

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 Bayport Public Library, Bayport, MN Thursday, August 8, 2019 6:00PM

1. Call to Order – 6:00PM
 - a. Approval of Agenda
2. Approval of Minutes
 - a. Draft minutes – June 13, 2019 **pg. 1-7**
4. Treasurer’s Report
 - a. Report of savings account, assets for August 8, 2019
 - b. Approve payment of bills for August 8, 2019
5. Public Comment
6. Old Business
7. New Business
 - a. Introduction of Interim Administrator – Matt Downing
 - b. 3M PFAS Reimbursement Request **#2 pg. 8-10**
 - c. Revised 2019 MSCWMO – WCD Service Agreement **pg. 11-18**
 - d. 2020 MSCWMO Draft Budget Approval and Notification Request **pg. 19-22**
8. Grant and Cost Share Applications
 - a. Peoples Church Native Prairie Reimbursement Request **pg. 23-27**
9. Plan Reviews/Submittals
 - a. Plan Reviews and Submittal Summary **pg. 28-58**
 - i. Culligan Addition
 - ii. Dewart Review
 - iii. Stordahl Review
 - iv. Zvago Review
10. Staff Report **pg. 59-61**
11. Adjourn

Regular Meeting of the Middle St. Croix Watershed Management Organization
Bayport Public Library, Bayport, MN
Thursday, June 13, 2019
6:00PM

Present: Brian Zeller, Lakeland Shores; Mike Runk, Oak Park Heights; Tom McCarthy, Lake St. Croix Beach; John Fellego, Baytown Township; Lakeland; Ryan Collins, Stillwater; Beth Olfelt-Nelson, St. Mary's Point; Dan Kylo, West Lakeland Township; Anne Perkins, Afton; Cameron Blake, WCD; Administrator Mike Isensee

Call to Order

The meeting was called to order at 6:00PM by Manager McCarthy.

Approval of Minutes

A motion to approve the May 9th, 2019 minutes was made by Manager Runk and seconded by Manager Fellego. Motion carried.

Treasurer's Report

The treasurer's report was presented by Manager Kylo. The remaining checking account balance is \$193,494.01. First State Bank CDs are valued at \$38,549.15. The ending balance in the RBC savings account for April 2019 is \$63,205.71 and for May is \$63,198.31.

Bills to be approved this month are: Anoka Conservation District: \$4,000.00; Carmen Simonet Design: \$323.00; Cornerstone Land Surveying: \$450.00; Glacial Ridge Growers: \$484.18; Kennedy & Graven: \$480.00; Landscape Alternatives: \$574.45; Metro Watershed Partners: \$500.00; Washington Conservation District (Administration- April): \$1,704.00; Washington Conservation District (Administration- May): \$2,655.85; Washington Conservation District (Technical Services- April): \$6,275.40; Washington Conservation District (Technical Services- May): \$1,575.00; Total: \$19,021.88.

The board noted that the RBC account decreased from April to May and wondered why that happened. Administrator Isensee said the report was prepared just before the meeting and that he would follow up with why the decrease occurred. Manager Zeller moved to accept the Treasurer's report and bills, Manager Runk seconded, and the motion carried.

Administrator Announcement

Administrator Isensee presented his resignation to the board. He informed the board that he was replacing Jim Shaver as the administrator for the Carnelian-Marine St. Croix Watershed District. Previously the replacement process has been aided by the WCD Administrator. An interview panel made up of a MSCWMO Board member, the previous MSCWMO administrator, the WCD administrator, and a WCD Board member has been used in the past for MSCWMO Administrator selection. Administrator Isensee explained that due to grant leveraging the MSCWMO has a complex funding scheme but that he would be available to assist the new administrator during the

transition. Manager Zeller recalled Jay Riggs, the WCD Administrator, leading MSCWMO board meetings during the transition in the past. Administrator Isensee confirmed this and explained that the July board meeting can be skipped, with the goal of having a new admin in place by September.

Administrator Isensee explained that the MSCMO Administrator position is technically a 50% position, but ended up being closer to 70-80% with time from project and grant management. Manager Olfelt-Nelson asked if there would be a reassessment of the position as the board has come to rely heavily on that amount of time. Manager Zeller explained that during his 14 years on the MSCWMO Board this is the fourth administrator transition he has gone through. He said part of the benefit of contracting through the WCD is assistance through transitions. The board requested that Manager Zeller be the MSCWMO Board member to participate in the new administrator selection. Manager Zeller agreed and thinks Administrator Isensee should be part of the search as he can effectively communicate the MSCWMO Board's preferred financial approach of keeping costs low and leveraging grants. Manager McCarthy agreed that grant writing experience will be an important trait to look for. Administrator Isensee will coordinate a conference call with Jay Riggs and Manager Zeller about the administrator search process. He said Jay Riggs need to get WCD Board approval at their next meeting to post the job listing and the process would likely take another 2-3 weeks after that.

Administrator Isensee reported on some important projects the board should keep in mind. He said the first task to be completed is the CWF grant application for Lily Lake's bioinfiltration basin and alum treatment. The application is mostly complete but needs to be modified. He informed Manager Collins that this application will require a \$137,000 match from the City of Stillwater and the state from the upcoming Greely reconstruction project.

Administrator Isensee said his first day as CMSCWD Administrator is July 5th. Manager McCarthy moved to accept Administrator Isensee's resignation. Manager Kylo seconded this motion and the motion carried. The board thanked Administrator Isensee for his 6 years of work for the MSCWMO.

2018 MSCWMO Audit

The board thought the audit was straightforward and they didn't have any questions regarding it. Manager Fellegly moved to accept the audit and allow it to be posted online. Manager Collins seconded this motion and the motion carried.

2019 BWSR Clean Water Fund Grant Application

Staff recommends re-applying for funding to implement the findings of the draft Lily Lake Delisting Report. The \$550,000 grant application is identified in the 2015-2025 MSCWMO Watershed Management Plan. If successful the MSCWMO will work with the City of Stillwater to complete design in 2020 and install a large bioretention BMP along Greeley Street in 2021. The basin will reduced 33.0 lbs./year of phosphorus loading to Lily Lake. In 2022, two alum treatments will be completed as part of the grant. Based on the 2018 internal loading study conducted by Wenck, this should reduce internal loading of phosphorus by as much as 120 pounds per year. The grant application will require a minimum match of \$137,000. Grant application will likely be due August 31st.

Manager Zeller moved, seconded by Manager Olfelt-Nelson, to approve the Lily Final 45 Implementation Grant application. The motion carried.

Approve payment for pretreatment device for Perro Creek Phase I Grant

The proposed 2nd Street Drainage Improvement project will install three bioretention swales that will intercept and infiltrate stormwater runoff from 6.7 acres of drainage along 2nd Avenue N. and 7th Street North that is directly discharging into Perro Creek. WinSLAMM water quality monitoring indicates the water quality swales will reduce phosphorous by 10.1 lbs. per year from entering Perro Creek and Lake St. Croix. At the March 14, 2019 MSCWMO Board meeting the board awarded construction of the project to Miller Contracting at an apparent low bid of \$129,891.75. The MSCWMO cost share portion is \$61,000 from the FY17 Clean Water Fund Grant and FY18 Watershed Based Funding. This project also includes a drainage pretreatment chamber specially designed by the manufactures (Anoka Conservation District) of the Rainguardian© to capture sediment, leaves and grass clippings prior to entering the basin. The cost of this specialty device is \$4,000. Staff is requesting payment of the invoice for this device.

Manager Felgy moved to approve payment of \$4,000 for the rainguardian pretreatment device to be installed on the 2nd Street Drainage Improvement Project. Manager Runk seconded this motion and the motion carried.

Approve Invoice for Bayport for Villas of Inspiration Review

The MSCWMO review expenses for the proposed Villas of Inspiration project have exceeded the MSCWMO review fee. The review fee is determined each year based on the average cost for a review of similar size and scope. The review fee for the Villas of Inspiration was \$1,250.00. Due to multiple design iterations MSCWMO review expenses were \$3,074.00.

Administrator Isensee requests the MSCWMO Board to approve invoicing the City of Bayport \$1,824.00. Manager Felleg moved to approve this invoice request. Manager Runk seconded this motion and the motion carried.

Manager Zeller asked about the project and what was developed. The board discussed the approved plan set. Administrator Isensee explained that the stormwater pretreatment looks small because some of the rate control was built in as part of the Stagecoach reconstruction project, and that the plans ended up meeting the MSCWMO Water Quality requirement.

3M PFAS Reimbursement Request

MSCWMO staff and our consultant EOR have 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 \$4,369.00 (\$1,242.50 MSCWMO April and May; \$1,267.50 EOR April; \$1,859.00 EOR May).

Manager Runk, seconded by Manager Perkins, made a motion to submit reimbursement request from MPCA of \$4,369.00 for the 3M PFAS Water Supply Groundwater meetings and technical review. The motion carried.

The board discussed which communities have been affected by PFAS including West Lakeland, Afton, Lakeland Shores, and Lakeland. Manager Zeller reflected on his own participation in these groundwater meetings. Manager Kylo explained that he is on West Lakeland's committee and that they are discussing how to proceed with the funds they will be awarded in the settlement. Manager Kylo said the city can decide on receiving the settlement directly to use as they see fit, or to allow

the MPCA to hold the money to be distributed later as needed. The board recalled Lake Elmo receiving settlement money and land. The group discussed the accepted treatment for private wells, the cost of installing GAC filters, and the burden of maintenance for the filters. Administrator Isensee recalled a program that was used to pay for the install of GAC filters but the residents were then responsible for maintenance. Manager Kylo said the GAC filters being installed currently were from an old settlement and that none of the current settlement money was being used. He recalled the PCA distributing the GAC filters. Manager Zeller asked if the MSCWMO Board should be represented in these meetings in a coordinated effort. Administrator Isensee said that Stu Grubb is representing the communities well in the meetings. Administrator Isensee reminded the board that they had authorized him as a signatory for the MSCWMO and the state and asked if the board has guidance to give to Stu and the new administrator. Administrator Isensee said he wanted to avoid the MSCWMO having to ask for reimbursement and asked if the board wanted Stu to hold the invoices until the new administrator was in place. The board agreed and Manager Kylo said he could be the main contact in the meantime. Manager Zeller reiterated that he believes the groundwater committee is well represented through Stu Grubb but that he believes the communities should represent themselves politically. Manager Olfelt-Nelson said she would be interested in hearing what was going on in the meetings.

