

# MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION

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



## Regular Meeting of the Middle St. Croix Watershed Management Organization HELD REMOTELY DUE TO COVID -19 PANDEMIC

Attend ONLINE VIA ZOOM by clicking this link: <https://zoom.us/j/468294624>

OR

Attend by CONFERENCE CALL by dialing +1 312 626 6799 – Meeting ID 468 294 624

Thursday, April 9<sup>th</sup>, 2020

6:00PM

1. Call to Order – 6:00PM
  - a. Approval of Agenda
2. Approval of Minutes
  - a. Draft minutes – March 12<sup>th</sup>, 2019 **pg. 1-6**
4. Treasurer’s Report
  - a. Report of savings account, assets for April 9<sup>th</sup>, 2020
  - b. Approve payment of bills for April 9<sup>th</sup>, 2020
5. Public Comment
6. Old Business
7. New Business
  - a. 3M PFAS Reimbursement Request **pg. 7-10**
  - b. Draft MSCWMO Stormwater Treatment Credit Policy **pg. 11-12**
  - c. City of Stillwater Cooperative Agreement for Lily Lake Delisting **pg. 13-18**
  - d. 2019 Annual Watershed Report **pg. 19-36**
8. Grant and Cost Share Applications
  - a. Perry Native Planting Cost Share Request **pg. 37-38**
9. Plan Reviews/Submittals
  - a. Plan Review and Submittal Summary **pg.39-40**
    - i. Oak Park Heights MCES Interceptor-ACTION
    - ii. Scanlan Garage and Driveway-ACTION
    - iii. CSAH 5 Phase 2-INFORM
    - iv. 3<sup>rd</sup> and Myrtle Development-INFORM
    - v. Lakeland 2019 Street Improvements-INFORM
  - b. Erosion and Sediment Control Inspection Reports **pg. 41-46**
10. Staff Report **pg. 47-49**
11. 1W1P Updates
12. Other
13. Adjourn

Regular Meeting of the Middle St. Croix Watershed Management Organization  
Bayport Public Library, Bayport, MN  
Thursday, March 12, 2020  
6:00PM

Present: Mike Runk, Oak Park Heights; Tom McCarthy, Lake St. Croix Beach; Dawn Bulera, Lake St. Croix Beach, Beth Olfelt-Nelson, St. Mary's Point; Joe Paiement, City of Lakeland, Ryan Collins, City of Stillwater, Rebecca Oldenburg Giebel, WCD; Administrator Matt Downing.

**Call to Order**

The meeting was called to order at 6:04PM by Manager McCarthy. Introductions were made.

**Approval of Agenda**

A motion to approve the March 12<sup>th</sup> agenda was made by Manager Runk and seconded by Manager McCarthy, the motion carried.

**Approval of Minutes**

A motion to approve the January 9<sup>th</sup>, 2020 minutes was made by Manager Runk and seconded by Manager McCarthy, the motion carried.

**Treasurer's Report**

The treasurer's report was presented by Administrator Downing in the absence of the Treasurer, Manager Kylo. In the absence of a February board meeting January and February's checking account totals were discussed. The remaining checking account balance in January was \$108,770.37. The remaining checking account balance for February is \$108,501.61. First State Bank CDs were valued at \$38,549.15. The ending balance in the RBC savings account for February 2020 is \$65,014.52. Manager Runk moved to accept the Treasurer's report, Manager Collins seconded, and the motion carried.

Bills to be approved this month are: EOR: \$338.00 regarding the 3M PFAS settlement; Master Water Stewards Cost Share: \$500, Washington Conservation District (Administration – January/February): \$ 4,532.25; Washington Conservation District (Technical Services – January/February): \$ 5,773.24; Total: \$11,143.49. Manager Runk moved to pay the MSCWMO's bills, Manager Collins seconded, and the motion carried.

Manager McCarthy asked if all cities were paid up and Administrator Downing said they were not. Manager McCarthy also inquired about if a maintenance plan had been established with Cameron Blake from the Washington Conservation District (WCD). Manager Olfelt-Nelson stated that Blake had talked to her and that he had stated maintenance was going to happen. Administrator Downing said that he would help facilitate the maintenance agreement with the WCD.

**Public Comment**

No public comments.

## **Old Business**

No old business.

## **3M PFAS Reimbursement Request**

Administrator Downing stated that the \$338.00 bill owed to EOR for technical input on 3M PFAS settlement is eligible to be submitted for reimbursement. A motion to approve reimbursement submittal totaling \$338.00 to the MPCA regarding the 3M PFAS settlement was made by Manager Runk and seconded by Manager McCarthy, the motion carried.

Manager Olfelt-Nelson said that St. Mary's Point hasn't been aware of any new updates or meetings regarding the 3M PFAS settlement. Administrator Downing said that there are monthly meetings taking place regarding modeling, planning, and development. Manager Olfelt-Nelson inquired about what was going into groundwater modeling. Administrator Downing said he believed the modeling is about mitigation, but that he hasn't attended any meetings, and will ask for a greater update about the modeling. Manager Olfelt-Nelson said the original model was not on track and that St. Mary's Point was not invited to the last meeting, while other communities have been reached out to. Administrator Downing stated that St. Mary's Point should have been contacted that that he will look into it.

## **Lakeland Shores Local Surface Water Management Plan Review**

Administrator Downing discussed that The City of Lakeland Shores' Local Surface Water Management Plan is working towards approval. He recommended that the MSCWMO ingrate The Metropolitan Council's comments with their own. Manager McCarthy asked if Manager Zeller has viewed the comment and Administrator Downing said that he had. A motion to incorporate The Metropolitan Council's comments into the comprehensive plan's comments was made by Manager Collins and seconded by Manager Runk, the motion carried.

## **1<sup>st</sup> Half Community Contributions Submittal**

A motion to approve the submittal for the 1<sup>st</sup> half of the community contributions was made by Manager McCarthy and seconded by Manager Olfelt-Nelson, the motion carried.

## **2019 Budgeted Savings Deposit**

Administrator Downing stated that there is \$5,557 in the budget for savings. A motion to approve the deposit of \$5,557 to savings was made by Manager Runk and seconded by Manager McCarthy, the motion carried.

## **Alternative Stormwater Treatment Compliance Policy**

Administrator Downing presented some options for new stormwater treatment compliance plans instead of the cash in-lieu policy currently in place. Administrator Downing brought examples from other watershed districts including Capitol Region Watershed District (CRWD), Ramsey-Washington Metro Watershed District (RWMWD), and Valley Branch Watershed District (VBWD). Downing stated that these plans could be mulled over until more board members were present. Administrator Downing asked if the Board wants to continue doing what they've been doing and discussed having a defined rate for stormwater treatment as a middle ground solution. This solution provides a concrete amount instead of basing the amount on a construction

estimate. Downing said another solution could be to spend the money from stormwater treatment compliance on stormwater catchment basins, which could be located anywhere in the watershed.

Manager Olfelt-Nelson asked what lessons the MSCWMO has learned from their current policy and what aspects the organization doesn't want to repeat. Administrator Downing explained that the current situation exists from the MSCWMO adopting MIDS. If stormwater treatment cannot be completed on site and after exhausting all options, then money can be paid in to the MSCWMO for treatment. There aren't guidelines for what treatment must be, the money could be spent within the catchment, community, or the watershed. Manager Runk asked about what areas in the MSCWMO this applies to right now. Administrator Downing said an example is a Drinking Water Supply Management Area (DWSMA) with no capture in Stillwater, where road reconstruction is being performed on Myrtle Street and County Road 5. What can't be mitigated on site is then paid for. This area is specifically challenging because it's an emergency response area.

Manager Olfelt-Nelson inquired what other organizations do to for their stormwater treatment compliance programs. Administrator Downing said that CRWD's policy is for mitigation to occur somewhere in the watershed district, like wetland banking. They are a small watershed district like MSCWMO so that policy might apply well, with a few exceptions like flood control. Manager McCarthy pointed out that it might not be possible to put water certain places due to the 3M PFAS contamination. Manager Runk said that the parks dedication funds might be a good source to help accomplish goals. Administrator Downing highlighted the RWMWD's plan because it good for more than one goal. The Board of Water and Soil Resources (BWSR) states that you cannot use grant funding to fulfill permit requirements, which limits how stormwater treatment can be paid for. Administrator Downing said he'd think about recommendations for the Board and discuss them with Manager Zeller. Manager Runk requested that Administrator Downing use the RWMWD's plan as a base.

### **Lake St. Croix Beach Bluff Stabilization Feasibility Study**

Administrator Downing gave an update about investigating using grant funding to do stabilization work on Lake St. Croix Beach's bluff. A meeting was held that including WCD staff, Administrator Downing, and Lake St. Croix Beach staff and their engineer, in order to see if the project could be accomplished with the \$200,000 grant. Administrator Downing explained that the project would include ~400 linear feet of shoreline restoration and be accomplished with 25% match of \$50,000 from Lake St. Croix Beach. The feasibility study presented different ranges of shoreline restoration and the load reduction associated with each and their estimate cost ranges. In order to meet load reduction and stay within the grant funds the 400 foot shoreline restoration is the best option. The high end of the estimate is over but the predicted actual cost is likely to be closer to the lower end. This strategy would mean putting all the grant funding towards one practice. The benefit of this strategy is that it would require less administrative time than pulling together small practices. A motion to approve the project was made by Manager Runk, Manager Collins seconded, the motion carried, all managers were in favor.

### **St. Croix River Grant**

Administrator Downing stated that he would like to add an agenda item to apply for the St. Croix River grant. A motion was made to approve Administrator Downing applying for the St. Croix River grant by Manager Olfelt-Nelson, Manager McCarthy seconded, the motion carried.

### **Officer Elections**

The MSCWMO Board needed to elect officers for 2020. Manager McCarthy motioned to nominate Manager Zeller as the Board Chair, Manager Paiement seconded, the motion carried. Manager Olfelt-Nelson motioned to nominate Manager Perkins as the Co-chair, Manager McCarthy seconded, the motion carried. Manager McCarthy motioned to nominate Manager Kylo as Treasurer, Manager Collins seconded, the motion carried. Manager Runk motioned to nominate Manager McCarthy as Secretary, Manager Collins seconded, the motion carried.

### **Interim Administrator Status**

Administrator Downing presented a memo written by Manager Zeller and Jay Riggs, District Manager of the WCD, to move Administrator Downing from an Interim Administrator to permanent. A motion to approve moving Administrator Downing from interim to permanent was made by Manager Runk, Manager McCarthy seconded, the motion carried.

### **Grant and Cost Share Applications**

Administrator Downing stated that the MSCWMO was awarded a large grant of \$513,500 for an alum treatment on Lily Lake. The MSCWMO needs to accept the grant and Manager Zeller needs to sign it. A motion for Manager Zeller to be authorized to accept and sign the grant was made by Manager Paiement, Manager McCarthy seconded, the motion carried.

Manager Olfelt-Nelson asked when the Lily Lake grant activities will take place. Administrator Downing explained that BWSR wants an agreement in place first with the City of Stillwater to cover maintenance and access. Unfortunately, MSCWMO cannot cover the funds of grant activities until the agreement is in place. The goal is to work with the City of Stillwater to plan the construction of the infiltration basin to be built in conjunction with road reconstruction on Greeley Street in 2021. The plan would be for road runoff/stormwater to head to an infiltration basin, so clean water enters the lakes. An infiltration basin coupled with an alum treatment to bind phosphorus would reduce both internal and external loading. This would achieve delisting Lily Lake and prevent a Total Maximum Daily Load (TDML) study being conducted.

Manager Olfelt-Nelson inquired about the bank stabilization occurring on the St. Croix this summer. Manager McCarthy clarified that that is a different project than the previous discussed bluff stabilization during the meeting, which will occur in 2022.

### **Plan Reviews/Submittals**

No plan reviews.

