00	0.00%
Water Resource Educator	\$ 6,000.00	\$ 6,000.00	0.00%
Website	\$ 750.00	\$ 750.00	0.00%
Inspection and Tracking Database	\$ 900.00	\$ 900.00	0.00%
Project Total	\$ 70,459.00	\$ 66,121.00	-6.157%
WATER N	IONITORING		
Water Monitoring	\$ 16,411.00	\$ 20,749.00	26.43%
Water Monitoring Total		\$ 20,749.00	26.433%
water Womtoring Total		Ψ Ξομ. 10.00	20110070
LONG TERM PROJECT SAVINGS			
Water Monitoring - Set aside for equipment rep		\$ 1,000.00	0.00%
WMP Update	\$ 6,000.00	\$ 6,000.00	0.00%
Savings Total	\$ 7,000.00	\$ 7,000.00	0.00%
MSCWMO Member Contribution Budget	\$ 133,070.00	\$ 133,070.00	0.00%
moornio member contribution budget	7 133,070.00	7 133,070.00	0.0076

Andersen Native Planting & Buckthorn Removal

Project: Installation of a 1,700 square foot native garden and a 0.5 acre removal of buck thorn

Cost: Native garden = \$915 Buckthorn Removal = \$550

Cost Share: MSCWMO \$250 Landscaping for Habitat Grant & a \$500 Washington Conservation District CWMA Buckthorn

Removal Grant



Project Location

Benefits:

Reduction in soil erosion and reestablishment of native vegetation.

Partner:

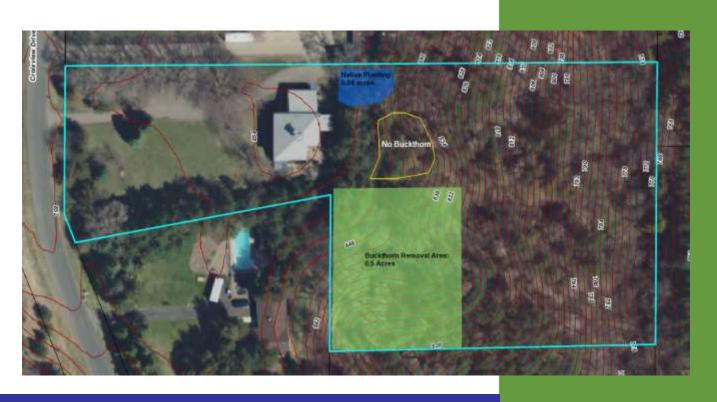
Washington
Conservation District

Watershed:

St. Croix River

Community:

63 Croixview Drive, Afton



MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION

Page 6 of 30

Afton, Bayport, Baytown Township, Lakeland, Lakeland Shores, Lake St. Croix Beach
Oak Park Heights St. Mary's Point, Stillwater and West Lakeland Township
Page

Installation:

2017

Riley Native Bluff Planting

Project: Removal of failed timber wall, blanketing and native planting on 2,070 ft² of eroding bluff.

Cost: Erosion control blanket and native plants = \$511.96

Cost Share: MSCWMO \$250 Landscaping for Habitat Grant



Before

After



MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION

Afton, Bayport, Baytown Township, Lakeland, Lakeland Shores, Lake St. Croix Beach
Oak Park Heights St. Mary's Point, Stillwater and West Lakeland Township
Page

Benefits:

Reduction in soil erosion and reestablishment of native vegetation.

Partner:

Washington
Conservation District

Watershed:

St. Croix River

Community:

Lakeland

Installation:

2017

455 Hayward Avenue N. Oakdale, MN 55128

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MEMORANDUM

TO: Middle St. Croix WMO Board of Managers

FROM: Mikael Isensee, Administrator

DATE: September 11, 2017

7a) Andersen Corporation Bayport Manufacturing Facility Stormwater Quality Improvement Filtration Basin Cost Share Request

Cost Share Request Summary

The Andersen Corporation is requesting \$50,000 cost share to install a filtration basin to treat 4.1 acres of parking lot area directly discharging to Lake St. Croix at their manufacturing facility located at 100 4th Avenue N. in Bayport, MN. As a component of the project Andersen is paving gravel sections of the parking lot and has installed catch basins to meet their industrial discharge permit requirements. The total project cost is \$452,000. The proposed filtration basin total cost is \$123,900 and reduces phosphorous loading to Lake St. Croix by at least 5.1 pounds per year. Cost share funding for the project is provided by the Lake St. Croix Direct Discharge Phase II Clean Water Fund

Direct Discharge Fliase II Clean water Fund

Grant.

Background

The MSCWMO has been working with Andersen Corporation Environmental Engineering since 2013 to identify and prioritize voluntary practices to improve stormwater quality and habitat at the approximately 128 acres Andersen Corporation Bayport manufacturing facility (Facility).

Approximately 79 acres (62%) of the area consists of impermeable surfaces. Class 5 gravel covers the northwest portion of the site where lumber is stored and trailers are temporarily parked.