1W1P Update

Administrator Isensee said he can still represent the MSCWMO in the 1W1P process in the Technical Advisory Committee. Manager Olfelt-Nelson motioned to approve this, Manager Collins seconded this motion, and the motion carried. Administrator Isensee explained that the MSCWMO would still need a policy representative, as Manager Fellegly is currently doing. Manager Fellegly updated the board on the progress of the 1W1P process. He said the 1W1P group has completed the issue statements, goals, and measurable outputs for the identified resource areas. He explained that the policy meetings are run well, and are made up of citizen representatives with technical staff contribution. Manager Fellegly noted the northern half of the watershed had more rural based interest and did not appear to be as far along in their programming as the participating southern local units of government.

He expressed concern in how to make MSCWMO priorities occur once the plan is in place and the WMO would not be applying for grants on their own. Administrator Isensee said that was why the MSCWMO representation in the plan creation process was so important in keeping priorities at the top of the list. Administrator Isensee explained that the plan would create a funding formula that would save on staff time in the end as grants would not have to be written. He said the 1W1P process for the state included about 80 watersheds and that the LSCWD was around the 12th plan to be created. Manager Fellegly asked if the 1W1P would result in a committee to determine funding. Administrator Isensee said this was still to be determined. The LSCWD plan will be complete in July 2020, with 6 more months until the final plan is complete and 6 months after for comments and adoption. Manager Olfelt-Nelson asked what the MSCWMO Policy representative was responsible for in this process. Administrator Isensee explained that the funding distribution process had not started yet and that the Policy committee member would have greater importance at that time. He reminded the board that the MSCWMO only has two lakes in its watershed. Manager Fellegly explained that the policy committee largely follows the guidance of the Advisory committee (the technical committee). Manager Zeller asked what was needed to move forward. Administrator Isensee

advised that Manager Fellegy continue to attend the meetings and that he would stay involved as well. Manager Zeller noted that this could be added to the agenda in a few months.

City of Bayport E. coli genetic testing cost share request

The City of Bayport is considering conducting genetic testing to determine if the E. coli in Perro Creek is a human source. The testing is being considered due to exceedingly high E. coli monitoring results just after and during storm events in 2018. The results of the testing will greatly impact the approach for addressing the E. coli impairment. The City has requested the board of managers consider providing cost share for this testing which ranges between \$7,500-\$10,000.

Administrator Isensee presented the E. coli data that was gathered last year, indicating that there was an exceedance in all nine of the tested locations, leaving the source unknown. Administrator Isensee explained that Matt Kline of Bayport Public Works is interested in the source testing. The group discussed the implications of the source testing in its usefulness for guiding future activities. Manager Zeller noted that the MSCWMO has invested a lot of time and money in Perro Creek and asked what is fair and reasonable to expect the MSCWMO to contribute. Administrator Isensee suggested \$2,500. Manager Zeller asked what amount the MSCWMO uses as a maximum cost share and Administrator Isensee explained that the MSCWMO only has existing policy for structural cost share rather than water quality testing assistance. He said the MSCWMO has a cap of \$1,000 on large scale restoration projects and a higher cap for water quality improvement projects. Manager Zeller suggested that since Bayport contributes \$16,000 to the MSCWMO budget, \$2,500 felt too high for him. He suggested the MSCWMO contribute \$1,000 to Bayport. Manager Fellegy motioned that MSCWMO provide \$1,000 in cost share to the City of Bayport for E. coli source testing in Perro Creek. Manager Zeller seconded this motion. Manager Olfelt-Nelson asked if the board felt that \$1,000 would be enough of a contribution to ensure that the city will move forward with the testing. Manager Zeller said with a budget of 2 million dollars Bayport should have the capacity to move forward. The motion carried.

Villas of Inspiration Invoice, Bayport

The Middle St. Croix Watershed Management Organization (MSCWMO) received required submittal items on October 15, 2018; discussed questions on November 14, 2018; received revised stormwater calculations November 1, 2018; received revised submittal items on March 15, 2019; received revised submittals on March 30, 2019; received revised submittals May 1, 2019; received revised submittals May 6, 2019 for the proposed Villas of Inspiration, located at Inspiration Parkway S., within MSCWMO boundaries and in the City of Bayport. The project, as revised meets most MSCWMO Performance Standards contained within Section 7.0 of the 2015 MSCWMO WMP. The MSCWMO recommends approval. No board action required.

Stillwater Marina Boat Launch Replacement, Stillwater

The Middle St. Croix Watershed Management Organization (MSCWMO) received required submittal items on May 15, 2019 for the proposed Stillwater Marina Boat Launch Repairs, located within MSCWMO boundaries and in the City of Stillwater. The proposed project qualifies for full review under the MSCWMO 2015 Watershed Management Plan (WMP). The project, as resubmitted, meets the Policies and Performance Standards contained within Section 7.0 of the 2015

MSCWMO WMP and meets all conditions of the recommended approval by the MSCWMO on May 30, 2019. No board action required.

DeWall Subdivision, Lakeland

Administrator Isensee requests the boards approval to go into technical review for this project. Manager Zeller noted that Lakeland has a new zoning planner. Administrator Isensee explained that the WCD's new engineer Rebecca Nestinger, who has 15 years of experience at SEH, will be handling MSCWMO reviews until the new administrator is in place. Manager Zeller asked if this area in Lakeland would be more developed in the future, noting that it has a lot of water.

Administrator Isensee explained that this area meets the pre/post rate control requirement and falls under flexible treatment options using MIDS, so there is water quality treatment but no volume control. Manager Zeller asked about offsite treatment options and Administrator Isensee explained that this had not been explored but that he wanted approval to move into technical review. Manager Zeller moved to approve the technical review, Manager McCarthy seconded this and the motion passed.

Culligan Building Expansion, Stillwater

Administrator Isensee explained that the project meets rate control and volume requirements. He recommends approval with two conditions regarding setback requirements and a reduction of ponding depth. Manager Zeller noted the steep fallback on the south side of the building.

Administrator Isensee said the overflow would assist the bypass of the system. Manager Collins moved to approve the project with two conditions as outlined by the administrator. Manager Runk seconded this motion and the motion carried.

Administrator's Report

Administrator Isensee outlined the state of current MSCWMO grants and recommended the board note one time sensitive issue as important to follow up on with the new administrator. Washington County Public Works, Transportation Division proposed and agreed to cash-in-lieu of treatment for the CSAH 23 (3rd Street) Reconstruction project approved by the board of managers on June 14, 2018. The total cash in lieu of treatment amount is \$118,720.00. The funding is being utilized (in conjunction with Lake St. Croix Direct Discharge Phase II and Phase III grant funding and St. Croix River Association Lake St. Croix Small Communities Grant) to fund the installation of the Stillwater Country Club bioretention basin. The WCD will maintain the basin until the Stillwater Country Club does. Administrator Isensee last Contacted Allen Brandt and Frank Ticnor at Washington County Public Works Transportation Division to inquire about timing for payment. The response was not this year. He is waiting for a response regarding when next year payment(s) will be received.

Adminstator Isensee explained that this will not cause an issue with cash flow until mid-year 2020 if the county doesn't pay before then.

Manager Zeller said Commissioner Kriesel was upset about this "charge" and is worried that county staff may have acted without approval in this agreement. Manager Zeller noted the board was hesitant about setting a precedent of cash in lieu of treatment with this agreement and that he wants firm commitment form the county that this amount will be paid. Administrator Isensee noted that the Stillwater Country Club basin has three other grants funding the project and two of them expire this year which is why the construction is occurring this year. He will follow up with communications

with Allen Brandt, Frank Ticnor, and Manager Zeller to stress the urgency of the MSCWMO in receiving that payment from the county in 2020. Administrator Isensee explained that the agreement was as formal as you can be without being a legal contract. Manager Zeller said he would keep it on the MSCWMO's radar screen.

Administrator Isensee said there were many grants to wrap-up but reiterated that he would be available to the new administrator to walk them through this.

Adjourn

Manager Zeller moved to adjourn the meeting at 8:22. Manager McCarthy seconded this motion and the meeting was adjourned.

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, Interim Administrator
DATE: July 17, 2019

RE: 7b.) 3M PFAS Contamination Groundwater Model Technical Services Reimbursement Request

MSCWMO staff and our consultant EOR have 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 \$2,165 (\$390.50 MSCWMO June; \$1,774.50 EOR June).

Recommended Board Action- Approve Submittal of 3M PFAS Reimbursement Request Totaling \$2,165

MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION

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July 18, 2019

Invoice: #19_006_03

Christina Sundgaard
 Grant and Contract Specialist
 MPCA Brainerd office
 christina.sundgaard@state.mn.us
 218-316-3884

RE: 3M PFAS Water Supply Groundwater Model Development

Date	Staff	Accomplishment	Hours	Rate	Subtotal
6/5/2019	Mikael Isen	3M PFAS	4	\$71.00	\$284.00
6/17/2019	Mikael Isen	3M PFAS	1.5	\$71.00	\$106.50
				Total	\$390.50

Summary of hours for preparing and participating in 3M subgroup meetings and review of post meet materials and tasks for the 3M PFAS Water Supply Groundwater model.

Sincerely,

Matt Downing, Interim Administrator

Invoice

Emmons & Olivier Resources, Inc.
7030 6th Street N
Oakdale, MN 55128-6146
Phone 651.770.8448
Fax 651.770.2552
www.eorinc.com



Invoice Total \$1,774.50

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

July 2, 2019
Invoice No: 00405-0011 - 3

Job 00405-0011 3M Groundwater Model Review

Summary of Work Performed:

- Attend SGI meeting on 6/19/2019.
- Review list of emergency projects.
- Discussion with Glen Champion/DNR and Mike Isensee about groundwater model data and formats.
- Project management and invoices.