### **Staff Report**

Administrator Downing stated that surface water management reviews, compliance, and plan reviews had all just begun and were not ready for approval. He mentioned the previously discussed Lily Lake grant and that the Lake St. Croix Direct Discharge Phase II and III have

been deposited and closed out. Another grant will be closed soon. The CWF grand and CWF Watershed Based Funding going towards raingardens on Perro Creek is onto the next step for this spring. The Lake St. Croix bluff stabilization feasibility study was completed. The meeting for the 3M PFAS settlement was attended. A water monitoring summary is being produced about monitoring activities in 2019. Erosion and sediment control inspections will start this spring once the ground is thawed.

## **1W1P**

Administrator Downing gave the 1W1P update in the absence of Manager Fellegly.

Administrator Downing stated that Manager Fellegly had informed him of the current state of the plan. The plan has been written and it was decided to enter into a Joint Power Collaborative (JPC). The collaboration will be between existing entities. How the formation of the JPC will look needs to be decided for the next meeting. A representative needs approval to make a decision. Manager Fellegly if given the authority would be approving the plan to be sent to 60 day review. A motion to authorize Manager Fellegly to vote in favor of sending the 1W1P to 60 day review was made by Manager Olfelt-Nelson, Manager McCarthy seconded, the motion carried with all in favor.

Manager McCarthy inquired if this means MSCWMO will be given one vote and if then Manager Fellegly would be voting on behalf of the MSCWMO. Administrator Downing said that the MSCWMO does indeed get one vote and that he would send out a link about the process for everyone to read.

Manager Olfelt-Nelson asked about a meeting that a representative attended for St. Mary's Point regarding area funding. Administrator Downing stated that there is a pool of funding for the St. Croix Basin. How things are currently divided is between the metro area and the non-metro area. This group is working on the money for the 1W1P. Administrator Downing said he believes that sharing the metro area money ultimately helps the entire state. Money that is spent upstream of the MSCWMO benefits them. Manager Olfelt-Nelson stated that Manager Fellegly has attended some of these funding discussions but that the process was confusing and that he suggested another MSCWMO member attend. Administrator Downing said that he wasn't invited to the metro vs non-metro funding discussion. Having Administrator Downing attend those meetings would mean additional staff time.

## **Other**

Administrator Downing stated that there is a discussion around the closing of the King Plant in the City of Oak Park Heights. Manager Runk discussed that the coal fired plant is closing in 2028. The recommendation is to put together a group/plan to look at the communities would be impacted. This group would then make recommendation to the Oak Park Heights City Council. The MSCWMO will be impacted since there will be issues to resolve. The City of Oak Park Heights would like watershed staff to be invited but staff funding could be a potential issue. Administrator Downing highlighted that the second page includes who would sit on the group, which would not be made up of elected officials. Manager Runk said that based on who is impacted by the plant closure and the need for expert, that Manager Zeller may be invited to be a representative for another group, like real estate. Administrator Downing pointed out if Manager Zeller was interested in being a representative for MSCWMO it would save staff time because it

is likely to be a hefty time commitment. Administrator Downing stated that he could support Manager Zeller with technical assistance. A discussion occurred that Manager Zeller would be a good representative as long as he was there as a representative solely for the MSCWMO and not as a realtor. A motion to approve appointing Manager Zeller as the MSCWMO representative for the King Plant closure discussion was made by Manager Olfelt-Nelson, Manager Paiement seconded, Manager Runk abstained, the motion carried.

### **Adjourn**

Manager Runk motioned to adjourn the meeting, Manager Olfelt-Nelson seconded this, the motion carried. The meeting adjourned at 7:10PM.



# MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION

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



## MEMORANDUM

**TO:** Middle St. Croix WMO Board of Managers  
**FROM:** Matt Downing, Administrator  
**DATE:** April 1<sup>st</sup>, 2020

### **RE: 7a.) 3M PFAS Contamination Groundwater Model Technical Services Reimbursement Request**

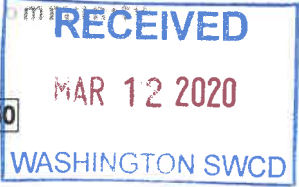
Our consultant at EOR has been reviewing documents and providing technical input on the development of the water supply groundwater model as part of the 3M PFAS settlement. Staff is requesting reimbursement from MPCA totaling \$760.50 (EOR February).

**Recommended Board Action- Approve Submittal of 3M PFAS Reimbursement Request Totaling \$760.50**



**Invoice**

**Emmons & Olivier Resources, Inc.**  
1919 University Ave. W, Ste 300  
St. Paul, MN 55104-3455  
Phone 651.770.8448  
Fax 651.770.2552  
www.eorinc.com



**Invoice Total \$760.50**

Matt Downing  
Middle St. Croix WMO  
C/O WCD  
455 Hayward Avenue North  
Oakdale, MN 55128

March 10, 2020  
Invoice No: 00405-0011 - 7

Job 00405-0011 3M Groundwater Model Review

Summary of Work Performed:  
Attended subgroup meeting on 2/19/2020.

**Professional Services from February 1, 2020 to February 29, 2020**  
**Professional Personnel**

	<b>Hours</b>	<b>Rate</b>	<b>Amount</b>	
Professional 4	4.50	169.00	760.50	
Totals	4.50		760.50	
<b>Total Labor</b>				<b>760.50</b>
		<b>Total this Invoice</b>		<b>\$760.50</b>

<b>Project Name</b>	3M Settlement Groundwater Model Review	<b>Date</b>	4/1/2020
<b>To / Contact info</b>	MSCWMO Managers		
<b>Cc / Contact info</b>	Matt Downing, Administrator		
<b>From / Contact info</b>	Stu Grubb, PG		
<b>Regarding</b>	Progress Update		

## Background

3M and its consultants are developing a groundwater model of southern Washington County. The model will evaluate groundwater flow and contaminant transport in areas with PFAS contamination. The model will be used for planning cleanup of the contamination and managing the construction of alternate drinking water supply projects. Stu Grubb/EOR has been monitoring progress of the groundwater model development on behalf of MSCWMO. His work is supported by a grant from the MPCA.

## Progress Update

For several months, the team of consultants developing the groundwater model had been working on their own to get the model up and running. Monthly informational meetings were still being held, but the meetings focused on drinking water supply projects that will be funded by the 3M settlement money. Since none of those projects affected MSCWMO, there was little to report back to the Managers.

At the February informational meeting, the groundwater model was unveiled. The model uses different software and a slightly different approach than previously completed models of the same area. Instead of dividing the area into small squares and rectangles, the model uses irregular shaped polygons. This improves the model accuracy around some geologic features such as faults. The model appears to be accurate and working as intended.

The next step is to add features such as new wells to the model. The pumping rates of existing wells will also be changed. The design goals of this process will be to:

- Identify areas that could provide uncontaminated water for future supply needs.
- Identify areas that might be over-pumped, leading to aquifer damage and unsustainable supplies.
- Avoid potential harm to surface water resources.
- Prevent or minimize the future spread of contamination.

Several new wells are proposed for the City of Woodbury. One well will likely be needed in the northeast part of the City, close to the MSCWMO. The currently-proposed well placement would draw water away from Valley Creek according to the groundwater model. One solution would be to move the well further north, away from the creek. This could have an effect on surface water resources and private drinking water wells within MSCWMO. I have asked the groundwater modeling team to consider that possibility. We will bring any potential problems to the attention of the project planners and the MSCWMO Managers.

The March informational meeting was cancelled due to corona virus concerns. We have not received any information from 3M or MPCA about how the planning process will continue in future months.

**Requested Action**

If there are specific questions or concerns about the ongoing planning process, the groundwater model, or groundwater contamination, please feel free to contact Stu Grubb at (651) 247-2045.



MEMORANDUM

TO: Middle St. Croix WMO Board of Managers  
FROM: Rebecca Nestingen, PE | WCD Engineer  
DATE: March 27<sup>th</sup>, 2020

RE: 7b.) Draft MSCWMO Stormwater Credit and Impact Fund Policy

Introduction

The MSCWMO Watershed Management Plan contains a volume control standard for the treatment of stormwater on projects with newly developed or reconstructed impervious surfaces in Section 7.2.3. Item 4 in this section contains flexible treatment options (FTOs) for sites where volume control (primarily achieved through infiltration) is not feasible or advised. The last FTO in the design sequence for alternative compliance with the volume control standard is Item 4.d:

*Off-site mitigation (including banking or cash or treatment on another project) will be considered by the MSCWMO on a case-by-case basis. In all cases, the receiving water shall be protected.*

The purpose of this policy is to detail the framework for a MSCWMO stormwater treatment credit system which includes banking and utilization of stormwater treatment credits and cash payments to a Stormwater Impact Fund to cover cost for off-site mitigation projects. A clear framework provides project review applicants a known process and expenditure for project planning and budgeting.

Alternative Compliance Sequencing

To the maximum extent practicable, the volume reduction standard shall be fully met onsite. If it is not possible because of site restrains, alternative compliance may be achieved by any combination of the FTOs in the sequence presented in the MIDS FTO design sequence flowchart (attached).

Stormwater Treatment Credits

For projects within the drainage area of an existing or planned future regional stormwater facility, the sequencing requirements may be waived if it has been determined by MSCWMO that the benefits are equivalent or greater than an onsite treatment practice. Project applicants must either utilize the banked treatment credits of the existing or planned stormwater facility or contribute to the Stormwater Impact Fund.

Projects which exceed volume reduction standards may generate banked credits for use on another project or used to compensate for undertreated drainage areas within the same project. Excess volume reduction shall not exceed the volume of 2.5 inches over the impervious surfaces of the drainage area to the BMP or the volume provided within the BMP, whichever is less. Each 1000 cubic foot of excess volume control will equate to 0.45 pounds of total phosphorus removal credit unless demonstrated otherwise with water quality modeling approved by MSCWMO.

Transfer of banked phosphorus removal credits between applicants is allowed. Applicants shall submit a letter to the MSCWMO outlining the conditions of the transfer and confirming the quantity of the transfer. The MSCWMO must review and approve all credit transfers.

If an applicant determines during the course of construction of a project that the required volume control cannot be achieved onsite and the applicant does not possess sufficient phosphorus reduction credits to offset the removal required in alternative compliance sequencing, the District may allow the applicant to defer the compliance to a future identified project that the applicant will complete within two years of the date of the permit application. Failure to provide compliance by that date would obligate the applicant to pay into the Stormwater Impact Fund at the rate applicable at the time payment is made into the fund.

### **Stormwater Impact Fund**

Cash contribution to the Stormwater Impact Fund is the last step in the alternative compliance sequencing process. The project applicant shall pay into the MSCWMO's Stormwater Impact Fund to cover the cost of implementing equivalent stormwater treatment BMPs elsewhere in the watershed. The required amount to contribute to the Stormwater Impact Fund shall be \$62,500 per pound of phosphorus removal required, to be reviewed by the MSCWMO board annually. The following criteria must be met in order for a project to be eligible for contribution to the Stormwater Impact Fund:

- Documentation of specific site conditions indicating why standard compliance is not feasible
- Documentation that the alternative compliance sequencing steps have been satisfied
- In the case of deferred treatment compliance as provided for in this policy, documentation to support why the required BMPs have not been constructed within two years of approving the deferral.

Money from the Stormwater Impact Fund shall be allocated to the following two activities:

- Project planning and engineering for construction of stormwater treatment BMP practices
- Construction of stormwater treatment BMP projects

The MSCWMO Administrator will evaluate projects as funding becomes available and assign priority to projects based on the following criteria:

- Money contributed to the Stormwater Impact Fund from a local government unit shall be spent within that local government unit's jurisdiction to the extent possible.
- Projects located within the same subwatershed as the permitted project(s) contributing to the Fund
- Projects that are identified in completed subwatershed studies or other planning documents
- Projects that include multiple funding and planning partners
- Quantity of stormwater treated
- Cost per pound of phosphorus removed

### **Recommended Board Action- Approve Draft Stormwater Credit and Impact Fund Policy**

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## MEMORANDUM

**TO:** Middle St. Croix WMO Board of Managers  
**FROM:** Matt Downing, Administrator  
**DATE:** April 1<sup>st</sup>, 2020

### **RE: 7c.) City of Stillwater Cooperative Agreement for the Lily Lake Improvement Project**

The MSCWMO was awarded a \$513,500 grant from the Clean Water Fund for the implementation of 2 large scale practices that should result in the removal of Lily Lake from the impaired waters list and prevent the need for a costly TMDL. Because of the scale of the project and the amount of funds allocated, BWSR is requiring a formal agreement be in place before we are eligible to receive the grant funds. The deadline for this part of the process is April 15<sup>th</sup>.