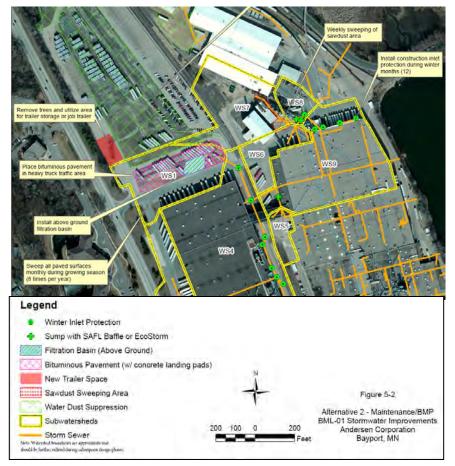


Figure 1 Andersen facility drainage area to outfall BLM-01

Runoff originating at the Facility flows to 11 stormwater outfalls in the St. Croix River. This project focuses on improvements to BML-01 outfall (Figure 1-1), which has exceeds Total Suspended Solids (TSS) and Chemical Oxygen Demand (COD) standards for industrial sites. The watershed contributing to outfall BML-01 is approximately 29.8 acres. The impervious surfaces in this area include concrete pavement roads and parking areas,

gravel parking and laydown areas, and roofs. A series of approximately 28 catch basins convey runoff from the gravel and pavement areas to outfall BML-01 in Lake St. Croix.

Prior to the installation of the filtration basin, Andersen Corporation in installing catch basin inserts at several of the catch basins within BML-01 to remove particulate before it enters the storm sewer. Additionally, they are paving gravel class five surfaces to reduce sediment discharges into the storm sewer. The proposed filtration basin further improves stormwater quality by at least 5.1 pounds of phosphorous per year prior to discharging to Lake St. Croix.

Andersen Corporation Bayport Manufacturing Facility Stormwater Quality Improvement Filtration Basin Cost Share Request

Motion by Board Member 1, seconded by Board Member 2, to award 50% cost share not to exceed \$50,000 for the installation of a stormwater filtration basin at the Andersen Manufacturing Facility in Bayport.

St. Francis of Assisi Raingarden

Project: Installation of a 1,200 square foot infiltration basin capturing runoff from 1.62 acres of parking lot.

Estimated Cost: \$7,765.00

Cost Share: MSCWMO \$500 Landscaping for water quality grant.



Project Location

Benefits:

Reduction in stormwater volume and nutrients.

Partner:

Washington **Conservation District**

Watershed:

St. Croix River

Community:

Lake St. Croix Beach



Summary

Approximatey 1200 sf infiltration basin that filters and encourages runoff from parking lot and lawn to be soaked back into the ground.

1.24 lbs/yr TP reduction: TSS reduction: 325 lbs/yr

MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION

Afton, Bayport, Baytown Township, Lakeland, Lakeland Shores, Lake St. Croix Beach Oak Park Heights St. Mary's Point, Stillwater and West Lakeland Township Page 1 Installation:

2017

455 HAYWARD AVENUE OAKDALE, MINNESTOA 55128 Phone 651.330.8220 x22 fax 651.330.7747 www.mscwmo.org

August 28, 2017

Adam Bell, Administrator City of Bayport 294 3rd Street North Bayport, MN 55003

RE: Andersen Parking Lot Improvements and Filtration Basin

Dear Mr. Bell,

The Middle St. Croix Watershed Management Organization (MSCWMO) received required submittal items on August 3, 2017 and revised submittals on August 24, 2017 for the proposed Andersen Windows Bayport Manufacturing Facility Parking Lot Improvements and Filtration Basin Project, located at 100 4th Ave. N., within MSCWMO boundaries and in the City of Bayport. The proposed project qualifies for full review under the MSCWMO 2015 Watershed Management Plan (WMP).

The project, as revised, meets all applicable Performance Standards contained within Section 7.0 of the 2015 MSCWMO WMP. The MSCWMO recommends approval with one condition:

1. Submit a maintenance agreement approved by the City of Bayport.

The enclosed checklist contains detailed information on project review qualification and the policies and performance standards of the WMP. MSCWMO review process information can be downloaded from www.mscwmo.org. Feel free to contact me at 651-330-8220 x22 or misensee@mnwcd.org if you have any questions regarding these comments.

Sincerely,

Mikael Isensee Administrator

From: Mike Isensee [mailto:MIsensee@mnwcd.org]

Sent: Tuesday, September 05, 2017 1:58 PM

To: Jennifer Cates < jennifer@catesfinehomes.com>

Cc: Steve Johnston <sjohnston@elanlab.com>; John Parotti (jparotti@sehinc.com)

<jparotti@sehinc.com>; Luke Horsager <LHorsager@elanlab.com>

Subject: RE: Tom Scanlan, 125 Lakeland Shore Road N

Hello Jennifer,

Thank you for the clarifications on August 31. Please consider the following revisions and resubmit the plans.

- 1. Add the location of all bluff lines.
- 2. Add tillage and soil bed preparation methods as part of the landscape installation.
- 3. Add downspout locations and flow arrows.
- 4. Identify final vegetation for the infiltration facilities.
- 5. Provide additional information to demonstrate the retention volume of the West Basin (see Section G)
- 6. Verify the total required infiltration volume based on new and reconstructed impervious surfaces (see Section G).
- 7. Add construction standards for the infiltration basin in conformance with MSCWMO standards (see Section H).