Professional Services from June 1, 2019 to June 30, 2019

Professional Personnel

	Hours	Rate	Amount	
Professional 4	10.50	169.00	1,774.50	
Totals	10.50		1,774.50	
Total Labor				1,774.50
		Total this Invoice		\$1,774.50

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MEMORANDUM

TO: Middle St. Croix WMO Board of Managers
FROM: Matt Downing, Interim Administrator
DATE: July 16, 2019

RE: 7c.) Revised WCD-MSCWMO 2019 Service Agreement

At the direction of former Administrator Isensee, I have prepared a new 2019 agreement for services between the Washington Conservation District and the Middle St. Croix WMO for consideration by the managers. A number of corrections and changes are present in this document; a new agreement rather than an amendment is in order.

A summary of the key changes from the previously signed agreement is as follows:

Item E. COST

Exhibit A: Added Task 3. Meeting Minutes under Administrative Services to better reflect the MSCWMO 2019 Budget and to account for the WCD to continue providing this service. Agreement increases from \$30,300 to \$31,600, no increase in the MSCWMO budget.

Exhibit B: At the March 14th 2019 meeting, the Board approved \$12,000 in 2016 funds rollover be allocated to 2019 BMP maintenance through the WCD, and \$4,500 from 2019 BMP Cost Share be reallocated to the BMP Technical Agreement. Increased agreement amount from \$46,000 to \$59,471 to align with the 2019 MSCWMO budget while accounting for these changes.

Exhibit C: At the June 13th 2019 meeting, the Board approved \$1,000 in cost share for microbial source tracking of *E. coli* in Perro Creek. The City of Bayport has already contracted with the WCD to pay for up to \$6,000 in laboratory costs, Task 5 was added to Exhibit C to account for time and materials related to shipping samples for analysis. Sample collection was rolled into previously agreed upon services for no additional cost to the MSCWMO. Increased agreement amount from \$21,293 to \$22,293

Attached to this memo is a copy of the new agreement with all changes from the original highlighted for review.

Total agreement increases from \$97,593 to \$113,364

Requested Board Action-Approve new 2019 WCD-MSCWMO Service Agreement with recommended changes

**2019 SERVICE AGREEMENT
BETWEEN
WASHINGTON CONSERVATION DISTRICT
AND MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION**

A. PARTIES

This Agreement is made and entered into by Washington Conservation District, (WCD), and the Middle St. Croix Watershed Management Organization (MSCWMO).

B. PURPOSE

WHEREAS, the MSCWMO has requested assistance from the WCD to implement the policies specified in MINN. STAT. §§ 103A.206 and 103D.201; and

WHEREAS, the WCD is authorized to enter agreements to provide such assistance pursuant to MINN. STAT. §§ 103C.331, SUBD. 3 and 7 and 103D.335, subd. 21.

NOW, THEREFORE, the parties agree as follows:

C. TERM OF CONTRACT

The term of this agreement shall be from January 1, 2019 to December 31, 2019 unless extended or terminated earlier as provided herein.

D. SCOPE OF SERVICES

The WCD will perform all services and furnish and deliver work products generally described the attached Exhibits.

E. COST

In full consideration for services under this agreement, the WCD shall charge the MSCWMO for its services at the rate set forth in Section F. Costs for services for activities detailed in the attached Exhibits include:

Exhibit A: Administrative Services - \$31,600.00

Exhibit B: Technical Services - \$59,471

Exhibit C: Water Monitoring Services - \$22,293.00

TOTAL: \$113,364.00

Any additional costs for special studies or capital projects must be set forth in a written amendment to this Agreement.

F. BILLING RATE AND PAYMENTS

1. Services in Exhibit A, B and **Task 5 in Exhibit C** are billed on an hourly basis at the rate of \$27.00 - \$81.00 per hour, based on personnel and task. Invoices for Exhibits A and B will be sent on a monthly basis and will list specifically the work performed.

AIS Watercraft Inspectors	\$27
Seasonal	\$39
Technician	\$57
Senior Technician/Specialist	\$62
Senior Tech II/Specialist II	\$68

Senior Specialist	\$71
Manager/Administrator/Engineer	\$81

Services for BWSR grants will be billed per the BWSR calculator. **Tasks 1-4 in Exhibit C** are billed on a lump sum basis for services and project expenses. Invoices in Exhibit C will be sent on a quarterly basis.

2. Project expenses will be billed as they are accrued.
3. Invoices are payable by the MSCWMO within 60 days.
4. Office supplies, normal office reproduction expenses, and transportation are included in the hourly rate. Other expenses are to be reimbursed at actual cost.

G. EQUAL EMPLOYMENT OPPORTUNITY- CIVIL RIGHTS

During the performance of this Agreement, the WCD agrees to the following:

No person shall, on the grounds of race, color, religion, age, sex, disability, marital status, public assistance, criminal record, creed or national origin, be excluded from full employment rights in, be denied the benefits of, or be otherwise subjected to discrimination under any program, service, or activity under the provisions of and all applicable federal and state laws against discrimination including the Civil Rights Act of 1964.

H. STANDARDS

The WCD shall comply with all applicable Federal and State statutes and regulations as well as local ordinances now in effect or hereafter adopted. Failure to meet the requirements of the above may be cause for cancellation of this contract effective the date of receipt of the Notice of Cancellation.

I. DATA PRIVACY

All data collected, created, received, maintained, or disseminated, or used for any purpose in the course of the WCD’s performance of the Agreement is governed by the Minnesota Government Data Practices Act, Minnesota 1984, Section 13.01, et seq. Or any other applicable state statutes and state rules adopted to implement the Act, as well as state statutes and federal regulations on data privacy. The WCD agrees to abide by these statutes, rules and regulations and as they may be amended.

J. AUDITS, REPORTS, AND MONITORING PROCEDURES

The WCD will:

1. Maintain records that reflect all revenues, cost incurred and services provided in the performance of the Agreement.
2. Agree that the County, the State Auditor, or legislative authority, or any of their duly authorized representatives at any time during normal business hours, and as often as they may deem reasonably necessary, shall have access to the rights to examine audit, excerpt, and transcribe any books, documents, papers, records, etc., and accounting procedures and practices of the WCD which are relevant to the contract.

K. INDEMNITY

The WCD and the MSCWMO mutually agree, to the fullest extent permitted by law, to indemnify and hold each other harmless for any and all damages, liability or cost (including reasonable attorneys’ fees and costs of defense) arising from their own negligent acts, errors or omissions in the performance of their services under this agreement, to the extent each party is responsible for such damages and losses on a comparative basis of fault. Parties agree to provide proof of contractual liability insurance upon request. This paragraph does not diminish, with respect to any third party, any defense, immunity or liability limit that the WCD or the MSCWMO may enjoy under law.

L. INDEPENDENT CONTRACTOR

It is agreed that nothing herein contained is intended or should be construed in any manner as creating or establishing the relationship of co-partners between the parties hereto or as constituting the WCD as the agent, representative, or employee of MSCWMO for any purpose or in any manner whatsoever. The WCD is to be and shall remain an independent contractor with respect to all services performed under this Agreement.

The WCD represents that it has, or will secure at its own expense, all personnel required in performing services under this Agreement. Any and all personnel of the WCD or other person, while engaged in the performance of any work or services required by the WCD under this Agreement, shall have no contractual relationship with the MSCWMO and shall not be considered employees of the MSCWMO.

M. MODIFICATIONS

Any material alteration or variation shall be reduced to writing as an amendment and signed by the parties. Any alteration, modification, or variation deemed not to be material by written agreement of the WCD and the MSCWMO shall not require written approval.

N. MERGER

It is understood and agreed that the entire agreement of the parties is contained here, except as modified during the term of the Agreement by a writing under Paragraph M above concerning a non-material change, and that this contract supersedes oral agreements and negotiations between the parties relating to this subject matter. All items referred to in this contract are incorporated or attached and deemed to be part of the contract.

O. TERMINATION

Either the WCD or the MSCWMO may terminate this Agreement with or without cause by giving the other party thirty (30) days written notice prior to the effective date of such termination. If the MSCWMO terminates this Agreement, it may specify work to be performed by the WCD before termination is effective and shall pay the WCD for services performed by the WCD up to the time specified for termination. If the WCD terminates the Agreement, it will not be compensated for part completion of a task except to the extent part completion has value to the MSCWMO.

P. OWNERSHIP OF DOCUMENTS AND INTELLECTUAL PROPERTY

All property of the MSCWMO used, acquired or created in the performance of work under this Agreement, including documents and records of any kind, shall remain the property of the MSCWMO. The MSCWMO shall have the sole right to use, sell, license, publish, or otherwise disseminate any product developed in whole or in part during the performance of work under this Agreement.

**2019 SERVICE AGREEMENT
BETWEEN
WASHINGTON CONSERVATION DISTRICT
AND MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION**

IN TESTIMONY WHEREOF the parties have duly executed this agreement by their duly authorized officers.

APPROVED:

MSCWMO

WCD

BY: _____
Board Chair Date

BY: _____
Board Chair Date

BY: _____
Secretary Date

BY: _____
WCD Manager Date

Approval as to form and execution:

Date

EXHIBIT A

2019 MSCWMO ADMINISTRATIVE SERVICES AGREEMENT

At the request of the MSCWMO the WCD shall furnish the following services under the terms of the AGREEMENT.