Working with the City of Stillwater, BWSR and the WCD, the attached agreement was drafted to satisfy all of the various conditions of each entity. It was modeled after the agreement in place for the Stillwater Country Club project and has been reviewed by the city attorney. Stillwater staff will be bringing it to city council.

The agreement does call for the MSCWMO to provide technical services and funding for the projects. Similar to the Country Club project, the MSCWMO will be responsible for the first years of establishment and maintenance of the basin prior to handing it off to the city. Through conversations with BWSR and the City it is my opinion that the MSCWMO also needs to provide some of the required cash match as well. BWSR is requiring assurance that some of the required match is secured, I am requesting that the Board consider allocating \$15,000 of the \$20,000 budgeted for the 2020 Cost Share program for this project. I will likely make a similar request in 2021, although other funding sources may be identified that could offset that need.

**Recommended Board Action- Approve the Cooperative Agreement for the Lily Lake Improvement Project. Encumber \$15,000 from the 2020 Cost Share Program for the Implementation of the Lily Lake Improvement Project.**

**COOPERATIVE AGREEMENT  
LILY LAKE IMPROVEMENT PROJECT (CWF C20-6055)**

This Cooperative Agreement (“**Agreement**”) is made as of the \_\_\_ day of \_\_\_\_\_, 202\_\_\_, by and among the Middle St. Croix Watershed Management Organization, a joint powers watershed management organization (“**WMO**”) and the City of Stillwater, a Minnesota municipal corporation (“**City**”). The WMO and the City may hereinafter be referred to individually as a “party” or collectively as the “parties.”

**1. Background.**

- 1.1 The parties wish to undertake a cooperative stormwater project to reduce phosphorus discharge into Lily Lake (“**Lake**”).
- 1.2 This cooperative project involves diverting stormwater flows from Greeley Street South, onto the southern portion of City property located at 1208 Greeley Street South in the City of Stillwater (“**Property**”), the construction of new stormwater piping and stormwater control structures on the Property, the installation of a filtration basin and pretreatment collection area on the Property, and an in-lake alum treatment (“**Alum Treatment**”) after the installation is complete (collectively, the “**Project**”). The filtration basin and the new storm sewer pipe to be constructed or placed as part of the Project are hereinafter collectively referred to as the “**Stormwater Management Facilities.**” As a result of the Project, stormwater will be diverted from running into the Lake, treated in the filtration basin, and managed as part of the City’s existing storm sewer system.
- 1.3 WMO will bid, enter into a contract with the contractor awarded the construction bid for the Project (“**Contractor**”), and construct the Project on the Property. The Project includes the use of grant funding from the Clean Water Fund (C20-6055).
- 1.4 The purpose of the Project is to reduce sediment and phosphorous discharge to the Lake and will result in the City being awarded credit for 12.50 pounds of Total Phosphorus reductions (“**Credit**”) that can be applied, per WMO rules, to projects within the Lily Lake direct watershed. This Credit can be applied toward new or reconstructed impervious surfaces on the Property, including parking lots, buildings, outside patios or sidewalk surfaces, or as part of future Greeley Street South Roadway Improvements. The WMO is responsible for maintaining a record of the Credit and applying it to future projects as is appropriate.
- 1.5 The WMO agrees to provide cash funding up to \$513,500 for the Project (from Clean Water Fund grant C20-6055). The WMO will additionally provide local funding cash contributions up to \$30,000.
- 1.6 The City agrees to provide cash match of up to \$80,000, and up to \$30,000 in-kind match for Project-related road construction activities.

**2. Design, Contracting, Construction, and Maintenance.**



The parties agree they shall have the following duties with respect to the Project and maintenance of the Stormwater Management Facilities:

- 2.1 The WMO shall be responsible for each of the following: preparing this Agreement; preparing the designs, plans, and specifications for the construction of the Project; provide design and bid documents for bidding and contracting to construct the Project; ensure any warranty work on the Project to be performed by the contractor is completed; installing and establishing vegetation on areas disturbed by the construction of the Project; operating, maintaining, cleaning, repairing, and replacing the pretreatment collection area and filtration basin for the first 5 years after project installation; and conducting annual inspections of the Project.
- 2.2 The WMO will maintain the Stormwater Management Facilities, per section 2.4, for the first 5 full growing seasons following the Project completion date. The City will take over maintenance in year 6 for the remainder of the 25-year life of the project.
- 2.3 The Credit will not expire as a result of WMO rule changes, including volume and rate control changes that may take place during the pre-development phase of the work to be performed on the Property.
- 2.4 Maintenance of the pretreatment collection area and filtration basin by the WMO and the City, as is required in sections 2.1 and 2.2 above, and as described in the “BWSR Native Vegetation Establishment and Enhancement Guidelines (January 2019 edition)” shall include (1) annual removal of accumulated sediment, trash, and debris both in the basin proper and in the pretreatment collection area, (2) annual eradication of noxious weeds and invasive species, (3) installation of supplemental native vegetation, as needed, if barren areas form or if control of noxious or invasive species control exceeds 25% of the Project area, (4) repair of any areas of erosion, as needed, (5) inspection and removal of debris at inlet and outlet structures to ensure flow is not impeded and verification that the structures and pipes are functioning properly, and (6) replacement of nonfunctional filtration media impacted by sedimentation and with a measured infiltration rate less than 0.375 inches per hour. The WMO will provide a list of maintenance activities and their frequency to the City upon transfer of maintenance responsibilities per section 2.2 of this Agreement.
- 2.5 The Stormwater Management Facilities shall not be considered a “wetland” under Minnesota law for the purposes of future addition or modification.
- 2.6 The City shall allow access to the WMO and qualified staff to the public boat launch on the days needed to dose the lake with the alum treatment.
- 2.7 The WMO will provide public and City notification per Minnesota Department of Natural Resources (“DNR”) guidelines for the Alum Treatment.

### 3. **Payment.**

- 3.1 The WMO agrees to pay the Contractor, per the terms of the construction contract agreed to after the bid close.
- 3.2 City agrees to pay WMO up to the cash amount stated in Section 1.6 upon receipt of an invoice and affirmation that WMO has matched the cash amount of funding requested from the City.

#### 4. Access.

- 4.1 The City hereby grants the WMO, their employees, agents, and contractors a license to access the Property as needed to allow the WMO to design and construct the Project, to operate, maintain, clean, repair, and replace the pretreatment swale and infiltration basin, and to conduct annual inspections of the Project as provided in this Agreement. This license shall terminate once the City uses its Credit and the WMO is no longer responsible for operation, maintenance, cleaning, repair, and replacement of the pretreatment collection area and the filtration basin.
- 4.2 The City, with respect to the Property, hereby grants the WMO, its employees, agents, and contractors a license to access the Property to allow the WMO to conduct such inspections, take such measurements, and to undertake such other activities as may be needed to perform its duties under this Agreement, including access for the life of the pretreatment swale and infiltration basin for the purpose of monitoring water quality and quantity, and the Project's efficacy.
- 4.3 Any party doing work pursuant to a license granted under this section shall be responsible for restoring the Property to at least the same condition it was in prior to performing the work and for not unreasonably interfering with the use of the Property being accessed.

#### 5. Miscellaneous.

- 5.1 Term. This Agreement shall be effective immediately upon execution of this contract, and will remain in effect for the 25 year functional life of the Stormwater Management Facilities, with the 25 years beginning on the Project completion date. The Project completion date will be the date of the MSCWMO board approval for final payment of the Project.
- 5.2 Project Removal or Replacement. Should the land occupier fail to maintain the practice during its effective life, the land occupier is liable to the State of Minnesota for the amount up to 150% of the amount of financial assistance received to install and establish the practice unless the failure was caused by reasons beyond the land occupier's control, or if conservation practices are applied at the land occupier's expense that provide equivalent protection of the soil and water resources.
- 5.3 Disputes. The parties will attempt in good faith to resolve any controversy or claim arising out of or related to this Agreement by negotiation. If negotiation is not successful, any party may request that the matter be mediated using a mediator acceptable to all parties, the

expense of which will be shared equally. If the matter has not been resolved within 60 days of the first written notice of the dispute, or if any party refuses to participate in mediation, a party may seek appropriate relief in a court of competent jurisdiction.

5.4 Amendments. Any amendments to this Agreement must be in writing and signed by all of the parties. This Agreement replaces any prior discussion or understandings of the parties regarding the Project.

5.5 Notices. Any notices under this Agreement shall be given to the following people, unless either party gives written notice to the other that the person designated to receive notice has been changed:

WMO:	Matt Downing, Administrator 455 Hayward Avenue Oakdale, MN 55128 (651) 330-8220, ext. 22 <a href="mailto:mdowning@mnwcd.org">mdowning@mnwcd.org</a>
CITY:	Tom McCarty, City Administrator 216 4 <sup>th</sup> Street North Stillwater, MN 55082 651-430-8801 <a href="mailto:tmccarty@ci.stillwater.mn.us">tmccarty@ci.stillwater.mn.us</a>

5.6 Liability. Each party is responsible for the acts and omissions of itself and its officers and employees to the extent authorized by law. No party is accepting liability for any other party. Nothing herein shall be deemed a waiver by either party of any applicable exclusions from or limits on liability including, without limitation, Minnesota Statutes, Chapter 466. The liability limits under Minnesota Statutes, section 466.04 applicable to the parties shall not be added together for determining total liability and they shall instead be treated as a single governmental unit as provided under Minnesota Statutes, section 471.59, subdivision 1a.

5.7 Compliance. Each of the parties shall be responsible for complying with all applicable federal, state, and local laws, rules, regulations, and ordinances in carrying out their respective duties under this Agreement.

IN WITNESS WHEREOF, the undersigned, as duly authorized representations of the parties, have entered into this Agreement effective as of the date first written above.

**MIDDLE ST. CROIX WATERSHED  
MANAGEMENT ORGANIZATION**

By: \_\_\_\_\_

Matt Downing, Administrator

By: \_\_\_\_\_

Brian Zeller, Board Chair

Date: \_\_\_\_\_

**CITY OF STILLWATER**

By: \_\_\_\_\_

Ted Kozlowski, Mayor

By: \_\_\_\_\_

Beth Wolf, City Clerk

Date: \_\_\_\_\_

# MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION

2019 ANNUAL REPORT



*Lakeland*

Prepared by:

MIDDLE ST. CROIX WMO BOARD OF MANAGERS  
APPROVAL DATE: April 9<sup>th</sup>, 2020

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## INTRODUCTION

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The Middle St. Croix WMO encompasses approximately 19.8 square miles and is located in the east-central part of Washington County. A distinction exists between the Middle St. Croix watershed and the other watersheds of Washington County in that the Middle St. Croix watershed has many small, parallel watersheds that all flow to the St. Croix, whereas the other watersheds in the County generally have one major drainage with a headwaters and outlet. Land use in the watershed is evenly distributed between agricultural uses, rural residential, high-density residential and commercial land uses.