I have attached the full review document with provides further explanation for these items. Please contact me if you have any questions.

Thank you,

Mike

Mikael Isensee, CPESC | Administrator

Middle St. Croix Watershed Management Organization

Watershed Specialist | Washington Conservation District | 455 Hayward Ave. | Oakdale, MN 55128

2651-330-8220 Ext. 22 | Fax 651-330-7747

Cell Phone: 612-839-6492 @ misensee@mnwcd.org

www.mscwmo.org www.mnwcd.org

455 Hayward Avenue, Oakdale, MN 55128 Phone 651.330.8220 x22 fax 651.330.7747 www.mscwmo.org

MSCWMO PROJECT REVIEW- SINGLE LOT RESIDENTIAL SUBMITTAL



MSCWMO Project Review ID: 17-013

Project Name: 125 Lakeland Shores

Applicant: Tom Scanlan, 125 Lakeland Shores Road, Lakeland Shores MN 55043

Purpose: A new home will be constructed utilizing the foundation and other portions of the existing home. In addition, the site landscaping will be updated and the existing driveway will be widened.

Location: 125 Lakeland Shores Rd. N., Lakeland Shores

Review date: 9/5/2017

Recommendation: Revise and resubmit.

APPLICABILITY:

Any project undertaking grading, filling, or other land alteration activities that involve movement of 100 cubic yards of earth or removal of vegetation on greater than 10,000 square feet of land
Any project that creates or fully reconstructs 6,000 square feet or more of impervious surface
All major subdivisions or minor subdivisions that are part of a common plan of development. Major subdivisions are defined as subdivisions with 4 or more lots.
Any project with wetland impacts
Any project with grading within public waters
Any project with grading within buffers
Any project with grading within 40-feet of the bluff line
Development projects that impact 2 or more of the member communities

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	CMSC
	New or redevelopment projects within the St. Croix Riverway that require a building permit that adds five hundred (500) square feet or more of additional impervious surface
	Any project requiring a variance from the current local impervious surface zoning requirements for the property
	Any land development activity, regardless of size, that the City determines is likely to cause an adverse impact to an environmentally sensitive area or other property, or may violate any other erosion and sediment control standard set by the member community.
REQ	RED SUBMITTALS:
	L. Review Fee: Single lot residential \$350 fee.
	2. Grading plan showing grading limits, existing and proposed contours related to NAVD 1988 datum (preferred) or NGVD 1929.
	3. Location of existing and proposed permanent structures.
	1. Ordinary High Water (OHW) elevations and location of all existing water bodies.
	5. Location of all bluff lines.
	5. Lowest floor elevations of structures built adjacent to stormwater management features and other water bodies must be a minimum of two feet above the 100-year flood elevation.
NA	7. Delineation of existing wetland, shoreland, ordinary high water levels, drain tiling, and floodplain areas.
NA	3. Details of proposed buffer upslope of water resources including size and vegetation characteristics (when applicable).

Oakdale, Phone 651.330.8220 fax 651.330.7747

9. Erosion/sediment control plan demonstrating locations, specifications, and details of following items:

A. Erosion Prevention

- i. Stabilize all exposed soil areas (including stockpiles) with temporary erosion control (seed and mulch or blanket) within 7 days after construction activities in the area have temporarily or permanently ceased.
- ii. Identify location, type and quantity of temporary erosion prevention practices.
- iii. Identify permanent vegetation.

B. Sediment Control

- i. Sediment control practices will be placed down-gradient before upgradient land disturbing activities begin.
- ii. Identify the location, type and quantity of sediment control practices.
- iii. Vehicle tracking practices must be in place to minimize track out of sediment from the construction site. Streets must be cleaned if tracking practices are not adequate to prevent sediment from being tracked onto the street.

C. Inspections and Maintenance

- i. Applicant must inspect all erosion prevention and sediment control practices once every 7 days or after a ½" rain event to ensure integrity and effectiveness. All nonfunctional practices must be repaired, replaced or enhanced the next business day after discovery.
- ii. Plans shall include contact information including email and a phone number of the person responsible for inspection and compliance with erosion and sediment control.

D. Pollution Prevention

- i. Solid waste must be stored, collected and disposed of in accordance with state law.
- ii. Provide effective containment for all liquid and solid wastes generated by washout operations (concrete, stucco, paint, form release oils, curing compounds).
- iii. Hazardous materials that have potential to leach pollutants must be under cover to minimize contact with stormwater.

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E. Final Stabilization

- For residential construction only, individual lots are considered final stabilized if the structures are finished and temporary erosion protection and downgradient sediment control has been completed.
- ii. Grading and landscape plans shall include soil tillage and soil bed preparation methods that are employed prior to landscape installation to a minimum depth of 8" and incorporate amendments to meet Minnesota State Stormwater Manual predevelopment soil type bulk densities.
 - 1. Observe minimum setbacks for areas within the dripline of existing trees, over utilities within 30 in of the surface, where compaction is required by design and inaccessible slopes.
- 10. Details of proposed structural stormwater practices (Meets Minnesota Stormwater Manual guidelines)
 - A. Stormwater flows are diverted away from bluffs whenever feasible.