TASK 1. Administrative Services

The WCD will provide administrative services to the MSCWMO. A WCD staff member shall serve as the Administrator of the MSCWMO. This staff member will be appointed by the WCD. The Administrator shall act on behalf of the Board of Managers to implement MSCWMO policies and actions. Administrative services will include: agenda and board packet preparation and distribution; receiving and sending official MSCWMO correspondence; submitting official notices for publication; coordination of meetings for the board, committees and other groups as necessary; maintaining the MSCWMO website; maintaining the MSCWMO files (except for projects conducted by the Watershed's Engineer or confidential legal records); directing activities between the MSCWMO, Engineer, Attorney, Recording Secretary, Local and State Units of Government and the public; acting as the primary and first response to inquiries from the public as to programs, projects and written policies or rules and other questions on MSCWMO issues, and other administrative duties as assigned by the MSCWMO Board.

TASK 2. Bookkeeping

The WCD will provide bookkeeping services to the MSCWMO. These services include: administration of accounts receivable and accounts payable including check generation, preparation of invoices for disbursement, and monthly bank reconciliation; coordination of annual audit and preparation of items necessary for audit; preparation of monthly reporting to the Board; preparation of budgets; and coordination of cash investment activities. The MSCWMO Board will direct any changes to accounts or investments.

TASK 3. Meeting Minutes

The WCD will provide note taking services for all regularly scheduled MSCWMO Board meetings. These services will include a WCD staff member being present at MSCWMO meetings for note taking, and the compilation and presentation of meeting minutes to the board for approval prior to posting as public record.

BUDGET FOR 2019 = \$31,600.00

EXHIBIT B

2019 MSCWMO TECHNICAL SERVICES AGREEMENT

At the request of the MSCWMO the WCD shall furnish the following services under the terms of the AGREEMENT.

TASK 1. Review of Development Plans and Erosion Control Monitoring

The WCD will provide review and comment on development plans on behalf of the MSCWMO. Comments and recommendations for erosion and sediment control, grading, drainage, and wetland protection will be made. Follow-up development site inspections will be performed if deemed appropriate and coordinated with the member communities. Plan Review Fees will offset the cost of this program to the greatest extent possible.

TASK 2. Best Management Practices (BMP) Program Administration

The WCD will act as the primary and first response to inquiries from the public regarding general MSCWMO BMP Program information, program eligibility, and best management practice information. One WCD staff person will be identified as the BMP Program Coordinator. Initial inquiries about general topics and water quality issues, and initial site visits will be responded to as part of the standard WCD programs and not charged under this contact. Specific inquiries regarding MSCWMO cost share, development of site concepts and designs, implementation assistance, receiving and sending official MSCWMO correspondence related to the Program, maintaining the Program files, administering cost-share documents needed as a part of the Program, and follow-up project reviews will be responded to as part of the MSCWMO BMP Program and will be charged as a part of this contract. Overall program coordination, summary reports, and ongoing program evaluation will be provided.

TASK 3. Community Outreach and Education

The WCD will use targeted and broad-based outreach techniques to generate interest in and understanding of the MSCWMO. The techniques used will include participation in local fairs, events, and community group meetings as a representative of the MSCWMO. The WCD will provide technical assistance and information to the citizens and communities of the MSCWMO through this program. This task is separate from but coordinated with the East Metro Water Resource Education Program.

TASK 4. Clean Water Grant Fund Administration and Implementation

The WCD will successfully carry out the work plan items identified in the Clean Water Fund Grants: Lake St. Croix Direct Discharge Phase I and Lake St. Croix Direct Phase II, Lake St. Croix Direct South Phase I, Perro Creek Phase I, Lily Lake Final 45 grants. The WCD will administer and implement the grants in cooperation with member community staff and in compliance with Board of Water and Soil Resource documentation and reporting requirements.

TASK 5. Establishment Period Maintenance of Clean Water Grant Funded Projects

The WCD will carry out maintenance and outreach activities during the establishment period of two years for targeted stormwater best management practices designed and installed as part of the cooperative retrofit program.

BUDGET FOR 2019 = \$59,471

EXHIBIT C

2019 MSCWMO WATER MONITORING SERVICES AGREEMENT

TASK 1. Lake Monitoring Services

The WCD will monitor McKusick Lake and Lily Lake 14 times per year, April through October. Surface water quality samples are collected and analyzed for total phosphorus, chlorophyll-a, and total Kjeldahl nitrogen. Other measurements include Secchi disk transparency, dissolved oxygen and temperature profiles, and lake level. The fee includes labor, lab costs, all equipment, vehicles, canoe, ice, storage, etc. that is required to conduct the monitoring.

TASK 2. Brick Pond Flow and Water Quality Monitoring

The WCD will install flow monitoring equipment the outfall of Brick Pond to Lily Lake. Water quality samples will be collected and analyzed for total phosphorus and total suspended solids.

TASK 3. Perro Creek Flow and Water Quality Monitoring

The WCD will install flow monitoring equipment at the Perro Creek outfall to Lake St. Croix. Water quality samples will be collected for total phosphorus, total suspended solids, and *E. coli*. *E. coli* samples will also be collected at 9 locations in an attempt to more accurately identify sources.

TASK 4. Water Monitoring Report

A water monitoring report will be generated that will incorporate current and previous years' data.

TASK 5. Microbial Source Tracking of Perro Creek *E. coli*

The WCD will coordinate with Source Molecular Labs to process and ship samples collected as part of TASK 3 for DNA source tracking of *E. coli*. A separate agreement with the City of Bayport will pay for laboratory costs, time and materials related to overnight shipping of samples is covered in this task.

Budget for 2019 = \$22,293.00

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, Interim Administrator
DATE: July 16, 2019

RE: 7d.) 2020 MSCWMO Draft Budget

The Middle St. Croix WMO has not increased its operating budget since 2015. At the March Board meeting, former Administrator Isensee requested that the WMO provide notice to the townships that are within the WMO that a potential of up to a 9% increase could be considered for the 2020 MSCWMO Budget. This increase would be due to the cost increases associated with the services the WMO solicits, not an expansion of the services provided by the WMO.

I have prepared a draft budget for you review. In preparing the draft, the considerations included accounting for the increase in the WCD fee schedule, a review of expenditures to line items in 2016-2019 and a review of current funds set aside. **The overall increase being proposed is 6.97%.** A detailed breakdown of each service area follows:

1. Administrative – 4.18% Total increase

- a. Line items Administration-General, Accounting and Minutes/Clerical increased from 7.45% - 3.33% to account for increases in the WCD fee schedule
- b. Line items Insurance & Bonds, Office Supplies and Copying/Printing decreased 16.67% - 13.3%. A review of past expenditures indicated that these reductions are closer to the actual expenses being incurred while still leaving a buffer for unexpected costs.

2. Project Funds – 12.475% Total increase

- a. Line items Engineering-Project, Development Plan Reviews and BMP TA & Admin increased from 8.80% - 5.0% to account for increases in the WCD fee schedule
- b. Line item BMP Cost-Share increased 36.46%. This is the single largest increase and takes this budget item back to where it was at the beginning of the last budget update. Having these funds available will be crucial for providing match to the many grants MSCWMO uses for BMP implementation.
- c. Line item Website increased 6.67% to account for increases in service cost.

3. Water Monitoring – 3.32% Total increase

- a. The increase accounts for the increases in the WCD fee schedule.

4. Long Term Project Savings- 17.86% Total decrease

- a. Line item Water Monitoring decreased 25%, the MSCWMO does not own a large volume of monitoring equipment and has previously invested heavily in savings, the proposed annual amount should be sufficient to continue to provide a good margin of financial buffer for the types of equipment MSCWMO would employ.
- b. Line item WMP Update decreased 16.67%. As of June 13th, the savings set aside for both water monitoring and the WMP update was approximately \$63k. A review of WMP update costs I conducted in 2018 indicated that our next plan update could be between \$40k - \$80k. The next plan update should occur in 2025, with the proposed reductions to savings contributions the overall account balance could be approximately \$92K at that time.

A summary of the proposed contribution increase to each community is as follows:

Community	2015-2019 Contribution	2020 Intial Proposed Increase	2020 Draft Budget Increase	Proposed 2020 Contribution
City of Afton	\$596.15	\$53.65	\$41.57	\$637.72
City of Bayport	\$16,132.61	\$1,451.93	\$1,124.81	\$17,257.42
City of Lake St. Croix Beach	\$5,194.25	\$467.48	\$362.16	\$5,556.41
City of Lakeland	\$13,233.81	\$1,191.04	\$922.70	\$14,156.51
City of St. Mary's Point	\$1,068.95	\$96.21	\$74.53	\$1,143.48
City of Lakeland Shores	\$1,564.90	\$140.84	\$109.11	\$1,674.01
City of Oak Park Heights	\$21,255.40	\$1,912.99	\$1,481.98	\$22,737.38
West Lakeland Township	\$19,392.42	\$1,745.32	\$1,352.09	\$20,744.51
Baytown Township	\$13,556.64	\$1,220.10	\$945.21	\$14,501.85
City of Stillwater	\$41,074.85	\$3,696.74	\$2,863.85	\$43,938.70
TOTAL BUDGET	\$133,069.98	\$145,046.28	\$142,347.98	\$142,347.98

Requested Board action- Approve the Draft 2020 MSCWMO Budget. Approve staff to send notification of the draft budget to the member communities.