The Middle St. Croix Watershed Management Organization (MSCWMO) is a Joint Powers Watershed Management Organization composed of ten St. Croix Valley communities that was established under State Statute 103B to cooperatively manage water resources within the watershed. The ten member communities of the MSCWMO are: Afton, Bayport, Baytown Township, Lakeland, Lakeland Shores, Lake St. Croix Beach, Oak Park Heights, St. Mary's Point, Stillwater, and West Lakeland Township

In general, the purposes of a Watershed Management Organization (WMO) are to conserve natural resources through land use planning, flood control, and other conservation projects in order to ensure continued public health and welfare. The specific purposes of a watershed management organization are:

- Cooperatively manage water resources in the watershed.
- Inventory and assess the resources of the watershed.
- Monitor the water quality of lakes and streams in the watershed.
- Provide education on water related issues in the watershed.
- Review development plans for stormwater management, erosion and sediment control, and provide wetland and shoreland protection.
- Plan and implement capital improvement projects that enhance the water resources of the watershed.

The mission of the Middle St. Croix Watershed Management Organization is to jointly and cooperatively manage the water resources of the watershed. The ten member communities will do so to conserve and protect the water resources in an efficient and effective manner.



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## ORGANIZATION AND BUDGET

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### MSCWMO Board of Managers

Each member municipality or township within the MSCWMO appoints one member to the MSCWMO Board. The 2019 representatives from each participatory community are listed below.

Annie Perkins  
4042 River Road S.  
Afton, MN 55001  
651-592-3007

Tom McCarthy  
16455 20<sup>th</sup> St. S.  
Lake St. Croix Beach, MN 55043  
651.436.7031

Brian Zeller (Chair)  
55 Lakeland Shores Rd  
Lakeland Shores, MN 55043  
612.325.3038

Beth Olfelt-Nelson  
2990 Itasca Ave. S.  
St. Mary's Point, MN 55043  
651.436.2533

Mike Runk  
5525 O'Brien Ave N  
Oak Park Heights, MN 55082  
651-439-5458

John Fellego  
4220 Osgood Ave N.  
Baytown Twp., MN 55082  
612.275.2200

Ryan Collins  
1467 Benson Blvd E  
Stillwater MN 55082  
651.246.8264

Joe Paiement  
1190 St. Croix Trail South  
Lakeland, MN 55043  
651-436-4430

Dan Kylo  
1891 Oldridge Ave. N.  
West Lakeland Township, MN 55082  
651.436.1134

John Dahl  
294 North Third St.  
Bayport, MN 55003  
651.439.7312

### MSCWMO Contract Support Staff

The MSCWMO does not employ staff but does contract with several organizations for professional services. The organizations providing these services are listed below.

Administrator  
Matt Downing  
Washington Conservation  
District  
455 Hayward Avenue,  
Oakdale MN 55128  
651.330.8220 Ext. 22

Attorney  
Troy Gilchrist  
470 Pillsbury Center  
200 South Sixth Street  
Minneapolis, MN 55402  
612.337.9215  
tgilchrist@kennedy-  
graven.com

Recording Secretary  
Washington Conservation  
District  
455 Hayward Avenue,  
Oakdale MN 55128  
651.330.8220 Ext. 27

**Table 1: 2019 Budget**

<b>Administration Budget</b>	<b>Community Contributions</b>
Administration - General	\$ 29,000
Accounting	\$ 1,500
Legal Fees – General	\$ 1,000
Audit	\$ 2,100
Insurance	\$ 3,000
Office supplies/equipment/postage	\$ 750
Minutes/Clerical	\$ 1,100
Copying/printing	\$ 750
<b>Subtotal</b>	<b>\$ 39,200</b>
<b>Project Budget</b>	
Project Contingency	\$ 2,000
Engineering - Project	\$ 5,400
Development Plan Reviews	\$ 4,800
Erosion Monitoring Program	\$ 2,250
BMP Program Tech. Assistance	\$ 30,021
BMP Program Cost Share	\$ 10,156
Community TA	\$ 3,000
Water Resource Educator	\$ 6,300
Website	\$ 750
Inspection and Tracking Database	\$ 900
Water Monitoring	\$ 21,293
Water Monitoring Equip. Savings	\$ 1,000
2025 WMP Update	\$6,000
<b>Subtotal</b>	<b>\$ 93,870</b>
<b>TOTAL</b>	<b>\$ 133,070</b>

**Table 2: 2020 Budget**

<b>Administration Budget</b>	<b>Community Contributions</b>
Administration - General	\$ 31,160
Accounting	\$ 1,550
Legal Fees – General	\$ 1,000
Audit	\$ 2,100
Insurance	\$ 2,600
Office supplies/equipment/postage	\$ 625
Minutes/Clerical	\$ 1,180
Copying/printing	\$ 625
<b>Subtotal</b>	<b>\$ 40,840</b>
<b>Project Budget</b>	
Project Contingency	\$ 2,000
Engineering - Project	\$ 5,700
Development Plan Reviews	\$ 5,040
Erosion Monitoring Program	\$ 2,250
BMP Program Tech. Assistance	\$ 20,000
BMP Program Cost Share	\$ 27,768
Community TA	\$ 3,000
Water Resource Educator	\$ 6,300
Website	\$ 800
Inspection and Tracking Database	\$ 900
Water Monitoring	\$ 22,000
Water Monitoring Equip. Savings	\$ 750
2025 WMP Update	\$5,000
<b>Subtotal</b>	<b>\$ 101,508</b>
<b>TOTAL</b>	<b>\$ 142,348</b>

## **AUDIT REPORT**

Michael Peterson, Certified Public Accountant & Consultant, has been contracted to complete an audit of the financial management of the WMO for the year 2019. Due to the COVID-19 pandemic, this process has been delayed at the time of this report. The audit will be presented to the State of Minnesota and posted to the MSCWMO website upon completion.

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## 2019 PROGRAMS AND PROJECTS

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### 2019 Implementation of Performance Standards

The mission of the MSCWMO is to jointly and cooperatively manage water resources within the WMO and to provide effective and efficient services to the residents of the watershed. To work towards meeting this goal, the MSCWMO adopted Minimal Impact Design Standards (MIDS) developed by the Minnesota Pollution Control Agency. The watershed also provided assistance to member communities to integrate MIDS into local ordinance. Rather than create its own separate permit program, the MSCWMO reviews projects that meet the criteria listed in section 7.0 of the 2015-2025 Watershed Management Plan. Member communities do not issue permits until the project has met all applicable watershed performance standards.

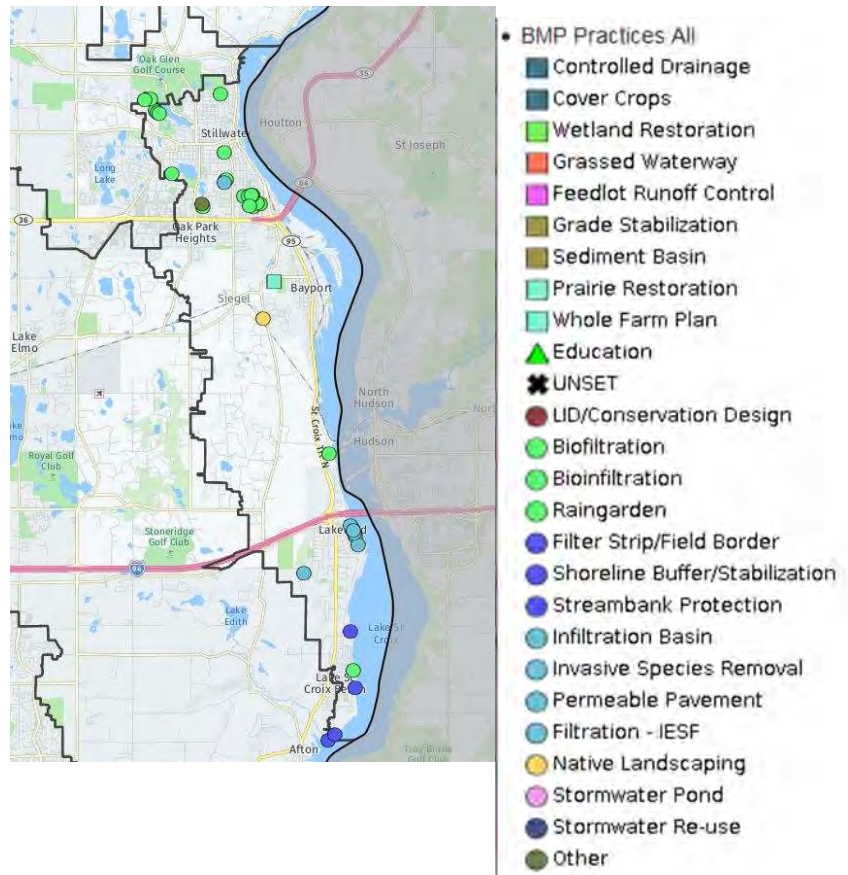
*Table 3: MSCWMO Project Reviews and Total Phosphorous Load Reductions of Permanent Stormwater Best Management Practices Estimated with the MIDS Calculator.*

<b>Year</b>	<b>Total Projects Reviewed</b>	<b>Total BMP Estimated TP Reduction (lbs./yr.)</b>	<b>Redevelopment BMP Estimated TP Reduction (lbs./yr.)</b>
2016	19	26.7	25.6
2017*	19	133.6	124.7
2018	18	25.8	17.2
2019	13	17.9	6.0

\*2017 includes the permanent stormwater BMPs installed as part of the St. Croix Crossing project.

## 2019 Projects Implementation

The MSCWMO 2015-2025 Watershed Management Plan targets goal reductions of Total Phosphorus to each of the three major watersheds draining to impaired surface waters listed on the State of Minnesota 303 D list: Lake St. Croix, Lily Lake, and Perro Creek. From 2015 to 2019, table 6.6 of the MSCWMO Watershed Management Plan identifies a total target of 70.1 lbs. total phosphorus load reduction to be completed by voluntary retrofitting. To date, 39 water quality improvement projects have been installed totaling an estimated annual total phosphorus reduction of 172.3 lbs.



*Table 4: MSCWMO Water Quality Retrofits and Total Phosphorous Load Reductions of Permanent Stormwater Best Management Practices Estimated with the MIDS Calculator.*

Year		Total Projects Installed	Total BMP Estimated TP Reduction (lbs./yr.)	Targeted Subwatersheds
2015	17	17.3	Lake St. Croix and McKusick	
2016	3	48.8	Lake St. Croix and Perro	
2017	5	10.1	Lake St. Croix and Lily	
2018	6	56.3	Lake St. Croix and Lily	
2019	7	39.4	Lake St. Croix and Lily	

## ***Best Management Practices and Subwatershed Implementation Program***

The MSCWMO continues to seek partnerships to construct high-performing and low-cost stormwater best management practices identified in its subwatershed analysis. In 2019, seven projects were completed that were identified in a subwatershed analysis and received local funding and clean water funding to design and construct:

These projects were installed in 2019:

Pine Tree Trail Raingarden, Stillwater in the Lily Lake Subwatershed

Stillwater Streets 2019 Raingardens (4x basins), Stillwater in the Lake St. Croix Subwatershed

Stillwater Country Club Filtration Basin, Stillwater, Lake St. Croix Subwatershed

Perro Creek Stormwater Retrofits (3x basin treatment train), Bayport, Lake St. Croix Watershed

The following is a summary of work that was completed in 2019:

### **Lake St. Croix Direct South:**

In 2018 the MSCWMO completed the Lake St. Croix Direct South Subwatershed Analysis and was successful at securing a 2019 Clean Water Fund Grant and a 2019 St. Croix River Association Grant to design and install high priority projects identified in the report. One large bluff stabilization project is now being designed in coordination with the city of Lake St. Croix Beach. Additionally, during the development of the subwatershed analysis a large actively eroding gully discharging into Lake St. Croix was identified on MnDOT and railroad land. MnDOT is currently designing a repair to the gully and is anticipating gully stabilization work will occur in 2020.

### **Lake St. Croix Direct North:**

The MSCWMO received a 2018 Board of Water and Resources Clean Water Fund grant to install stormwater treatment features as prioritized in the 2014 Lake St. Croix Direct Discharge Subwatershed Analysis. In partnership with the Stillwater Country Club and the City of Stillwater, the MSCWMO installed a biofiltration basin that will reduce phosphorus directly discharging to Lake St. Croix by 25 lbs. per year.