 Please add downspout locations and flow arrows.
 - B. Volume control facilities must drain down within 48 hours, as required by the MPCA NPDES Construction Stormwater Permit.
 - i. The period of inundation shall be calculated using the maximum water depth below the surface discharge elevation and the soil infiltration rate.
 - C. The maximum water depth for volume control facilities is 1.5 feet.
 - D. Planting plan identified vegetation suitable for the hydrology of the basin.
 - E. Separation from seasonally saturated soils or bedrock is 3 feet or more for bioretention and infiltration practices.
 - F. Volume control facilities meet the following setback requirements:

Setback	Minimum Distance (ft)	
Property line	10	
Building foundation*	10	
Private well	50	
Public water supply well	50	
Septic system tank/leach	35	
field		
*Minimum with slopes directed away from the building		

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G. Volume control is provided for the first 1.1" inch of runoff for all impervious:

Volume Retention Required (cu. ft.)	Volume Retention Provided (cu. ft.)	
15,886 sf * 1.1"= 1,456 cu. ft.*	West Basin Volume = Unverified **	
	BMP #2 Volume = 705 cu. ft.	
	Total =	

* Based on clarifications from the designer on 8/31/2017 the total new and reconstructed impervious surfaces is 15,886 square feet. The required retention volume is then 1,456 cu. ft. Please demonstrate retention of this volume on site.

** The west basin does not have a verifiable overflow elevation. Infiltration volume credit is measured by basin storage volume. From the information provided, it appears the overflow elevation is 30.1 which results in very little retention volume. Please provide more information to demonstrate the retention volume of the West Basin.

H. Construction Standards

- To prevent soil compaction, the proposed volume control facility must be staked off and marked during construction to prevent heavy equipment and traffic from traveling over it.
- ii. Facilities may not be excavated within 2.0 feet of final grade until the contributing drainage area has been constructed and fully stabilized.
- iii. Facilities are in-place during construction activities, all sediment and runoff must be diverted away the facility, using practices such as pipe capping or diversions.
- iv. Facilities installation must occur in dry soil conditions. Excavation, soil placement and rapid stabilization of perimeter slopes must be accomplished prior to the next precipitation event.
- v. Excavation shall be performed by an excavator with a toothed bucket. Use excavator bucket to place materials. Construction equipment shall not be allowed into the basin.
- vi. Prior to the release of any remaining fee or security, the owner must provide documentation that constructed volume control facilities perform as designed.

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I. Details

- i. Include a standard cross section of the infiltration device similar to those identified in the Minnesota Stormwater Manual http://stormwater.pca.state.mn.us/index.php/Bioretention_plan_and_section_ndrawings
- ii. The cross section must detail the infiltration media used in the device. Typically, devices use Mix B as described in the Minnesota Stormwater Manual: A well-blended, homogenous mixture of 70 to 85 percent washed construction sand; and 15 to 30 percent MnDOT Grade 2 compost.

J. Additional Notes:

 The gravel path design must be submitted to the MSCWMO for review prior to approval by the City.

455 HAYWARD AVENUE OAKDALE, MINNESTOA 55128 Phone 651.330.8220 x22 fax 651.330.7747 www.mscwmo.org Still water

Baytown

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Lakest.

September 7, 2017

Mr. Shawn Sanders City of Stillwater 406 Fourth Street North Stillwater, MN 55082

RE: CROSBY HOTEL

Dear Mr. Sanders:

The Middle St. Croix Watershed Management Organization (MSCWMO) received required submittal items on November 18, 2016, revised submittals on December 5, 2016, revised submittals on August 21, 2017, and additional submittals on August 30, 2017 for the proposed Crosby Hotel, located within MSCWMO boundaries and in the City of Stillwater. The proposed project qualifies for full review under the MSCWMO 2015 Watershed Management Plan (WMP).

The project, as resubmitted, meets most of the Policies and Performance Standards contained within Section 7.0 of the 2015 MSCWMO WMP. The MSCWMO recommends approval with five conditions:

- 1. Add Tabulated quantities of all erosion prevention and sediment control BMPs.
- 2. Modify BMPs to achieve 60% TP reduction. MIDS calculator submission only credits 58% reduction.
- 3. Include the following construction standards for the tree trenches: Excavation within 2.0 feet of final grade for infiltration/filtration systems is prohibited until contributing drainage areas are constructed and fully stabilized.
- 4. Include the following guidance for all proposed stormwater BMPS: Prior to the release of any remaining fee or security, the permit holder must provide documentation that constructed volume control facilities perform as designed.
- 5. Submit a stormwater maintenance agreement approved by the City of Stillwater.

This recommended approval is based on the technical review of MSCWMO performance standards and does not constitute approval by the City of Stillwater. The enclosed checklist contains detailed information on project review qualification and the policies and performance standards of the WMP. MSCWMO review process information can be downloaded from www.mscwmo.org. Please contact me at 651-275-1136 x22 or misensee@mnwcd.org if you have any questions regarding these comments.