MSCWMO 2020 Draft Budget

	2019 MSCWMO Budget	2020 MSCWMO Budget	% CHANGE
ADMINISTRATION			
Administration - General	\$ 29,000.00	\$ 31,160.00	7.45%
Accounting	\$ 1,500.00	\$ 1,550.00	3.33%
Legal Fees - General	\$ 1,000.00	\$ 1,000.00	0.00%
Audit	\$ 2,100.00	\$ 2,100.00	0.00%
Insurance & Bonds	\$ 3,000.00	\$ 2,600.00	-13.33%
Office supplies/equipment/postage	\$ 750.00	\$ 625.00	-16.67%
Minutes/Clerical	\$ 1,100.00	\$ 1,180.00	7.27%
Copying/printing/reproduction/minutes	\$ 750.00	\$ 625.00	-16.67%
Admin Total	\$ 39,200.00	\$ 40,840.00	4.18%
PROJECT FUNDS			
Project Contingency	\$ 2,000.00	\$ 2,000.00	0.00%
Engineering - Project	\$ 5,400.00	\$ 5,700.00	5.56%
Development Plan Reviews	\$ 4,800.00	\$ 5,040.00	5.00%
Erosion Monitoring Program	\$ 2,250.00	\$ 2,250.00	0.00%
BMP Cost-Share (general)	\$ 14,656.00	\$ 20,000.00	36.46%
BMP TA & Admin	\$ 25,521.00	\$ 27,768.00	8.80%
Community TA	\$ 3,000.00	\$ 3,000.00	0.00%
Water Resource Educator	\$ 6,300.00	\$ 6,300.00	0.00%
Website	\$ 750.00	\$ 800.00	6.67%
Inspections and Tracking Database	\$ 900.00	\$ 900.00	0.00%
Project Total	\$ 65,577.00	\$ 73,758.00	12.475%
WATER MONITORING			
Water Monitoring	\$ 21,293.00	\$ 22,000.00	3.32%
Water Monitoring Total	\$ 21,293.00	\$ 22,000.00	3.320%
LONG TERM PROJECT SAVINGS			
Water Monitoring - Set aside for equipment replacement & Monitoring Costs	\$ 1,000.00	\$ 750.00	-25.00%
WMP Update	\$ 6,000.00	\$ 5,000.00	-16.67%
Savings Total	\$ 7,000.00	\$ 5,750.00	-17.86%
MSCWMO Member Contribution Budget	\$ 133,070.00	\$ 142,348.00	6.97%



2020 Technical Services Rate Schedule

The Washington Conservation District shall use the following hourly rate schedule.

AIS Watercraft Inspectors	\$29
Seasonal	\$39
Technician	\$59
Senior Technician/Specialist	\$64
Senior Tech II/Specialist II	\$70
Senior Specialist	\$76
Manager/Administrator/Engineer	\$84

Technical services provided by the WCD will be billed in accordance with this Rate Schedule. Invoices are generally sent on a quarterly basis (unless other arrangements are made) and will summarize the work performed. Invoices are payable within 60 days.

Office supplies, in-house reproduction expenses, and transportation are included in the rates noted above. Out source reproduction, special bulk mailings, equipment, supplies, and other non-ordinary costs are not included. Any direct costs are to be reimbursed at actual cost.

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: Mike Isensee, Previous Administrator
DATE: August 8, 2019

RE: 8a.) Peoples Church Native Prairie Restoration Reimbursement Request #2

On December 13, 2018 the MSCWMO Board of Managers approved cost share reimbursement of \$1,000 for the Peoples Church native prairie restoration project.

The Peoples Church of Bayport has completed the restoration of 2 acres of native prairie located at on the South side of 5th Avenue, across from the Bayport Fire Station. The total cost for the installation materials (the majority of the project was installed and maintained with volunteer labor) was \$5,200.00. In January the total receipts for installation were \$4,290.75. The Washington Conservation District reimbursed costs of \$3,900.00 and on January 10, 2019 the MSCWMO reimbursed costs of \$390.75.

The landowner has submitted additional receipts for work conducted in the spring of 2019 totaling \$239.74.

Technical staff have confirmed the additional work and expenses and recommend reimbursing costs of \$239.74 bringing the total MSCWMO reimbursement to \$630.43 based on total expenditures of \$4,530.79.

Peoples Church Native Prairie Restoration Grant Application, Bayport

Motion by Board Member 1, seconded by Board Member 2, motion to approve reimbursement of \$239.74 for the 2 acre prairie restoration located South of 5th Avenue N and East of Barkers Alps Park in Bayport, MN,



Paul Spilseth, MD
4283 McDonald Drive
Stillwater, MN 55082
651 271 6742

Tara Kelly
455 Hayward Ave N
Oakdale, MN 55128

Dear Tara,

Enclosed are several bills from our project at People's Church in Baytown.

Total for the 3 bills is \$239.74

Thank you for your help with this project. It is now green, and not concerned that it looks like mostly weeds yet.


Paul Spilseth

ACTION RENTAL

14575 61ST ST. COURT N.
STILLWATER, MN 55082
www.actionrentalmn.com

651-439-6592 Phone
833-790-3150 Fax

Status: Completed
Invoice #: 257123
Invoice Date: Mon 5/20/2019
Date Out: Mon 5/20/2019 11:11AM

Operator: KYLE SWAGER

Customer #: 3048

PAUL SPILSETH
4593 MCDONALD DRV OVERLOOK
STILLWATER, MN 55082
651-439-5568 Phone

Qty	Key	Items	Part#	Status	Returned Date	Price	
1	GRIN#4	TORO STUMP GRINDER #4		Returned	Mon 5/20/2019 1:42PM	\$100.00	
		Meter Out: 105.2 Meter In: 105.2 Total hours on meter: 0.0					
		CUSTOMER IS RESPONSIBLE FOR FUEL, IF ACTION RENTAL HAS TO REFUEL IT THERE WILL BE A \$4.50 PER GALLON FEE					
		CUSTOMER IS ALLOWED UP TO 8HRS ON METER IN A 24HR PERIOD IF OVER, THERE WILL BE A CHARGE OF \$25 PER HR. OVER					
1	TRAGR	GRINDER TRAILER/TRENCHER		Returned	Mon 5/20/2019 1:42PM	\$18.00	

THANK YOU FOR YOUR CONTINUED BUSINESS

Payments made on this contract:

Rental/Sale Paid	\$137.02	Mon 5/20/2019 11:12AM Credit Card Visa 4*****9122 Auth:944684
Total	\$137.02	

Rental Contract

In accepting this equipment by signing below, with ACTION RENTAL, owner customer hereby agrees:

- (1) The rental equipment has been received in good working condition, and will be returned in the same condition, ordinary wear and tear accepted.
 - (2) Customer agrees to pay in full for all damages or loss of rental equipment.
ANY THEFT WHILE IN CUSTOMER'S POSSESSION IS CUSTOMER'S RESPONSIBILITY.
 - (3) Customer assumes all responsibility for injuries to persons or damages to property, and agrees to hold Owner harmless for any and all claims, of whatsoever nature, arising out of use of the rental equipment while in his custody.
 - (4) Customer agrees to Owner's rights to enter premises of customer at any time to repossess said equipment. Customer hereby waives any rights of action against Owner by reason of such taking or entry and agrees to reimburse Owner's cost of repossession, if any.
 - (5) A day consists of 24 hours time out or 8 hours time used, whichever comes first on machines equipped with hour meters.
 - (6) Credit or replacement adjustments will be made for items found defective only if ACTION RENTAL is notified within one half hour of occurrence.
- DAMAGEWAIVER
- For 8.99% we cover most accidental damage on all equipment. Intentional damage and loss not covered. If you decline the damage waiver it must be before contract is written.

Rental:	\$118.00
Damage Waiver:	\$10.61
Subtotal:	\$128.61
Sales Tax:	\$8.41
Total:	\$137.02
Paid:	\$137.02
Amount Due:	\$0.00

Signature:

PAUL SPILSETH

From: dale@prairiemoon.com
 Subject: Invoice 1911901200
 Date: June 5, 2019 at 2:37 PM
 To: spils@mac.com

Thank you for your order.



Prairie Moon Nursery

Prairie Moon Nursery
 32115 Prairie Lane
 Winona, MN 55987
 toll free: 866-417-8156
 fax: 507-454-5238
 www.PrairieMoon.com

Invoice	
Sent Date	Order Number
06/05/19	1911901200

Bill To
PAUL SPILSETH 4283 MCDONALD DR STILLWATER MN 55082 US

Ship to
PAUL SPILSETH 4283 MCDONALD DR STILLWATER, MN 55082 US

Account	Order Date	Ship Date	PO Number	Telephone	Salesman	Payment Terms	Ship Method
122808	04/29/19	04/30/19		651.271.6742	General	Credit Card	Spee Dee

Item	Description	UM	Quantity Ordered	Quantity Back Ordered	Quantity Shipped	Unit Price	Extended Price
PDQ1000-X	Pretty Darn Quick (PDQ) Seed Mix - 1000 sq ft	MX	1	0	1	31.00	31.00
GROW-B	Growing Your Prairie	EA	1	0	1	0.00	0.00
ECOG-S-B	Eco Grass (Low Maintenance Lawn Blend)	LB	2	0	2	5.50	11.00
AVECC-S-B	Avena sativa (Oats) - Cover Crop	LB	4	0	4	1.00	4.00
Comments:							

Subtotal	Shipping	Add Amt	Other	Credits	Tax	Total
46.00	5.00	0.00	0.00	0.00	3.64	54.64

Thank you!



MENARDS - Oakdale
3205 Hadley Ave North
Oakdale, MN 55128

KEEP YOUR RECEIPT
RETURN POLICY VARIES BY PRODUCT TYPE

Unless noted below allowable returns for items on this receipt will be in the form of an in store credit voucher if the return is done after 08/31/19

If you have questions regarding the charges on your receipt, please email us at:
OAKDfrontend@menards.com



Sale Transaction

RUP W&G SUPER CONC 35.20 NR
2638483 44.88

TOTAL 44.88
TAX WASHINGTON-MN 7.125% 3.20
TOTAL SALE 48.08
Visa Credit 9122 48.08

Auth Code:222094
Chip Inserted
a000000031010
TC - 46338078df62dfdc3

TOTAL NUMBER OF ITEMS = 1

GUEST COPY

The Cardholder acknowledges receipt of goods/services in the total amount shown hereon and agrees to pay the card issuer according to its current terms.

THIS IS YOUR CREDIT CARD SALES SLIP
PLEASE RETAIN FOR YOUR RECORDS.