### **Lily Lake, Stillwater:**

In 2018 the MSCWMO completed the Lily Lake Delisting Roadmap which identifies projects and treatments to complete the total phosphorus load reductions to Lily Lake and remove it from the impaired waters list by 2022. The final report is located on the MSCWMO website: <http://www.mscwmo.org/subwatershed-assessments>. In 2019 the MSCMWO applied for and received a grant from the Clean Water Fund to install a large-scale filtration basin at Lily Lake Park and to do an in-lake alum treatment in Lily Lake. The WMO is currently working with city staff on contracting and hope to complete the install in 2021. The project itself will be instrumental in avoiding the TMDL process and potentially delisting the lake for phosphorus impairments.



### **Perro Creek:**

In 2017 MSCWMO received funding from the BWSR's Clean Water Fund Program to fund urban stormwater quality improvement for Perro Creek. Outreach and design were completed in 2018. Three bioretention projects in the city of Bayport were installed at the end of 2019 in an effort to reduce 7lbs of TP from entering into Perro Creek (and the St Croix River).

In addition to the subwatershed programs, the MSCWMO continues to promote its Best Management Practices Program during 2019. In 2019, 2 voluntary best management practices were designed and installed in partnership with local residents:

Perro Creek Native Buffer Restoration Phase II, Bayport, Perro Creek Subwatershed

Private Landowner Raingarden, Lakeland, Lake St. Croix Subwatershed



### ***Construction Monitoring Program***

The MSCWMO construction-monitoring program was developed to ensure that the policies and performance standards of the MSCWMO were implemented on the ground for qualifying projects. Staff continues to monitor projects, which were reviewed by the MSCWMO board. The MSCWMO coordinates its inspection program with its member communities and their building/permit inspectors.

### ***BMP Inspections and Maintenance***

The MSCWMO BMP Inspection and Tracking Database was developed to ensure that the installed practices are meeting functional and aesthetic expectations. In 2019, 105 MSCWMO projects were inspected. Utilizing the Washington Conservation District Maintenance Crew, Minnesota

Conservation Corps, and volunteer maintenance was performed on BMPs that are municipalities responsibility to maintain.

The watershed also worked in partnership with the East Metro Water Resource Education Program, Sustainable Stillwater, the Lily Lake Association, and the Stillwater Foundation to develop and Pilot an Adopt a Raingarden Program in Stillwater. The program will continue in 2020.



### ***Groundwater***

The MSCWMO continued to recognize the Washington County Groundwater Plan during 2019 and continued to participate in County wide technical advisory committee meetings to prioritize implementation and identify responsible parties for specific activities.

### ***Local Government Controls***

The MSCWMO continued to work with its member communities to strengthen water quality and natural resource management. Through a Clean Water Fund Accelerated Implementation grant the MSCWMO is assisting its member communities to update their local controls. In 2018 all communities except Stillwater adopted Minimum Impact Design Standards (MIDS) into local ordinance and code. All communities will continue to participate in the MSCWMO's project review program. The City of Stillwater has drafted MIDS standards

### ***One Watershed One Plan***

In 2019, the MSCWMO has worked collaboratively with 15 local governments participating in the Lower St. Croix One Water One Plan planning efforts. The MSCWMO will continue to work collaboratively to develop a coordinated management plan on the large HUC 8 basin scale.

## **Information and Education Program**

### ***Shared Water Resource Educator***

The MSCWMO continues to participate in the shared East Metro Water Resource Education Program (EMWREP). During 2019, EMWREP had 4600 face-to-face interactions with the public at workshops and events, conducted 15 workshops, published 52 weekly newspaper articles, trained 13 Master Water Steward volunteers, launched a new Adopt-a-Drain program, taught 30 lessons to 4<sup>th</sup> grade students, conducted social research with agricultural landowners, and developed stormwater education materials and training opportunities for local communities.

In 2019, MSCWMO conducted the following education activities:

- Community events and presentations:
  - April 25: Stillwater Noon Rotary (20 people)
  - May 4: Stillwater raingarden clean-up (24)
  - July 20: Learn and Grow with Us, Master Gardener Garden Tour (50)
  - July 31 – Aug. 4: Washington County Fair (Lake Elmo) (500+)
  - Sept. 7: River Rally community clean-up (Stillwater) (30)
  - Sept. 26: Presentation at Master Gardener monthly meeting (Bayport) (75)
  - Oct. 15: Presentation at Wild Ones monthly meeting (Stillwater) (30)
- Postcards mailed to residents on Lily Lake advertising the UMN AIS Detectors program. May 13 Lake Association workshop (24 attendees)
- Sponsored four citizens to become trained as Master Water Stewards: Barb Bickford, Michael McCarthy, Katherine Mahoney, and Gabriel Curell
- 54 storm drains adopted through Adopt-a-Drain. Residents prevented 253.3lbs of debris from entering storm drains.
- Attended March 1 St. Croix Preparatory Career Day.
- Attended September 17 Lily Lake Association Meeting
- Published 52 articles about water in the Valley Life / Stillwater Gazette (Circulation - 17,479)
- Produced newsletter articles for Afton, Bayport, Lakeland, Oak Park Heights, and Stillwater.

**Residential Water Quality Program:** EMWREP conducted public education and outreach to promote the MSCWMO cost-share program through presentations and newspaper articles. In addition, MSCWMO supported the following activities:

- 55 raingardens adopted in Stillwater and Oak Park Heights through the new Adopt a Raingarden Program. 50 volunteers participated in the spring raingarden clean-up event.

**Stormwater U:** Through EMWREP, the MSCWMO conducted four SMART salting trainings for contractors and businesses and presented on the Adopt a Raingarden programs at the National EWRI Conference (Aug. 6).



**NEMO:** The Northland NEMO program (Non-point Education for Municipal Officials) provides local elected officials and decision makers with resources and information to make informed decisions about land use and water quality in their communities. Northland NEMO is hosted by the University of Minnesota Extension and EMWREP is a partner organization.

- During 2018 the watershed collaborated with 14 local government partners to plan the Lower St. Croix 1W1P and engage stakeholders in the planning process.

The MSCWMO will continue providing funding and staff time to support EMWREP in 2020.

A full report of EMWREP activities completed in 2019 can be viewed at the following link:

<http://www.mnwcd.org/s/2019-EMWREP-Annual-Report.pdf>

### **Website**

The MSCWMO continued to update its website in 2019. The website contains up to date meeting dates, agendas, minutes, annual reports, water monitoring information, contact information and more. In addition, the website also contains a section for grant reporting which highlights projects completed as part of the BWSR Clean Water Legacy Program. The website also contains a tab “for developers” and “for builders” which provides all necessary information on the MSCWMO’s project review process. The MSCWMO website can be viewed at the following link:

<http://www.mscwmo.org>

## **2019 Data Collection Program**

### **Water Quality Monitoring Program**

In 2019 the Middle St. Croix Watershed Management Organization (MSCWMO) continued condition monitoring and water quality and elevation biweekly on McKusick Lake and Lily Lake. Information from the Brown’s Creek Diversion Drainage which flows to McKusick Lake is monitored by the Brown’s Creek Watershed District, but resulting information is also provided to the MSCWMO for use in management planning. The MSCWMO established a permanent monitoring station at the storm sewer connection from Brick Pond to Lily Lake. This station will measure the annual volume of water and concentration of phosphorous flowing from Brick Pond to Lily Lake. The MSCWMO monitored volume and concentration of discharge for both based flow and storm flows from Perro Creek and intensified bacteria sampling efforts to more accurately identify areas impacted by high *E. coli* levels. The watershed partnered with the City of Bayport to conduct genetic testing of *E. coli* to determine if it is human or not. That monitoring is planned to continue in 2020.

Full water monitoring reports can be viewed on our website. The 2019 monitoring report will be available in July of 2020.

<http://www.mscwmo.org/water-monitoring>

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## 2019 WORKPLAN

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### ***Best Management Practices Program***

The MSCWMO will continue to promote its Best Management Practices Program in 2020. The MSCWMO will continue to work to engage landowners in the Lily Lake, McKusick Lake, Perro Creek, Lake St. Croix Direct Discharge North and South subwatersheds.

### ***Subwatershed Analyses and Implementation***

In 2020 the MSCWMO will continue working with the City of Stillwater, Stillwater Country Club, City of Bayport, City of Lake St. Croix Beach, MnDOT, and private landowners to design and install targeted stormwater quality best management practices identified in subwatershed analyses. The MSCWMO received a Clean Water Fund Grant to implement the findings of the Lily Lake Impaired Waters Delisting Road Map.

### ***Water Monitoring***

The MSCWMO will continue water quality condition monitoring program for Lily and McKusick Lakes and Perro Creek. The MSCWMO has hired the Washington Conservation District to complete monitoring and reporting again in 2020. The MSCWMO is planning to apply for funding to monitor the volume and concentration flowing out from the Mulberry Ravine and select stormwater outfalls in the City of Stillwater discharging directly into Lake St. Croix.

### ***Public Education and Outreach Programs***

The MSCWMO will continue to participate in the East Metro Water Resource Education Program. The activities and programs offered through this partnership will help MSCWMO meet its goals for education and outreach.

### ***Lower St. Croix One Watershed One Plan***

The MSCWMO will continue to work collaboratively with 15 units of government charged with water governance in the Lower St. Croix HUC8 watershed to develop a coordinated management plan.

### ***Development Plan Reviews and Erosion Monitoring Program; MSCWMO Policies and Performance Standards***

The MSCWMO will continue to review qualifying projects for consistency with the 2015 Watershed Management plan, and will continue to coordinate its review process with its member communities. Staff will also continue to monitor current and past projects to ensure stormwater management features are functioning as planned. The MSCWMO will promote trainings and events that will improve performance on future projects.

### ***Website Update and Maintenance***

The MSCWMO continues to update and maintain its website.

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## APPENDIX A

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### ***2019 Annual Communications***

#### AFTON

The City of Afton is one of ten member communities of the Middle St. Croix Watershed Management Organization (MSCWMO) that collectively works to improve the water quality of Lake St. Croix. The MSCWMO provides educational, technical, and financial assistance to the City of Afton to effectively manage water resources. They also partner with the Washington Conservation District to provide design and cost share assistance for voluntary conservation projects on private lands that reduce sediment and phosphorous pollution entering the St. Croix River. If you are considering a conservation project on your property or have any questions about the MSCWMO watershed please contact Matt Downing, Administrator of the MSCWMO at [mdowning@mnwcd.org](mailto:mdowning@mnwcd.org) or Annie Perkins, the City of Afton appointed MSCWMO Board Manager at 651-592-3007.

#### BAYPORT

The City of Bayport is one of ten member communities of the Middle St. Croix Watershed Management Organization (MSCWMO) that collectively works to improve the water quality of Perro Creek and Lake St. Croix. The MSCWMO provides educational, technical, and financial assistance to the City of Bayport to effectively manage water resources. They also partner with the Washington Conservation District to provide design and cost share assistance for voluntary conservation projects on private lands that reduce sediment and phosphorous pollution entering Perro Creek and the St. Croix River. If you are considering a conservation project on your property or have any questions about the watershed please contact Matt Downing, Administrator of the MSCWMO at [mdowning@mnwcd.org](mailto:mdowning@mnwcd.org) or Council Member John Dahl the City appointed Board Manager on the watershed, at 651-439-7312.

#### BAYTOWN TWP

Baytown Township is one of ten member communities of the Middle St. Croix Watershed Management Organization (MSCWMO) that collectively works to improve the water quality of Lake St. Croix. The MSCWMO provides educational, technical, and financial assistance to Baytown Township to effectively manage water resources. They also partner with the Washington Conservation District to provide design and cost share assistance for voluntary conservation projects on private lands that reduce sediment and phosphorous pollution entering the St. Croix River. If you are considering a conservation project on your property or have any questions about the watershed please contact Matt Downing, Administrator of the MSCWMO at [mdowning@mnwcd.org](mailto:mdowning@mnwcd.org) or Township Board Member John Fellego, the Township appointed Board Manager on the watershed, at 651-275-2200.