Sincerely,

Mikael Isensee Administrator

455 HAYWARD AVE. N. OAKDALE, MINNESTOA 55128

Phone 651.330.8220 x22 fax 651.330.7747 www.mscwmo.org

PROJECT REVIEW

MSCWMO Project Review ID: 17-12

Project Name: Crosby Hotel

Applicant:

Purpose: Construction of a redevelopment

Location: North Second Street, Stillwater

Review date: 9/7/2017

Recommendation: Approve with 5 Conditions

Additional Notes:

1. Add Tabulated quantities of all erosion prevention and sediment control BMPs.

- 2. Modify BMPs to achieve 60% TP reduction. MIDS calculator submission only credits 58% reduction.
- 3. Include the following construction standards for the tree trenches: Excavation within 2.0 feet of final grade for infiltration/filtration systems is prohibited until contributing drainage areas are constructed and fully stabilized.
- Include the following guidance for all proposed stormwater BMPS: Prior to the release of any remaining fee or security, the permit holder must provide documentation that constructed volume control facilities perform as designed.
- Submit a stormwater maintenance agreement approved by the City of Stillwater.

Applicability:

	Any project undertaking grading, filling, or other land alteration activities that involve movement of 100 cubic yards of earth or removal of vegetation on greater than 10,000 square feet of land
	Any project that creates or fully reconstructs 6,000 square feet or more of impervious surface
	All major subdivisions or minor subdivisions that are part of a common plan of development. Major subdivisions are defined as subdivisions with 4 or more lots.
	Any project with wetland impacts
	Any project with grading within public waters
	Any project with grading within buffers
П	Any project with grading within 40-feet of the bluff line

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	Development projects that impact 2 or more of the member communities
	New or redevelopment projects within the St. Croix Riverway that require a building permit that adds five hundred (500) square feet or more of additional impervious surface
	Any project requiring a variance from the current local impervious surface zoning requirements for the property
	Any land development activity, regardless of size, that the City determines is likely to cause an adverse impact to an environmentally sensitive area or other property, or may violate any other erosion and sediment control standard set by the member community.
	TAL ITEMS: ic submittals are highly encouraged
	A completed and signed project review application form and review fee
\boxtimes	Grading Plan/Mapping Exhibits
	a. Property lines and delineation of lands under ownership of the applicant.
	b. Delineation of existing on-site wetlands, shoreland and/or floodplain areas (including any buffers).
	c. Ordinary High Water (OHW) elevations and datum, as determined by the MDNR (if applicable).
	d. Existing and proposed site contour elevations related to NAVD 1988 datum (preferred) or NGVD, 1929. Datum must be noted on exhibits.
	e. Drainage easements covering land adjacent to ponding areas, wetlands, and waterways up to their 100-year flood levels and covering all ditches and storm sewers. Access easements to these drainage easements and to other stormwater management facilities shall also be shown.
	f. Minimum building elevation for each lot.
	g. Identification of downstream water body.
	Permanent Stormwater Management System in compliance with the requirements of the NPDES SDS Construction Stormwater Permit and MSCWMO Performance Standards.
	a. Impervious areas (Pre- and Post-Construction).
	b. Construction plans and specifications for all proposed stormwater management facilities.
	c. Location(s) of past, current or future onsite well and septic systems (if applicable).
\boxtimes	Other exhibits required to show conformance to these Performance Standards
	A Stormwater Pollution Prevention Plan in compliance with the requirements of the NPDES SDS Construction Stormwater Permit
	Grading Plan/Mapping Exhibits:

- a. Delineation of the subwatersheds contributing runoff from off-site, proposed and existing on-site subwatersheds, and flow directions/patterns.
- b. Location, alignment, and elevation of proposed and existing stormwater facilities.
- c. Existing and proposed normal water elevations and the critical (the highest) water level produced from the 100-year 24-hour storms.
- d. Location of the 100-year flood elevation, natural overflow elevation, and lowest floor elevations.

Hydrologic/Hydraulic Design Exhibits:

- a. All hydrologic and hydraulic computations completed to design the proposed stormwater management facilities shall be submitted. Model summaries must be submitted. The summaries shall include a map that corresponds to the drainage areas in the model and all other information used to develop the model.
- b. A table (or tables) must be submitted showing the following:
 - i. A listing of all points where runoff leaves the site and the existing and proposed stormwater runoff rates and volumes.
 - ii. A listing of the normal water levels under existing and proposed conditions and the water levels produced from the storm and runoff events listed above for all on-site wetlands, ponds, depressions, lakes, streams, and creeks.
- NA Dedications or easements for the portions of the property which are adjacent to the facility and which lie below the 100 year flood level. For sites within public right-of-way, no easement is required.
- A proposed maintenance agreement, which may be in the format of Appendix K, or other form approved by the city.