NR = Non-Returnable item. If opened, we cannot accept returns of herbicides,



MEMORANDUM

TO: Matt Downing, Interim Administrator
FROM: Rebecca Nestingen, PE
DATE: August 1, 2019

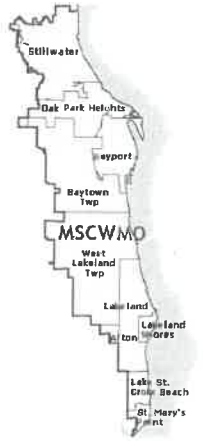
RE: 9a) Plan Reviews/Submittals

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

- **Culligan Building Addition.** The Culligan Water facility at 1435 Curve Crest Blvd in Stillwater proposes an addition to the existing building and parking facility. The project, as revised and resubmitted on July 10th, 2019, meets applicable Performance Standards contained within Section 7.0 of the MSCWMO 2015 WMP.
- **Stordahl Home Reconstruction.** The Stordahl home at 1635 Rivercrest Rd N in Lakeland proposes the demolition of a majority portion of an existing home and detached garage and construction of a new home. The project application for project review as submitted on July 3rd, 2019 contained insufficient information to complete the review and additional information from the applicant was requested. The additional information requested was submitted July 10th, 2019. The project is recommended for approval with twelve conditions.
- **Finnegan Home Addition.** The Finnegan home at 333 Quixote Ave N in Lakeland Shores proposes a home office and porch addition on the north side of the home as well as a deck. A variance request has been submitted to the City of Lakeland Shores and the City advised the applicant on July 8th that the project requires MSCWMO plan review. A plan review application and review fee have not yet been received.
- **St. Croix Woodlands Development.** The Dewall’s propose to subdivide approximately 42 acres into 5 residential lots. Four 2.5 acre lots are proposed along with a 32 acre lot in the location of the existing home. The initial application for project review was received on May 23rd, 2019. In the initial iteration of the stormwater management design the applicant was citing shallow bedrock to preclude infiltration and full compliance with MIDS standards. On June 17th, 2019 the MSCWMO requested revisions and resubmittal documenting compliance with MIDS flexible treatment options. On June 27th the MSCWMO received a revised resubmittal which utilizes infiltration to fully comply with MIDS standards, however, further documentation demonstrating 3’ of vertical separation between the infiltration basin and shallow bedrock have been requested as of July 5th. Additional soil borings demonstrating separation from bedrock and revised plans were received on July 19, 2019. The project, as revised and resubmitted on July 19th, 2019, meets applicable Performance Standards contained within Section 7.0 of the MSCWMO 2015 WMP.
- **Zvago Stillwater.** This project was formerly submitted as the Ecumen Stillwater Senior Living Center in 2017 and approved with conditions but never completed. The project has since changed ownership and has resubmitted a new plan review application and updated required submittal items on July 17th, 2019. The plan review has been completed and the recommendation is to amend the plans to correct seven items and resubmit the plans for further review.

MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION

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



July 18th, 2019

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

RE: Culligan Addition

Dear Mr. Sanders:

The Middle St. Croix Watershed Management Organization (MSCWMO) received required submittal items on May 9th, 2019 and revisions on June 11th, June 19th, and July 10th, 2019 for the proposed Culligan Addition, located within MSCWMO boundaries and in the City of Stillwater. The proposed project qualifies for full review under the MSCWMO 2015 Watershed Management Plan (WMP).

The project, as resubmitted, meets the applicable Policies and Performance Standards contained within Section 7.0 of the 2015 MSCWMO WMP. **The MSCWMO recommends approval.**

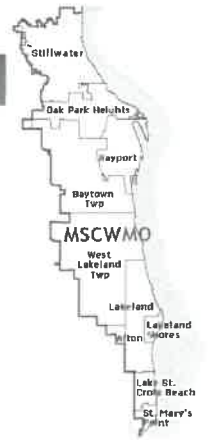
This recommended approval is based on the technical review of MSCWMO performance standards and does not constitute approval by the City of Stillwater. MSCWMO review process information can be downloaded from www.mscwmo.org. Please contact me at 651-275-1136 x22 or m Downing@mnwcd.org if you have any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

Sincerely,

Matt Downing
Administrator
Middle St. Croix Watershed Management Organization

MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION

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



July 19, 2019

Kate Piscitello
690 Quinnell Ave. N
Lakeland, MN 55043-0643

RE: DeWall Subdivision

Dear Ms. Piscitello:

The Middle St. Croix Watershed Management Organization (MSCWMO) received required submittal items for the DeWall Subdivision on May 23 2019 and resubmittals on June 17, 2019 and July 19, 2019. The proposed project is within MSCWMO boundaries and in the City of Lakeland. The proposed project qualifies for full review under the MSCWMO 2015 Watershed Management Plan (WMP).

The project, as submitted, contains sufficient information to determine conformance with the Policies and Performance Standards contained within Section 7.0 of the MSCWMO Watershed Management Plan

The MSCWMO recommends approval of the project without conditions.

This recommended approval is based on the technical review of the MSCWMO performance standards and does not constitute approval by the City of Lakeland. The enclosed checklist contains detailed information on project review qualifications and the policies and performance standards of the WMP. MSCWMO review process information can be downloaded from www.mscwmo.org. Please contact me at 651-330-8220 x22 or mdowning@mnwcd.org if you have any questions.

Sincerely,

Matt Downing
MSCWMO Administrator
mdowning@mnwcd.org

MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION

455 HAYWARD AVE. N.
OAKDALE, MINNESOTA 55128
Phone 651.330.8220 x22 fax 651.330.7747 www.mscwmo.org



PROJECT REVIEW

MSCWMO Project Review ID: 19-008

Project Name: Dewall Subdivision

Applicant: Steve Johnston

Purpose: Subdivide existing lot into 5 separate parcels

Location: 16028 5th St S, Lakeland, MN

Review date: ~~07/05/1907/19/19~~

Recommendation:

Board approval with the following contingencies:

- ~~• Soil borings meeting minimum standards and demonstrating 3' of vertical separation between bottom of the infiltration basin and shallow bedrock are provided.~~
- ~~• A minimum horizontal setback between the infiltration area below the 713.0' contour and septic area are provided.~~
- ~~• The construction plans for the infiltration basin include the following notes to prevent clogging or compaction and demonstrate performance:
 - ~~○ Excavation within 2.0 feet of final grade for infiltration/filtration systems is prohibited until contributing drainage areas are constructed and fully stabilized.~~
 - ~~○ Rigorous sediment and erosion controls planned to divert runoff away from the system.~~
 - ~~○ Installation of volume control facilities must occur in dry soil conditions. Excavation, soil placement and rapid stabilization of perimeter slopes must be accomplished prior to the next precipitation event.~~
 - ~~○ Excavation shall be performed by an excavator with a toothed bucket. Use excavator bucket to place materials. Construction equipment shall not be allowed into the basin.~~
 - ~~○ Prior to the release of any remaining fee or security, the permit holder must provide documentation that constructed volume control facilities perform as designed.~~~~

Applicability:

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

- Any project with grading within public waters
- Any project with grading within buffers
- Any project with grading within 40-feet of the bluff line
- Development projects that impact 2 or more of the member communities
- New or redevelopment projects within the St. Croix Riverway that require a building permit that adds five hundred (500) square feet or more of additional impervious surface
- Any project requiring a variance from the current local impervious surface zoning requirements for the property
- Any land development activity, regardless of size, that the City determines is likely to cause an adverse impact to an environmentally sensitive area or other property, or may violate any other erosion and sediment control standard set by the member community.

SUBMITTAL ITEMS:

Electronic submittals are highly encouraged

- A completed and signed project review application form and review fee
- Grading Plan/Mapping Exhibits
 - a. Property lines and delineation of lands under ownership of the applicant.
 - b. Delineation of existing on-site wetlands, shoreland and/or floodplain areas (including any buffers).
 - c. Ordinary High Water (OHW) elevations and datum, as determined by the MDNR (if applicable).
 - d. Existing and proposed site contour elevations related to NAVD 1988 datum (preferred) or NGVD, 1929. Datum must be noted on exhibits.
 - e. Drainage easements covering land adjacent to ponding areas, wetlands, and waterways up to their 100-year flood levels and covering all ditches and storm sewers. Access easements to these drainage easements and to other stormwater management facilities shall also be shown.
 - f. Minimum building elevation for each lot.
 - g. Identification of downstream water body.
- Permanent Stormwater Management System in compliance with the requirements of the NPDES SDS Construction Stormwater Permit and MSCWMO Performance Standards.
 - a. Impervious areas (Pre- and Post-Construction).
 - b. Construction plans and specifications for all proposed stormwater management facilities.
 - c. Location(s) of past, current or future onsite well and septic systems (if applicable).

Middle St. Croix Watershed Management Organization

MEMBER COMMUNITIES:

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

- Other exhibits required to show conformance to these Performance Standards
- A Stormwater Pollution Prevention Plan in compliance with the requirements of the NPDES SDS Construction Stormwater Permit
- Grading Plan/Mapping Exhibits:
 - a. Delineation of the subwatersheds contributing runoff from off-site, proposed and existing on-site subwatersheds, and flow directions/patterns.
 - b. Location, alignment, and elevation of proposed and existing stormwater facilities.
 - c. Existing and proposed normal water elevations and the critical (the highest) water level produced from the 100-year 24-hour storms.
 - d. Location of the 100-year flood elevation, natural overflow elevation, and lowest floor elevations.
- Hydrologic/Hydraulic Design Exhibits:
 - a. All hydrologic and hydraulic computations completed to design the proposed stormwater management facilities shall be submitted. Model summaries must be submitted. The summaries shall include a map that corresponds to the drainage areas in the model and all other information used to develop the model.
 - b. A table (or tables) must be submitted showing the following:
 - i. A listing of all points where runoff leaves the site and the existing and proposed stormwater runoff rates and volumes.
 - ii. A listing of the normal water levels under existing and proposed conditions and the water levels produced from the storm and runoff events listed above for all on-site wetlands, ponds, depressions, lakes, streams, and creeks.
- Dedications or easements for the portions of the property which are adjacent to the facility and which lie below the 100 year flood level. For sites within public right-of-way, no easement is required.
- A proposed maintenance agreement, which may be in the format of Appendix K, or other form approved by the city.