#### LAKELAND

The City of Lakeland is one of ten member communities of the Middle St. Croix Watershed Management Organization (MSCWMO) that collectively works to improve the water quality of Lake St. Croix. The MSCWMO provides educational, technical, and financial assistance to the City of Lakeland to effectively manage water resources. They also partner with the Washington

MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION

2019 ANNUAL REPORT

Conservation District to provide design and cost share assistance for voluntary conservation projects on private lands that reduce sediment and phosphorous pollution entering the St. Croix River. If you are considering a conservation project on your property or have any questions about the watershed please contact Matt Downing, Administrator of the MSCWMO at [mdowning@mnwcd.org](mailto:mdowning@mnwcd.org) or Council Member Joe Paiement, the City appointed Board Manager on the watershed, at 651-206-5200.

#### LAKELAND SHORES

The City of Lakeland Shores is one of ten member communities of the Middle St. Croix Watershed Management Organization (MSCWMO) that collectively works to improve the water quality of Lake St. Croix. The MSCWMO provides educational, technical, and financial assistance to the City of Lakeland Shores to effectively manage water resources. They also partner with the Washington Conservation District to provide design and cost share assistance for voluntary conservation projects on private lands that reduce sediment and phosphorous pollution entering the St. Croix River. If you are considering a conservation project on your property or have any questions about the watershed please contact Matt Downing, Administrator of the MSCWMO at [mdowning@mnwcd.org](mailto:mdowning@mnwcd.org) or Mayor Brian Zeller, the City appointed Board Manager on the watershed, at 612-325-3038.

#### LAKE ST CROIX BEACH

The City of Lake St. Croix Beach is one of ten member communities of the Middle St. Croix Watershed Management Organization (MSCWMO) that collectively works to improve the water quality of Lake St. Croix. The MSCWMO provides educational, technical, and financial assistance to the City of Lake St. Croix Beach to effectively manage water resources. They also partner with the Washington Conservation District to provide design and cost share assistance for voluntary conservation projects on private lands that reduce sediment and phosphorous pollution entering the St. Croix River. If you are considering a conservation project on your property or have any questions about the watershed please contact Matt Downing, Administrator of the MSCWMO at [mdowning@mnwcd.org](mailto:mdowning@mnwcd.org) or Mayor Tom McCarthy, the City appointed Board Manager on the watershed, at 651-436-7031.

#### OAK PARK HEIGHTS

The City of Oak Park Heights is one of ten member communities of the Middle St. Croix Watershed Management Organization (MSCWMO) that collectively works to improve the water quality of Perro Pond and Lake St. Croix. The MSCWMO provides educational, technical, and financial assistance to the City of Oak Park Heights to effectively manage water resources. They also partner with the Washington Conservation District to provide design and cost share assistance for voluntary conservation projects on private lands that reduce sediment and phosphorous pollution entering Perro Pond or St. Croix River. If you are considering a conservation project on your property or have any questions about the watershed please contact Matt Downing, Administrator of the MSCWMO at [mdowning@mnwcd.org](mailto:mdowning@mnwcd.org) or Council Member Mike Runk, the City appointed Board Manager on the watershed, at (651) 439-5458.

#### ST. MARY'S POINT

The City of St. Mary's Point is one of ten member communities of the Middle St. Croix Watershed Management Organization (MSCWMO) that collectively works to improve the water quality of Lake

#### MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION



St. Croix. The MSCWMO provides educational, technical, and financial assistance to the City of St. Mary's Point to effectively manage water resources. They also partner with the Washington Conservation District to provide design and cost share assistance for voluntary conservation projects on private lands that reduce sediment and phosphorous pollution entering the St. Croix River. If you are considering a conservation project on your property or have any questions about the watershed please contact Matt Downing, Administrator of the MSCWMO at [mdowning@mnwcd.org](mailto:mdowning@mnwcd.org) or Council Member Beth Olfelt-Nelson, the City appointed Board Manager on the watershed, at 612-417-5394.

#### STILLWATER

The City of Stillwater is one of ten member communities of the Middle St. Croix Watershed Management Organization (MSCWMO) that collectively works to improve the water quality of Lily Lake, Lake McKusick, and Lake St. Croix. The MSCWMO provides educational, technical, and financial assistance to the City of Stillwater to effectively manage water resources. They also partner with the Washington Conservation District to provide design and cost share assistance for voluntary conservation projects on private lands that reduce sediment and phosphorous pollution entering Lily Lake, Lake McKusick, or the St. Croix River. If you are considering a conservation project on your property or have any questions about the watershed please contact Matt Downing, Administrator of the MSCWMO at [mdowning@mnwcd.org](mailto:mdowning@mnwcd.org) or Council Member Ryan Collins, the City appointed Board Manager on the watershed, at 651-246-8264.

#### WEST LAKELAND TWP

West Lakeland Township is one of ten member communities of the Middle St. Croix Watershed Management Organization (MSCWMO) that collectively works to improve the water quality of Lake St. Croix. The MSCWMO provides educational, technical, and financial assistance to West Lakeland Township to effectively manage water resources. They also partner with the Washington Conservation District to provide design and cost share assistance for voluntary conservation projects on private lands that reduce sediment and phosphorous pollution entering the St. Croix River. If you are considering a conservation project on your property or have any questions about the watershed please contact Matt Downing, Administrator of the MSCWMO at [mdowning@mnwcd.org](mailto:mdowning@mnwcd.org) or Board Member Dan Killo, the Township appointed Board Manager and Treasurer for the watershed, at 612-436-1134.



MEMORANDUM

**TO:** Middle St. Croix WMO Board of Managers  
**FROM:** Lauren Haydon, BMP Design Senior Technician, Washington Conservation District  
**DATE:** March 25, 2020

**RE: Evan Perry Native Planting – 904 3<sup>rd</sup> St S, Stillwater**

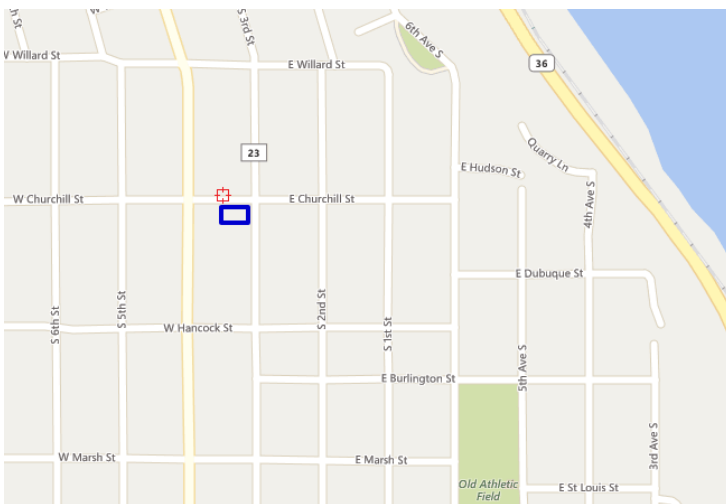
Mr. Perry is applying for the Landscaping for Habitat grant. He would like to install a 300 sq ft native planting. His property is located on the corner of 3<sup>rd</sup> St S & Churchill in a very popular neighborhood in Stillwater where the project would provide a lot of educational opportunities. Mr. Perry has a lot of interest in creating pollinator habitat through the use of flowering shrubs and plants, and intends to install his project using organic site prep methods only.

**Total Contractor Estimate:** \$1789.20  
**Amount of Phosphorus Removed:** n/a  
**Cost Share Requested:** \$250.00

**Requested Board Action:**

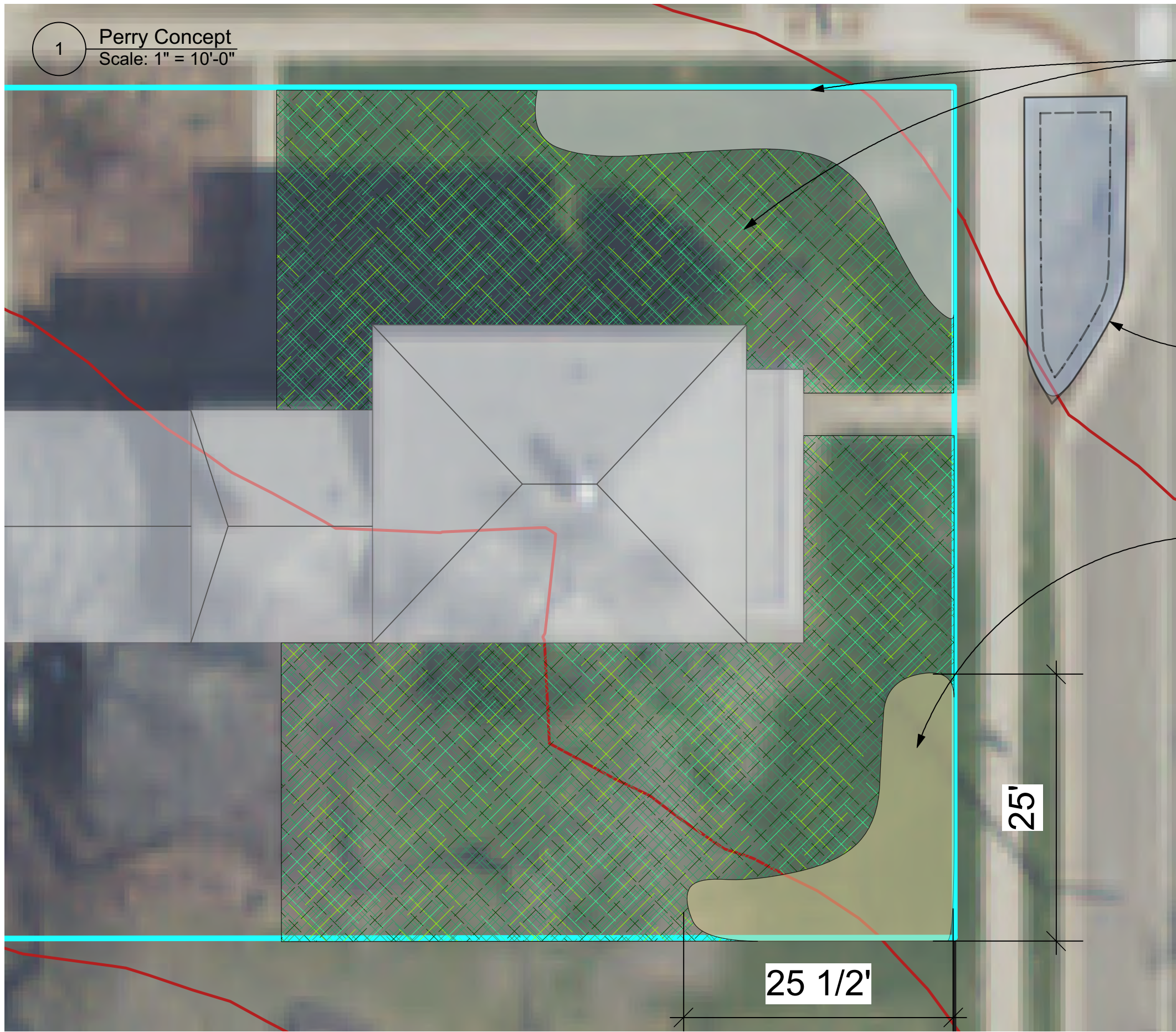
Motion by Board Member 1, seconded by Board Member 2, to approve encumbrance of \$250.00 cost share for the installation of the Perry native planting.

**Location & Photos:**





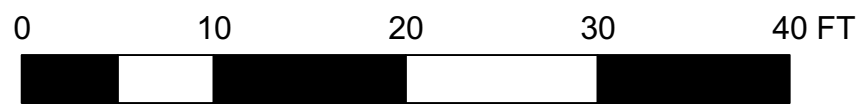
1 Perry Concept  
Scale: 1" = 10'-0"



Phase II: Native Planting & Bee Lawn  
-Not eligible for cost share at this time. Could be considered in future grant applications.  
-Bee lawns would consist of a blend of fine fescues and low growing perennial plants that provide nectar and pollen for pollinators. Examples include creeping thyme and dutch white clover.