HISTORY & CONSIDERATIONS:

SPECIAL OR IMPAIRED WATER

- This site drains to, and is within one mile of special or impaired water and complies with enhanced protections.
 - a. Scenic or Recreational river C.1., C.2., C.3.
 - b. Scientific and Natural area C.1., C.2., C.3.
 - c. Waterbody with a TMDL C.1., C.2.
 - C.1. Stabilization initiated immediately and all soils protected in seven days/provide temp basin for five acres draining to common location.
 - C.2. Treat water quality volume of one inch of runoff by retaining on site unless not feasible due to site conditions (See Part III.D.1. design requirements).
 - C.3. Maintain buffer zone of 100 linear feet from Special Water.

EROSION AND SEDIMENT CONTROL [A checked box indicates compliance]

A Stormwater Pollution Prevention Plan (SWPPP) that meets the National Pollutant Discharge Elimination System (NPDES) requirements.

Narrative

- Identify the person knowledgeable and experienced who will oversee the implementation of the SWPPP; the installation, inspection, and maintenance of the BMPs.
 - a. Identifies the person who will oversee the BMP inspection and maintenance.
 - b. Identify the training requirements are satisfied.
 - c. Inspections performed once every 7 days.
 - d. Inspections performed within 24 hours of a rain event greater than 0.5 in/24 hours.
 - e. Inspection and Maintenance records include:
 - i. Date and time of inspection.
 - ii. Name of person(s) conducting inspections.
 - iii. Finding of inspections, including the specific location where corrective actions are needed.
 - iv. Corrective actions taken (including dates, times, and party completing maintenance activities).
 - v. Date and amount of rainfall events greater than 0.5 in/24 hours.
 - vi. Rainfall amounts must be obtained by a properly maintained rain gauge installed onsite, or by a weather station that is within one mile or by a weather reporting system.
 - vii. Requirements to observe, describe, and photograph any discharge that may be occurring during the inspection.
 - viii. All discovered nonfunctional BMPs must be repaired, replaced, or supplemented with functional BMPs within 24 hours after discovery, or as soon as field conditions allow.
- Describes procedures to amend the SWPPP and establish additional temporary ESC BMPs as necessary for site conditions.
- Describes the installation timing for all Erosion Sediment Control (ESC) Best Management Practices (BMPs).
- Describes final stabilization methods for all exposed areas.
- Methods used to minimize soil compaction and preserve topsoil must be described.
- Describes dewatering technique to prevent nuisance conditions, erosion, or inundation of wetlands?
- Identifies any specific chemicals and the chemical treatment systems that may be used for enhancing the sedimentation process on the site, and how compliance will be achieved with the permit requirements.
- Describes pollution prevention management measures
 - a. Storage, handling, and disposal of construction products, materials, and wastes.
 - b. Fueling and maintenance of equipment or vehicles; spill prevention and response.

- c. Vehicle and equipment washing.
- d. No engine degreasing allowed on site.
- e. Containment of Concrete and other washout waste.
- f. Portable toilets are positioned so that they are secure.

Plan sheets

NA Temporary Sediment Basins required (10 acres draining to common location or **5 acres** App. A) Basin design meets the following criteria:

- a. Adequately sized 2-year, 24-hour storm, minimum 1,800 feet/acre; or no calculative minimum 3,600ft3/acre.
- b. Designed to prevent short circuiting.
- c. Outlets designed to remove floating debris.
- d. Outlets designed to allow complete drawdown.
- e. Outlets designed to withdraw water from the surface
- f. Outlets have energy dissipation.
- g. Have a stabilized emergency spillway.
- h. Situated outside of surface waters and any natural buffers.
- - a. Exposed soils have erosion protection/cover initiated immediately and finished within 7 days.
 - b. Wetted perimeters of ditches stabilized within 200 feet of surface water within 24 hours.
 - c. Pipe outlets have energy dissipation within 24 hours of connecting.
- Locations and types of all temporary and permanent Sediment Control BMPs.
 - a. Sediment control practices established on down gradient perimeters and upgradient of any buffer zones.
 - b. All inlets are protected.
 - c. Stockpiles have sediment control and placed in areas away from surface waters or natural buffers.
 - d. Construction site entrances minimize street tracking?
 - e. Plans minimize soil compaction and, unless infeasible to preserve topsoil.
 - f. 50 foot natural buffers preserved or (if not feasible) provide redundant sediment controls when a surface water is located within 50 feet of the project's earth disturbances and drains to the surface water.
- Tabulated quantities of all erosion prevention and sediment control BMPs.

- Stormwater flow directions and surface water divides for all pre- and post-construction drainage areas.
- NA Locations of areas not to be disturbed (buffer zones).
- NA Location of areas where construction will be phased to minimize duration of exposed soil areas.
- NA Blufflines are protected from construction activities in urban (40 foot buffer) areas and rural areas (100-foot buffer).

LAKE, STREAM AND WETLAND BUFFERS

- NA A buffer zone of unmowed natural vegetation is maintained or created upslope of all water bodies (wetlands, streams, lakes).
- NA A 50 foot natural buffer or (if a buffer is infeasible) provide redundant sediment controls when a surface water is located within 50 feet of the project's earth disturbances and stormwater flows to the surface water.
- NA If adjacent to a Special or Impaired Water an undisturbed buffer zone of not less than 100 linear feet from the special water is maintained both during construction and as a permanent feature post construction.