HISTORY & CONSIDERATIONS:

SPECIAL OR IMPAIRED WATER

- This site drains to, and is within one mile of special or impaired water and complies with enhanced protections.
 - a. Scenic or Recreational river C.1., C.2., C.3.
 - b. Scientific and Natural area C.1., C.2., C.3.
 - c. Waterbody with a TMDL C.1., C.2.

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- C.1. Stabilization initiated immediately and all soils protected in seven days/provide temp basin for five acres draining to common location.
- C.2. Treat water quality volume of one inch of runoff by retaining on site unless not feasible due to site conditions (See Part III.D.1. design requirements).
- C.3. Maintain buffer zone of 100 linear feet from Special Water.

EROSION AND SEDIMENT CONTROL [*A checked box indicates compliance*]

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

Narrative

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

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NA Identifies any specific chemicals and the chemical treatment systems that may be used for enhancing the sedimentation process on the site, and how compliance will be achieved with the permit requirements.

- Describes pollution prevention management measures
 - a. Storage, handling, and disposal of construction products, materials, and wastes.
 - b. Fueling and maintenance of equipment or vehicles; spill prevention and response.
 - c. Vehicle and equipment washing.
 - d. No engine degreasing allowed on site.
 - e. Containment of Concrete and other washout waste.
 - f. Portable toilets are positioned so that they are secure.

Plan sheets

- Temporary Sediment Basins required (10 acres draining to common location or 5 acres App. A) Basin design meets the following criteria:*
 - a. Adequately sized – 2-year, 24-hour storm, minimum 1,800 ft³/acre; or no calculative minimum 3,600 ft³/acre.
 - b. Designed to prevent short circuiting.
 - c. Outlets designed to remove floating debris.
 - d. Outlets designed to allow complete drawdown.
 - e. Outlets designed to withdraw water from the surface
 - f. Outlets have energy dissipation.
 - g. Have a stabilized emergency spillway.
 - h. Situated outside of surface waters and any natural buffers.
- Locations and types of all temporary and permanent Erosion Control BMPs.
 - a. Exposed soils have erosion protection/cover initiated immediately and finished within 7 days.
 - b. Wetted perimeters of ditches stabilized within 200 feet of surface water within 24 hours.
 - c. Pipe outlets have energy dissipation within 24 hours of connecting.
- Locations and types of all temporary and permanent Sediment Control BMPs.
 - a. Sediment control practices established on down gradient perimeters and upgradient of any buffer zones.
 - b. All inlets are protected.
 - c. Stockpiles have sediment control and placed in areas away from surface waters or natural buffers.
 - d. Construction site entrances minimize street tracking?

Middle St. Croix Watershed Management Organization

MEMBER COMMUNITIES:

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- e. Plans minimize soil compaction and, unless infeasible to preserve topsoil.
- f. 50 foot natural buffers preserved or (if not feasible) provide redundant sediment controls when a surface water is located within 50 feet of the project's earth disturbances and drains to the surface water.

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

LAKE, STREAM AND WETLAND BUFFERS

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

STORMWATER MANAGEMENT *[A checked box indicates compliance]*

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

Rate and Flood Control Standards

- The peak rate of stormwater runoff from a newly developed or redeveloped site shall not exceed the 2-, 10-, and 100-year 24-hour storms with respective 2.8, 4.2, and 7.3-inch rainfall depths with MSCWMO approved time distribution based on Atlas 14 for existing and proposed conditions. The runoff curve number for existing agriculture areas shall be less than or equal to the developed condition curve number. The newly developed or redeveloped peak rate shall not exceed the existing peak rate of runoff for all critical duration events, up to and including the 100-year return frequency storm event for all points where discharges leave a site during all phases of development.
- Predevelopment conditions assume "good hydrologic conditions" for appropriate land covers as identified in TR-55 or an equivalent methodology. Runoff curve numbers have been increased where predevelopment land cover is cropland:
 - Hydrologic Soil Group A: Runoff Curve Number 56
 - Hydrologic Soil Group B: Runoff Curve Number 70
 - Hydrologic Soil Group C: Runoff Curve Number 79

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Hydrologic Soil Group D: Runoff Curve Number 83

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

Volume Control Standards

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

Volume Retention Required (cu. ft.)	Volume Retention Provided (cu. ft.)	
40,000 sf *1.1" = 3,667 cu. ft.	BMP BMP #1	Volume 6,880cu. ft.
	Total Proposed	6,88055,794 cu.ft.
Total Required	3,667 cu. ft.	

Flexible Treatment Options (when applicable)

- NA Applicant demonstrated qualifying restrictions as defined in Section 7.2.2 (4) of the 2015 MSCWMO Watershed Management Plan that prohibits the infiltration of the entire required volume.
- NA MIDS calculator submission removes 75% of the annual total phosphorous.

Infiltration/Filtration Design Standards

Middle St. Croix Watershed Management Organization

MEMBER COMMUNITIES:
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- Proposed stormwater management features meet or exceed NPDES General Construction Permit requirements are designed in conformance with the most recent edition of the State of Minnesota Stormwater Manual.
- None of the following conditions exist that prohibit infiltration of stormwater on the site
 - a. Areas where vehicle fueling and maintenance occur.
 - b. Areas with less than three (3) feet of separation distance from the bottom of the infiltration system to the elevation of the seasonally saturated soils or the top of bedrock. ~~Infiltration will occur over all surface areas below the low surface outlet at 713.0. There are a number of the soil borings that were provided within this surface area that indicate refusals at depths less than 3' below the surface. Addition soil borings should be completed to determine if the refusal was caused by cobble or shallow bedrock.~~
 - c. Areas where industrial facilities are not authorized to infiltrate industrial stormwater under an National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Industrial Stormwater Permit issued by the MPCA.
 - d. Areas where contaminants in soil or groundwater will be mobilized by infiltrating stormwater.
 - e. Areas of Hydrologic Soil Group D (clay) soils
 - f. Areas within 1,000 feet up-gradient, or 100 feet down-gradient of active karst features unless allowed by a local unit of government with a current MS4 permit.

- Minimum setbacks from the Minnesota Department of Health for infiltration practices are met

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

~~Confirm a 35' minimum horizontal setback between the 713.0' contour and the septic area is provided.~~

- Pretreatment devices(s) remove at least 50% of sediment loads. If downstream from a potential hot spot, a skimmer is in place to facilitate cleanup. ~~Pretreatment is assumed to occur via routing runoff from impervious surfaces over pervious surfaces (disconnected impervious) and filtration on swale slopes/bottoms.~~
- Water quality volume will be discharged through infiltration or filtration media in 48 hours or less.
 - a. For bioretention (biofiltration and bioinfiltration) volume control management facilities above ground with vegetation the period of inundation shall be calculated using the maximum water depth below the surface discharge elevation and the soil infiltration rate.
 - b. For infiltration basin volume control management facilities the period of inundation shall be calculated using the maximum water depth below the surface discharge elevation and the soil infiltration rate.

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Appropriate soil borings have been conducted that meet the minimum standards. ~~Borings do not extend far enough below the bottom of the infiltration practice. Provide a minimum of 6 borings within the infiltration area (from the 712' to 713 contour) that extend to an elevation of at least 707'.~~

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

The least permeable soils horizon identified in the soil boring dictated the infiltration rate.

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

Filtration basin demonstrates a basin draw down between 24 hours and 48 hours.

NA Filtration system Iron Enhanced Sand Filter is sized to bind soluble phosphorous removal for 30 year functional life of the system using the published value of 17lbs.phosphorous removal per 20 yards of 5% by weight iron filings to 95% sand.

Identify as build survey and method to demonstrate infiltration or filtration basin is functioning. ~~This will be satisfied with the following construction guidance note 'e'.~~

Construction plans provide adequate construction guidance to prevent clogging or compaction and demonstrate performance.

- a. Excavation within 2.0 feet of final grade for infiltration/filtration systems is prohibited until contributing drainage areas are constructed and fully stabilized.
- b. Rigorous sediment and erosion controls planned to divert runoff away from the system.
- c. Installation of volume control facilities must occur in dry soil conditions. Excavation, soil placement and rapid stabilization of perimeter slopes must be accomplished prior to the next precipitation event.
- d. Excavation shall be performed by an excavator with a toothed bucket. Use excavator bucket to place materials. Construction equipment shall not be allowed into the basin.
- e. Prior to the release of any remaining fee or security, the permit holder must provide documentation that constructed volume control facilities perform as designed.

There is a way to visually verify the system is operating as designed.

A minimum 8.0' maintenance access is provided to all stormwater facilities.

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WETLAND PERFORMANCE STANDARDS

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

Middle St. Croix Watershed Management Organization

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MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION

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



July 18, 2019

Kate Piscitello
690 Quinnell Ave. N
Lakeland, MN 55043-0643

RE: Stordahl Home Reconstruction

Dear Ms. Piscitello:

The Middle St. Croix Watershed Management Organization (MSCWMO) received the required submittal items on July 10th, 2019 for the proposed Stordahl Home Reconstruction, located at 1635 Rivercrest Rd N. within MSCWMO boundaries and in the City of Lakeland. The proposed project qualifies for full review under the MSCWMO 2015 Watershed Management Plan (WMP).

The project, as submitted, contains sufficient information to determine conformance with the Policies and Performance Standards contained within Section 7.0 of the MSCWMO Watershed Management Plan

The MSCWMO recommends approval of the project with the following twelve conditions:

1. Identify the location, size and vegetative characterizes of the buffer upslope of Lake St. Croix.
2. Add estimated types and quantities of temporary erosion control, permanent erosion control and sediment control practices.
3. Add erosion and sediment control inspection frequency requirements.
4. Add required contact information for person responsible for construction site erosion and sediment control.
5. Identify pollution prevention measures.
6. Identify soiling tilling and soil bed preparation prior to installation of final vegetation.
7. Identity timing of installation of final stabilization.
8. Route stormwater flows from gutters and downspouts away from bluffs.
9. Provide a planting plan with vegetation suitable for the hydrology of the rain gardens. (Note: Turf is acceptable with the anticipated drawdown times)
10. Provide minimum setbacks from the property line (including right-of-way) and septic system tanks.
11. Add stormwater practice construction standards.
12. Add required rain garden (aka bioinfiltration basin) cross section detail and media information.