Existing Curb Cut Raingarden  
\*Landowner will continue to provide maintenance of the garden.

Phase I: Proposed Native Planting (300 sq ft)  
-This full sun area native planting will provide additional filtration of stormwater runoff from the house and yard in addition to providing essential pollinator habitat through the use of flowering shrubs and forbs.



Washington Conservation District  
455 Hayward Ave N  
Oakdale, MN 55128  
(651) 330-8220  
www.mnwcd.org



plan created by:

Project Address	904 3rd St S Stillwater, MN	Drawn	Reviewed	Revision
Project Manager	Jaren Haydon-Dries	Washington Conservation District		

**MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION**

455 Hayward Ave N  
Oakdale, MN 55128  
(651) 330-8220 xt 22  
www.mscwmo.org

Project Title	Perry Native Planting
Sheet Title	Landscape Vertical
CAD File Name	P:\Projects\Watersheds\MSWMO\MSWMO_BMP_Program\2019\Perry_001_3d.dwg

Date  
1/1/01

Sht-1  
of  
1  
Page 38 of 49





MEMORANDUM

**TO:** Matt Downing, Administrator  
**FROM:** Rebecca Nestingen, PE  
**DATE:** April 2<sup>nd</sup>, 2020

**RE: 9a) Plan Reviews/Submittals**

The following is a summary of recent activity on projects submittals which qualify for plan review under the MSCWMO 2015 Watershed Management Plan (WMP):

- **Oak Park Heights MCES Interceptor.** Metropolitan Council Environmental Services (MCES) submitted a project review application for a sanitary sewer interceptor replacement project in Oak Park Heights on February 28<sup>th</sup>, 2020. The project does not add or reconstruct more than 6000 square feet of impervious surface so the project was reviewed for conformance with erosion and sediment control standards only. *Staff recommends approval.*
- **Scanlan Garage and Driveway Reconstruction.** The Scanlan home at 125 Lakeland Shores Rd N in Lakeland Shores proposes reconstruction of garage and driveway on the property. A MSCWMO review application was received on March 2<sup>nd</sup>, 2020. Staff determined the project was previously permitted in 2017 but the new plans increased the impervious surface the previous project provided stormwater volume controls for and an additional 107 cubic feet of volume control was required with the expanded project. Revised materials were received from the applicant on March 30<sup>rd</sup>, 2020 and March 30<sup>th</sup>, 2020 demonstrating additional volume control measures. *Staff recommends approval.*
- **CSAH 5 Phase 2 Pedestrian and Safety Improvement Project.** On February 3<sup>rd</sup>, 2020, the MSCWMO staff received a project review application for Washington County’s Phase 2 of the CSAH 5 reconstruction in Stillwater. The plans received included an underground infiltration chamber to provide volume control for the Phase 2 portion of the project as well as the Phase 1 portion of the project complete in 2018 which was deferred to the Phase 2 portion of the project. Upon review it was determined the proposed underground infiltration practice was located in a high vulnerability drinking water source management area (DWSMA) and emergency response area (ERA) where infiltration is prohibited. Due to these limiting site constraints, the project consultant has suggested that the MIDS flexible treatment option (FTO) 3 maybe the only viable alternative for compliance with MSCWMO standards. Staff have been working on developing a draft policy and rate for FTO 3 (credit banking/cash payment to stormwater impact fund) subject to approval by the MSCWMO board.
- **3<sup>rd</sup> and Myrtle Street Condominium Development.** A new condominium development is proposed in the currently vacant lot and the intersection of 3<sup>rd</sup> and Myrtle Street in Stillwater. A project application for review was received on February 27<sup>th</sup>, 2020. On March 5<sup>th</sup>, the MSCWMO staff sent a review letter requesting revision and resubmittal to address eleven items. Revised materials were received on March 20<sup>th</sup> and March 31<sup>st</sup>, 2020. The review of the revised and resubmitted items is still currently ongoing but cursory review indicates a likely staff recommendation of approval with conditions.

- **Lakeland 2019 Street Improvements.** A review application for the 2019 street improvement project was received in February of 2019 and a review letter requesting revision and resubmittal to address 15 comments was sent March, 14<sup>th</sup>, 2019. The project was then deferred by the City of Lakeland until 2020. Revised materials were received on March 26<sup>th</sup>, 2020. The review of the revised and resubmitted items is still currently ongoing but cursory review indicates a likely staff recommendation of approval with conditions.

MIDDLE ST. CROIX WATERSHED MANAGEMENT  
 ORGANIZATION CONSTRUCTION SITE  
 INSPECTION PROGRAM

Middle St. Croix WMO  
 c/o Washington Conservation District  
 455 Hayward Ave N  
 Oakdale, MN 55128  
 Phone: (651) 330-8220 x29  
[www.mscwmo.org](http://www.mscwmo.org)



**EROSION & SEDIMENT CONTROL  
 INSPECTION REPORT**

Matt and Shannon Stordahl  
 16884 Island Terr  
 Lakeland, MN 55044

March 18, 2020  
 MSCWMO Permit #: **19-006**  
 Electronic-Mailed (x)

**Project: Stordahl Home Reconstruction**

Dear Mr. & Mrs. Stordahl:

The Middle St. Croix Watershed Management Organization (MSCWMO) conducted an inspection for erosion and sedimentation control issues at the site noted above on **3-18-2020**. The following report summarizes the field inspection findings and describes areas of compliance/non-compliance. Our inspections will be using the procedures and protocols defined in the Minnesota Pollution Control Agency (MPCA) National Pollutant Discharge Elimination System (NPDES) General Stormwater Permit for Construction Activity.

**Inspection information**

Is this inspection routine or in response to a storm event:  7 day  Rain

Rainfall amount (if applicable): \_\_\_\_\_

Is site within one aerial mile of special or impaired water that can potentially receive discharge from the site?  Yes  No

**Note:** If NA is selected at any time, specify **why** in the comment area for that section.

**Erosion prevention requirements**

	Yes	No	NA
1. Are soils stabilized where no construction activity has occurred for 14 days (including stockpiles)? (7 days where applicable, or 24 hours during Minnesota Department of Natural Resources [DNR] Fish Spawning restrictions)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Has the need to disturb steep slopes been minimized?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. If steep slopes are disturbed, are stabilization practices designed for steep slopes used?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. All ditches/swales stabilized 200' back from point of discharge or property edge within 24 hours? (Mulch, hydromulch, tackifier, or similar best management practices [BMPs] are not acceptable in ditches/swales if the slope is greater than 2%)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Do pipe outlets have energy dissipation (within 24 hours of connection)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Is construction phasing being followed in accordance with the approved construction plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Are areas not to be disturbed marked off (flags, signs, etc.)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Comments:**

**Bluff is not disturbed.**

**Areas where rain gardens are to be constructed are not flagged, but contractor is aware compaction may become an issue and will rip soil before constructing rain gardens if necessary.**

## Sediment control requirements

	Yes	No	NA
1. Are perimeter sediment controls installed properly on all down gradient perimeters?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are appropriate BMPs installed protecting inlets, catch basins, and culvert inlets?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Is a required buffer preserved around all streams, lakes, and wetlands during construction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Has buffer monumentation been installed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Do all erodible stockpiles have perimeter control in place?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Is there a temporary sediment basin on site, and is it built as shown in the approved stormwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Is soil compaction being minimized where not designed for compaction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Is topsoil being preserved unless infeasible?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Comments:

**Silt fence enhanced with wood chip biologs are being used in downgradient areas.**

**Rain garden areas have not been significantly disturbed yet.**

## Maintenance and inspections

	Yes	No	NA
1. Are all previously stabilized areas maintaining ground cover?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Are perimeter controls maintained and functioning properly, sediment removed when one-half full?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Are inlet protection devices maintained and adequately protecting inlets?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Are the temporary sediment basins being maintained and functioning properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Are vehicle tracking BMPs at site exists in place and maintained and functioning properly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Is all tracked sediment being removed within 24 hours?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Have all surface waters, ditches, conveyances, and discharge points been inspected?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8. Were any discharges seen during this inspection (i.e., sediment, turbid water, or otherwise)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

If yes, record the location of all points of discharge. Photograph and describe the discharge (size, color, odor, foam, oil sheen, time, etc.). Describe how the discharge will be addressed. Was the discharge a sediment delta? If yes, will the delta be recovered within seven days and in accordance with item 11.5 of the NPDES permit?

### Comments:

**Biologs on the north side of the house were run over by machinery and need to be replaced to prevent discharge to the bluff on the NE corner. All other perimeter controls were well maintained.**

## Other

	Yes	No	NA
1. Are pollution prevention management measures for solid waste, hazardous material, concrete, and truck washing in place?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Is any dewatering occurring on site?  If yes, what BMPs are being used to ensure that clean water is leaving the site and the discharge is not causing erosion or scour?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. If chemical flocculants are used, is there a chemical flocculant plan in place?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Will a permanent stormwater management system be created for this project if required and in accordance with Section 15 of the NPDES permit?  If yes, describe: <b>2 raingardens- NW corner and SE corner</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. If infiltration/filtration systems are being constructed, are they marked and protected from compaction and sedimentation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Description of areas of non-compliance noted during the inspection, required corrective actions, and recommended date of completion of corrective actions:  <b>Minor maintenance is required- repair biologs on NE corner as soon as possible. Extra logs were noted on site that could be used to replaced damaged logs.</b>			
7. Potential areas of future concern:  <b>Monitor silt fence and biologs near bluff frequently and address any failures as they occur.</b> <b>Monitor for compaction in proposed rain garden areas.</b> <b>Continue street sweeping as necessary.</b> <b>Ground cover (straw mulch, hydromulch, etc) should be placed on any areas not being driven on by machinery.</b>			

## Maintenance and Compliance Summary

Overall Site Grade: **B**

A status described above as non-compliant indicates a permit violation that must be addressed in accordance with the NPDES Permit. Follow-up inspections will be conducted on a regular basis. Please contact Matt Downing at 651-330-8220 x29 if you have any questions.

Respectfully,

Aaron DeRusha  
MSCWMO Inspector  
Cc: Matt Downing, MSCWMO

### GRADE DESCRIPTIONS

**A** The site is in full compliance, all practices are in place, and the site is well maintained.

**B** The site is in compliance, but normal maintenance activities are required.

**C** The site is not in compliance. Maintenance or supplemental practices are required.

**D** The site is not in compliance. Erosion and sediment control practices are in poor condition and controllable water resource or off-site impacts are likely. Contact the District for a follow up inspection as soon as correction measures have been taken.

**F** The site is in severe non-compliance.



**MIDDLE ST. CROIX WATERSHED MANAGEMENT  
ORGANIZATION CONSTRUCTION SITE  
INSPECTION PROGRAM**

Middle St. Croix WMO  
c/o Washington Conservation District  
455 Hayward Ave N  
Oakdale, MN 55128  
Phone: (651) 330-8220 x29  
[www.mscwmo.org](http://www.mscwmo.org)



**EROSION & SEDIMENT CONTROL  
INSPECTION REPORT**

Robert Lind  
MN Party Bus  
1445 Neal Ave  
West Lakeland, MN 55042

March 18, 2020

MSCWMO Permit #: **18-010**  
Electronic-Mailed (x)

**Project: 2<sup>nd</sup> Street Commercial Development- MN Party Bus**

Dear Mr. Lind,

The Middle St. Croix Watershed Management Organization (MSCWMO) conducted an inspection for erosion and sedimentation control issues at the site noted above on **3-18-2020**. The following report summarizes the field inspection findings and describes areas of compliance/non-compliance. Our inspections will be using the procedures and protocols defined in the Minnesota Pollution Control Agency (MPCA) National Pollutant Discharge Elimination System (NPDES) General Stormwater Permit for Construction Activity.