STORMWATER MANAGEMENT [A checked box indicates compliance]

Water quality treatment is provided prior to direct discharge of stormwater to wetlands and all other water bodies.

Rate and Flood Control Standards

The peak rate of stormwater runoff from a newly developed or redeveloped site shall not exceed the 2-, 10-, and 100-year 24-hour storms with respective 2.8, 4.2, and 7.3-inch rainfall depths with MSCWMO approved time distribution based on Atlas 14 for existing and proposed conditions. The runoff curve number for existing agriculture areas shall be less than or equal to the developed condition curve number. The newly developed or redeveloped peak rate shall not exceed the existing peak rate of runoff for all critical duration events, up to and including the 100-year return frequency storm event for all points where discharges leave a site during all phases of development.

Predevelopment conditions assume "good hydrologic conditions" for appropriate land covers as identified in TR-55 or an equivalent methodology. Runoff curve numbers have been increased where predevelopment land cover is cropland:

Hydrologic Soil Group A: Runoff Curve Number 56 Hydrologic Soil Group B: Runoff Curve Number 70 Hydrologic Soil Group C: Runoff Curve Number 79 Hydrologic Soil Group D: Runoff Curve Number 83

Computer modeling analyses includes secondary overflows for events exceeding the storm sewer systems level-of-service up through the critical 100-year event.

- NA In sub-areas of a landlocked watershed, the proposed project does not increase the predevelopment volume or rate of discharge from the sub-area for the 10-year return period event.
- NA Flowage easements up to the 100-yr flood level have been secured for stormwater management facilities (such as ditches and storm sewers).
- NA Lowest floor elevations of structures built adjacent to stormwater management features and other water bodies are a minimum of two feet above the 100-year flood elevation and a minimum of two feet above the natural overflow of landlocked basins.

Volume Control Standards

- Calculations/computer model results indicate stormwater volume is controlled for new development and redevelopment requirements per the MSCWMO Design Standards.
 - 1. New Nonlinear Development 1.1" * new impervious surfaces
 - 2. Reconstruction/Redevelopment Projects 1.1" * reconstructed impervious surfaces
 - 3. Linear Projects 0.55" * new and/or fully reconstructed impervious surface and 1.1" from net increase in impervious area
 - 4. Sites with Restrictions- flexible treatment options documentation has been provided.

Volume Retention Require	d (cu. ft.)	Volume Retention Provided (cu. ft.)	
	_	ВМР	Volume
43,560 sf *1.1" = 3,993	cu. ft.	BMP #1	5,287 cu. ft.
Total Required 3,9	93 cu. ft. 1	Total Proposed	5,287 cu.ft.

Flexible Treatment Options (when applicable)

- Applicant demonstrated qualifying restrictions as defined in Section 7.2.2 (4) of the 2015 MSCWMO Watershed Management Plan that prohibits the infiltration of the entire required volume.
- MIDS calculator submission removes 60% of the annual total phosphorous. 58%

Infiltration/Filtration Design Standards

- Proposed stormwater management features meet or exceed NPDES General Construction Permit requirements are designed in conformance with the most recent edition of the State of Minnesota Stormwater Manual.
- igwedge None of the following conditions exist that prohibit infiltration of stormwater on the site
 - a. Areas where vehicle fueling and maintenance occur.
 - b. Areas with less than three (3) feet of separation distance from the bottom of the infiltration system to the elevation of the seasonally saturated soils or the top of bedrock.

- c. Areas where industrial facilities are not authorized to infiltrate industrial stormwater under an National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Industrial Stormwater Permit issued by the MPCA.
- d. Areas where contaminants in soil or groundwater will be mobilized by infiltrating stormwater.
- e. Areas of Hydrologic Soil Group D (clay) soils
- f. Areas within 1,000 feet up-gradient, or 100 feet down-gradient of active karst features unless allowed by a local unit of government with a current MS4 permit.
- Minimum setbacks from the Minnesota Department of Health for infiltration practices are met

Setback	Minimum Distance (ft)	
Property line	10	
Building foundation*	10	
Private well	35	
Public water supply well	50	
Septic system tank/leach field	35	
*Minimum with slopes directed away from the building		

Pretreatment devices(s) remove at least 50% of sediment loads.	If downstream from a potential hot spot, a
skimmer is in place to facilitate cleanup.	

- Water quality volume will be discharged through infiltration or filtration media in 48 hours or less.
 - a. For bioretention (biofiltration and bioinfiltration) volume control management facilities above ground with vegetation the period of inundation shall be calculated using the maximum water depth below the surface discharge elevation and the soil infiltration rate.
- b. For infiltration basin volume control management facilities the period of inundation shall be calculated using the maximum water depth below the surface discharge elevation and the soil infiltration rate.

NA Appropriate soil borings have been conducted that meet the minimum standards.

- a. A minimum of one boring was conducted at the location of the infiltration facility for facilities up to 1,000 ft²; between 1,000 and 5,000 ft², two borings, between 5,000 and 10,000 ft², three borings and greater than 10,000 ft² 4 borings plus an additional boring for every 2,500 ft² beyond 12,500 ft²
- b. Soil borings extend a minimum of five feet below the bottom of the infiltration practice. If fractured bedrock is suspected, the soil boring goes to a depth of at least ten feet below the proposed bottom of the volume control facility.
- c. A minimum of three feet of separation to the seasonal water table and/or bedrock.
- d. Identify unified soil classification.
- The least permeable soils horizon identified in the soil boring dictated the infiltration rate.

- Additional flows are bypassed and are routed through stabilized discharge points.

 Filtration basin demonstrates a basin draw down between 24 hours and 48 hours.
- NA Filtration system designed to remove at least 80% of total suspended solids
- **NA** Filtration system Iron Enhanced Sand Filter is sized to bind soluble phosphorous removal for 30 year functional life of the system using the published value of 17lbs.phosphorous removal per 20 yards of 5% by weight iron filings to 95% sand.
- Construction plans provide adequate construction guidance to prevent clogging or compaction and demonstrate performance.
 - a. Excavation within 2.0 feet of final grade for infiltration/filtration systems is prohibited until contributing drainage areas are constructed and fully stabilized.
 - b. Rigorous sediment and erosion controls planned to divert runoff away from the system.
 - c. Installation of volume control facilities must occur in dry soil conditions. Excavation, soil placement and rapid stabilization of perimeter slopes must be accomplished prior to the next precipitation event.
 - d. Excavation shall be performed by an excavator with a toothed bucket. Use excavator bucket to place materials. Construction equipment shall not be allowed into the basin.
 - e. Prior to the release of any remaining fee or security, the permit holder must provide documentation that constructed volume control facilities perform as designed.
- ☐ There is a way to visually verify the system is operating as designed.
- ☑ A minimum 8.0' maintenance access is provided to all stormwater facilities.

WETLAND PERFORMANCE STANDARDS

- NA Direct discharge of stormwater to wetlands and all other water bodies without water quality treatment is prohibited.
- NA Any potential changes to the hydrology of the wetland (i.e. changes to the outlet elevation or contributing drainage area) must be reviewed to evaluate the impact of both the existing and proposed wetland conditions and approved by the MSCWMO.
- NA Land-altering activities shall not increase the bounce in water level or duration of inundation from a 2.0-inch 24-hour storm for any downstream wetland beyond the limit specified in Table 7.2 for the individual wetland susceptibility class.

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Administrator's Report-September 2017

Administration

- One Watershed One Plan Meeting with BWSR
- Lake St. Croix Improvement Funds Grant Application
- CWF Grant Application
- Website updates
- Washington County Fair
- Newsletter articles
- Request for Local Water Management Plans

Presentations

- Washington County Water Consortium BMP Tour
- Minnesota Association of Soil and Water Conservation Districts Annual Tour
- Met Council- Plan It! St. Croix Communities MIDS Project

Construction Site Inspections

• Inspected all project reviews that are currently being constructed.

Conservation Project Technical Assistance and Cost Share

- Beth Meyer Installation
- Andersen Windows final plans

Managing Existing Projects

St. Croix Watershed Improvement Grant

Description: \$40,000 grant from St. Croix River Association with a goal to monitor phosphorous discharge to target the location for future phosphorous reduction best management practices (2015-2017).

Activities This Month: COMPLETED!!

Lake St. Croix Direct Discharge Grant

Description: \$142,000 grant for stormwater quality improvements in Oak Park Heights, Stillwater and Bayport (2014-2018).

Activities This Month: Project has been let, waiting for contractor to begin construction.

Lily Lake Phase III Grant

Description: \$109,000 for stormwater quality improvements for areas discharging to Lily Lake (2014-2017)

Activities This Month: Construction oversite. Should be done soon, I hope.

South Beach Flood Damage Repair Grant



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Description: \$40,000 grant to incorporate native vegetation into a soil filled rip-rap short stabilization project on Lake St. Croix in St. Croix Beach (2014-2016)

Activities This Month: COMPLETED!

South Lake St. Croix Direct Discharge Subwatershed Analysis Grant

Description: \$10,000 grant to investigate and prioritize water quality improvement projects in the South MSCWMO (2016).

Activities This Month: Completed potential BMP site evaluations. Starting modeling and reporting.

Lake St. Croix Direct Discharge Phase II

Description: \$151,000 grant for stormwater quality improvements in Oak Park Heights, Stillwater and Bayport (2015-2018).

Activities This Month: Outreach to targeted landowners. Design for another curb cut raingarden in catchment SD-13. Starting new round of targeted outreach.

Lily Lake Final – 45

Description: \$65,000 grant to identify and partially design stormwater practices to reduce phosphorous discharges to Lily Lake by at least 45 lbs. per year.

Activities This Month: 90% complete with the subwatershed update.

Meetings

- Minnesota Stormwater Research Committee- Research proposal selection meeting.
- NEMO Workshop on the Water Planning Meeting
- Washington County SSTS Risk Assessment Meeting
- St. Croix Crossing (bridge project) infiltration basin meeting with MnDOT, contractor, designer

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