**Inspection information**

Is this inspection routine or in response to a storm event:  7 day  Rain

Rainfall amount (if applicable): \_\_\_\_\_

Is site within one aerial mile of special or impaired water that can potentially receive discharge from the site?  Yes  No

**St. Croix River**

**Note:** If NA is selected at any time, specify **why** in the comment area for that section.

**Erosion prevention requirements**

	Yes	No	NA
1. Are soils stabilized where no construction activity has occurred for 14 days (including stockpiles)? (7 days where applicable, or 24 hours during Minnesota Department of Natural Resources [DNR] Fish Spawning restrictions)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Has the need to disturb steep slopes been minimized?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. If steep slopes are disturbed, are stabilization practices designed for steep slopes used?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. All ditches/swales stabilized 200' back from point of discharge or property edge within 24 hours? (Mulch, hydromulch, tackifier, or similar best management practices [BMPs] are not acceptable in ditches/swales if the slope is greater than 2%)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Do pipe outlets have energy dissipation (within 24 hours of connection)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Is construction phasing being followed in accordance with the approved construction plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Are areas not to be disturbed marked off (flags, signs, etc.)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Comments:**

**Site is entirely open since last fall.**

**Area where rain garden is proposed on NE corner is not protected- will need to be monitored for compaction and infiltration rate.**

## Sediment control requirements

	Yes	No	NA
1. Are perimeter sediment controls installed properly on all down gradient perimeters?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Are appropriate BMPs installed protecting inlets, catch basins, and culvert inlets?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Is a required buffer preserved around all streams, lakes, and wetlands during construction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Has buffer monumentation been installed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Do all erodible stockpiles have perimeter control in place?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Is there a temporary sediment basin on site, and is it built as shown in the approved stormwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Is soil compaction being minimized where not designed for compaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Is topsoil being preserved unless infeasible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Comments:

**Silt fence was installed and staked, but not trenched in. Most of it is collapsed throughout the site. The silt fence is not installed correctly and is non-functional.**

**Fencing was backfilled along the boulder retaining wall, but is not staked and will be overwhelmed by any runoff, discharging to the property to the north. The site is not fully contained along the boulder wall. Silt fence must provide capacity above the boulder wall by being staked and stapled up so water cannot flow overtop.**

## Maintenance and inspections

	Yes	No	NA
1. Are all previously stabilized areas maintaining ground cover?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Are perimeter controls maintained and functioning properly, sediment removed when one-half full?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Are inlet protection devices maintained and adequately protecting inlets?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Are the temporary sediment basins being maintained and functioning properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Are vehicle tracking BMPs at site exists in place and maintained and functioning properly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Is all tracked sediment being removed within 24 hours?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Have all surface waters, ditches, conveyances, and discharge points been inspected?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8. Were any discharges seen during this inspection (i.e., sediment, turbid water, or otherwise)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

If yes, record the location of all points of discharge. Photograph and describe the discharge (size, color, odor, foam, oil sheen, time, etc.). Describe how the discharge will be addressed. Was the discharge a sediment delta? If yes, will the delta be recovered within seven days and in accordance with item 11.5 of the NPDES permit?

### Comments:

**No sediment tracking observed at time of inspection. Rock entrance is installed.**

**Lack of maintenance of the silt fence is evident. Silt fence must be staked tight, trenched, and repaired along the entire northern and western border of the site. Sediment discharge to the neighboring property will occur with any runoff.**

## Other

	Yes	No	NA
1. Are pollution prevention management measures for solid waste, hazardous material, concrete, and truck washing in place?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Is any dewatering occurring on site?  If yes, what BMPs are being used to ensure that clean water is leaving the site and the discharge is not causing erosion or scour?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. If chemical flocculants are used, is there a chemical flocculant plan in place?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Will a permanent stormwater management system be created for this project if required and in accordance with Section 15 of the NPDES permit?  If yes, describe: <b>3 raingardens providing 1,545 cf of treatment with sediment pretreatment devices.</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. If infiltration/filtration systems are being constructed, are they marked and protected from compaction and sedimentation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Description of areas of non-compliance noted during the inspection, required corrective actions, and recommended date of completion of corrective actions:  <b>Perimeter control must be addressed immediately. Additional silt fence/biologs must be used to fully contain all downhill areas of the site to protect neighboring property.</b>			
7. Potential areas of future concern:  <b>Proposed rain garden areas are not protected and being worked in- compaction and infiltration rate will need to be checked before project completion.</b>			

## Maintenance and Compliance Summary

Overall Site Grade: **F**

A status described above as non-compliant indicates a permit violation that must be addressed in accordance with the NPDES Permit. Follow-up inspections will be conducted on a regular basis. Please contact Matt Downing at 651-330-8220 x29 if you have any questions.

Respectfully,

Aaron DeRusha  
MSCWMO Inspector  
Cc: Matt Downing, MSCWMO

### GRADE DESCRIPTIONS

**A** The site is in full compliance, all practices are in place, and the site is well maintained.

**B** The site is in compliance, but normal maintenance activities are required.

**C** The site is not in compliance. Maintenance or supplemental practices are required.

**D** The site is not in compliance. Erosion and sediment control practices are in poor condition and controllable water resource or off-site impacts are likely. Contact the District for a follow up inspection as soon as correction measures have been taken.

**F** The site is in severe non-compliance.

# MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION

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



## Staff Report- March 2020

### Administration

- Prepared April meeting materials
- Prepared 2019 Annual Report
- Investigated Alternative Compliance Policies

### Project Reviews

- Oak Park Heights MCES Interceptor-ACTION
- Scanlan Garage and Driveway-ACTION
- CSAH 5 Phase 2-INFORM
- 3rd and Myrtle Development-INFORM
- Lakeland 2019 Street Improvements-INFORM

### Lily Lake Phosphorus Reductions for Delisting – CWF Grant C20-6055

**Description:** Awarded \$513,500 for in-lake alum treatment and filtration basin to remove 120lbs of phosphorus from Lily Lake.

**Activities This Month:** Developed agreement with the City of Stillwater that is required by BWSR to receive grant funds.

**Staff:** Bryan Pynn-WCD, Matt Downing-MSCWMO

### Lake St. Croix Direct Discharge Phase II and Phase III

**Description:** \$151,000 (phase II) and a \$34,000 (phase III) grants for stormwater quality improvements in Oak Park Heights, Stillwater and Bayport (2015-2019). Funding was utilized to work in partnership with the Stillwater Country Club to install a basin to reduce 25.0 lbs. of phosphorus per year discharging into Lake St. Croix.

**Activities This Month:** Project is constructed and invoices paid. Final grant reporting has been submitted for both phases. Addressing BWSR comments for final closeout. Planning for spring maintenance, which includes cleanout of sediment trap and planting of additional trees and shrubs purchased from WCD plant sale.

**Staff:** Bryan Pynn-WCD, Matt Downing-MSCWMO

### Perro Creek Water Quality Improvements Phase I and Watershed Based Funding

**Description:** \$63,000 CWF grant and \$39,124 allocation from CWF Watershed Based Funding to design and install stormwater quality practices to reduce nutrients and bacteria discharging directly into Perro Creek and then to Lake St. Croix.

**Activities This Month:** Remaining items for Spring 2020 include planting basin 3, install mulch and edging on basin 3, observe raingarden function and turfgrass growth. There is a 5% retainage and about 2% of the project cost left to pay once work is complete in Spring 2020. Final reporting has been completed and payment from BWSR is in process.

# MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION

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**Staff:** Bryan Pynn, WCD

## **Watershed Based Funding- Lily Lake Raingardens**

**Description:** \$39,636 CWF Watershed Based Funding allocation to improve water quality. The funding is approved to provide the design and installation of two raingardens on Lily Lake in Stillwater.

**Activities This Month:** No Activity - One basin installed; other basin removed from project. Will apply remaining WB funds to another project in 2020. Still looking at install options.

**Staff:** Bryan Pynn, WCD

## **Lake St. Croix Small Communities Phosphorus Reduction Grant**

**Description:** \$200,000 grant for stormwater quality improvement south of Bayport (2019-2021). Planning to work in partnership with City of Lake St. Croix Beach to stabilize the bluff on the north side of town.

**Activities This Month:** Met with Lake St Croix Beach and SHE multiple times. Reviewing SEH feasibility study on construction of bluff project. Addressing comments from concerned citizens and other agencies.

**Staff:** Bryan Pynn, WCD Matt Downing, MSCWMO

## **3M PFAS Settlement MPCA Staff Reimbursement Grant**

**Description:** Up to \$20,000 reimbursement of staff time for both the Administrator and consultant (Stu Grub with EOR) to participate in the development of the groundwater model for the PFAS contamination in the southern portion of the watershed.

**Activities This Month:** Consultant attended the February workgroup meeting. A summary of work performed is included in this packet.

**Staff:** Matt Downing, MSCWMO Stu Grub, EOR

## **Microbial Source Tracking of *E. coli* in Perro Creek**

**Description:** The MSCWMO and the City of Bayport agreed to partner on an effort to identify the source of *E. coli* contamination of Perro Creek. 4 locations on the creek were sampled for the presence or absence of human DNA in the bacteria. This effort is above and beyond the concentration monitoring already being conducted by the MSCWMO.

**Activities This Month:** Lab results are being summarized for the 2019 Monitoring Summary.

**Staff:** Rebecca Oldenburg Giebel, WCD

## **Water Monitoring Program**

Middle St. Croix Watershed Management Organization Member Communities  
Afton, Bayport, Baytown, Lakeland, Lakeland Shores, Lake St. Croix Beach, Oak Park Heights, St. Mary's Point, Stillwater, & West Lakeland

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**Description:** The MSCWMO water monitoring program includes the monitoring of flow at three sites. These sites have that equipment serves to collect data on the total volume of water flowing into Lily Lake at the Greeley Street Inlet, through Perro Creek at the Diversion Structure, as well as, the Perro Creek Diversion Structure Overflow. Water quality is also collected at the Greeley Street Inlet and the Perro Creek Diversion Structure on a monthly basis, as well as during storm events.

Additionally, the MSCWMO monitors two lakes, Lily and McKusick for several parameters from April-October. Data is collected on both lakes on a biweekly basis and includes: water level, clarity, pH, temperature and dissolved oxygen profiles, an aesthetics and user profile, and field conditions. Additionally, water quality samples are collected from the surface of the lakes and analyzed for total phosphorus, total Kjeldahl nitrogen, and chlorophyll.

**Activities This Month:** 2020 MSCWMO Monitoring Summary is being written.

**Staff:** Rebecca Oldenburg Giebel, WCD

## Erosion and Sediment Control Inspections

**Description:** The MSCWMO has contracted with the WCD to conduct erosion and sediment control inspections for construction projects that have been reviewed and recommended for permit approval by partner communities.

**Activities This Month:** A spring reminder email was sent on March 9 to all known active sites reminding contractors to inspect their erosion control measures and prepare sites for spring runoff. The Stordahl 1635 Rivercrest Home project was inspected on March 18, and repairs to the perimeter control were needed on the NE corner of the house. The builder took corrective action by the next day. The 2<sup>nd</sup> St Commercial-MN Party Bus site was inspected March 18. No corrective action had been taken since the November 2019 inspection; the silt fence perimeter control was in severe non-compliance, and at risk of discharging sediment to the neighboring property. Follow up with the builder occurred and the builder agreed to have the silt fence trenched in and repaired by the next day. The builder followed up on March 19 and confirmed the corrective actions had been taken. Inspection reports for both projects are attached.

**Staff:** Aaron DeRusha WCD

## **Meetings**

- LSCB Bluff Stabilization Project Review -March 20<sup>th</sup>, 25<sup>th</sup>, 30<sup>th</sup>
- Lily Lake Delisting Strategy -Ongoing at will (remote)
- Lakeland Shores Pre-Permit Application -March 20<sup>th</sup>