This recommended approval is based on the technical review of the MSCWMO performance standards and does not constitute approval by the City of Lakeland. The enclosed checklist contains detailed information on project review qualifications and the policies and performance standards of the WMP. MSCWMO review process information can be downloaded from www.mscwmo.org. Please contact me at 651-330-8220 x22 or mdowning@mnwcd.org if you have any questions.

Sincerely,



Matt Downing
MSCWMO Administrator
mdowning@mnwcd.org

MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION

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



MSCWMO Project Review ID: 19-006

Project Name: Stordahl Home Reconstruction

Applicant: Matt & Shannon Stordahl

Purpose: Reconstruct existing home and garage

Location: 1635 Rivercrest Rd N, Lakeland

Review date: July 18, 2019

Recommendation: Approval with the following 12 conditions:

1. Identify the location, size and vegetative characterizes of the buffer upslope of Lake St. Croix.
2. Add estimated types and quantities of temporary erosion control, permanent erosion control and sediment control practices.
3. Add erosion and sediment control inspection frequency requirements.
4. Add required contact information for person responsible for construction site erosion and sediment control.
5. Identify pollution prevention measures.
6. Identify soiling tilling and soil bed preparation prior to installation of final vegetation.
7. Identity timing of installation of final stabilization.
8. Route stormwater flows from gutters and downspouts away from bluffs.
9. Provide a planting plan with vegetation suitable for the hydrology of the rain gardens. (Note: Turf is acceptable with the anticipated drawdown times)
10. Provide minimum setbacks from the property line (including right-of-way) and septic system tanks.
11. Add stormwater practice construction standards.
12. Add required rain garden (aka bioinfiltration basin) cross section detail and media information.

Applicability:

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

- Any project with wetland impacts
- Any project with grading within public waters
- Any project with grading within buffers
- Any project with grading within 40-feet of the bluff line
- Development projects that impact 2 or more of the member communities
- New or redevelopment projects within the St. Croix Riverway that require a building permit that adds five hundred (500) square feet or more of additional impervious surface
- Any project requiring a variance from the current local impervious surface zoning requirements for the property
- Any land development activity, regardless of size, that the City determines is likely to cause an adverse impact to an environmentally sensitive area or other property, or may violate any other erosion and sediment control standard set by the member community.

ALL SUBMITTALS MUST CONTAIN THE FOLLOWING ITEMS:

- 1. Review Fee: Single lot residential \$350 fee.
- 2. Grading plan showing grading limits, existing and proposed contours related to NAVD 1988 datum (preferred) or NGVD 1929.
- 3. Location of existing and proposed permanent structures.
- 4. Ordinary High Water (OHW) elevations and location of all existing water bodies.
- 5. Location of all bluff lines.
- 6. Lowest floor elevations of structures built adjacent to stormwater management features and other water bodies must be a minimum of two feet above the 100-year flood elevation.
- 7. Delineation of existing wetland, shoreland, ordinary high water levels, drain tiling, and floodplain areas.
- 8. Details of proposed buffer upslope of water resources including size and vegetation characteristics (when applicable).

9. Erosion/sediment control plan demonstrating locations, specifications, and details of the following items: **Underline items are not addressed in the submitted plans.**

A. Erosion Prevention

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

B. Sediment Control

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

C. Inspections and Maintenance

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

D. Pollution Prevention

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

E. Final Stabilization

- i. For residential construction only, individual lots are considered final stabilized if the structures are finished and temporary erosion protection and downgradient sediment control has been completed.
- ii. Grading and landscape plans shall include soil tillage and soil bed preparation methods that are employed prior to landscape installation to

a minimum depth of 8” and incorporate amendments to meet Minnesota State Stormwater Manual predevelopment soil type bulk densities.

1. Observe minimum setbacks for areas within the dripline of existing trees, over utilities within 30 in of the surface, where compaction is required by design and inaccessible slopes.

10. Details of proposed structural stormwater practices (Meets Minnesota Stormwater Manual guidelines) Underline items are not addressed in the submitted plans.

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

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

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

Volume Retention Required (cu. ft.)	Volume Retention Provided (cu. ft.)
11,779 sf * 1.1” = 1,080 cf 1,080 cf total required	BMP #1 Volume = 381 cf BMP #2 Volume = 893 cf Total = 1,274 cf

- H. Construction Standards
 - i. To prevent soil compaction, the proposed volume control facility must be staked off and marked during construction to prevent heavy equipment and traffic from traveling over it.
 - ii. Facilities may not be excavated within 2.0 feet of final grade until the contributing drainage area has been constructed and fully stabilized.
 - iii. Facilities are in-place during construction activities, all sediment and runoff must be diverted away the facility, using practices such as pipe capping or diversions.

- iv. Facilities installation must occur in dry soil conditions. Excavation, soil placement and rapid stabilization of perimeter slopes must be accomplished prior to the next precipitation event.
 - v. Excavation shall be performed by an excavator with a toothed bucket. Use excavator bucket to place materials. Construction equipment shall not be allowed into the basin.
 - vi. Prior to the release of any remaining fee or security, the owner must provide documentation that constructed volume control facilities perform as designed.
- I. Details
- i. Include a standard cross section of the infiltration device similar to those identified in the [Minnesota Stormwater Manual](#)
 - ii. The cross section must detail the infiltration media used in the device. Typically, devices use Mix B as described in the [Minnesota Stormwater Manual](#): A well-blended, homogenous mixture of 70 to 85 percent washed construction sand; and 15 to 30 percent MnDOT Grade 2 compost.

MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION

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



August 1, 2019

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

RE: Zvago Stillwater Development

Dear Mr. Sanders:

The Middle St. Croix Watershed Management Organization (MSCWMO) received required submittal items on July 17th, 2019 for the proposed Zvago Stillwater Development (formerly known as Ecumen Stillwater Senior Living Center), located within MSCWMO boundaries and in the City of Stillwater. The proposed project qualifies for full review under the MSCWMO 2015 Watershed Management Plan (WMP).

The MSCWMO has reviewed the project and requests the following revisions be made and the project resubmitted to the MSCWMO to continue the review:

1. Submit a proposed maintenance agreement, which may be in the format of Appendix K, or other form approved by the City.
2. Add tabulation quantities of erosion prevention and sediment control BMPs.
3. Biofiltration typical section must be updated with the section from the MN Stormwater Manual.
4. Biofiltration designs must bypass high flows when the basins are full. High flows are currently routed through the basins.
5. Add pretreatment to remove at least 50% of sediment loads prior to discharge to biofiltration basins.
6. Revise and resubmit the MIDS model.
7. Demonstrate the changes in hydrology do not increase the inundation or bounce of downstream wetlands beyond the limit specified in Table 7.2 for the 2-inch, 24-hour storm event.

MSCWMO review process information can be downloaded from www.mscwmo.org. Please contact me at 651-275-1136 x22 or mdowning@mnwcd.org if you have any questions regarding these comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Downing".

Matt Downing
Interim Administrator
Middle St. Croix Watershed Management Organization



PROJECT REVIEW

MSCWMO Project Review ID: 19-007

Project Name: Zvago Stillwater

Applicant: Matt Pavek, Civil Site Group

Purpose: New multifamily residential development

Location: 114 Brick Street

Review date: July 22, 2019

Recommendation: Amend plans and resubmit.

Please address the following issues and resubmit the plans for review:

1. Submit a proposed maintenance agreement, which may be in the format of Appendix K, or other form approved by the City.
2. Add tabulation quantities of erosion prevention and sediment control BMPs.
3. Biofiltration typical section must be updated with the section from the MN Stormwater Manual: https://stormwater.pca.state.mn.us/index.php?title=File:04_Biofiltration_with_Underdrain_at_Bottom.pdf
4. Biofiltration designs must bypass high flows when the basins are full. High flows are currently routed through the basins.
 - a. High flows are still routed through the basins. Unlike ponds, biofiltration basins do not have a dead pool to prevent scour and resuspension. Piping must be configured so high flows must bypass the basin.
 - b. Note that bypassing high flows will also require revising and resubmitting the HydroCAD® model to demonstrate rate control.
5. Add pretreatment to remove at least 50% of sediment loads prior to discharge to biofiltration basins.
 - a. The impervious surfaces in drainage area PR1 are not disconnected they drain directly to storm sewer catch basins.
 - b. CBMH 3 includes a SAFL Baffle, Snout, and Sump however it does not have any volume reduction capacity or retain 100% of the annual runoff volume as indicated in the MIDS calculator submitted. TSS and Particulate P removal rates should be defined based upon SHSAM model output.
 - c. The majority of impervious surfaces in drainage area PR2 (building footprint) are not disconnected. The building roof is directly connected to a storm sewer stub, however, the rooftop runoff is anticipated to contain less TSS and an exception to the 50% TSS pretreatment removal can be made.
6. Revise and resubmit the MIDS model with the following corrections

- a. Remove PR1 stormwater disconnection (impervious areas are directly connected).
 - b. Update TSS and Particulate P removal rates for the SAFL Baffle and Sump based upon SHSAM model output and revise the volume reduction capacity and annual runoff volume removal to 0.
 - c. Update Filtration Basin 1 and 2 surface area and media depth/depth below underdrain parameters. The areas do not match the current plans or HydroCAD values and the depth below the underdrain does not match the plan typical section.
 - d. Revise Filtration Basin 1 and 2 underlying soil – hydrologic soil group based upon soils below the filtration media.
 - e. Remove PR2 stormwater disconnection (impervious areas are directly connected).
 - f. Remove PR4 stormwater disconnection (impervious areas are directly connected).
7. Demonstrate the changes in hydrology do not increase the inundation or bounce of downstream wetlands beyond the limit specified in Table 7.2 for the 2-inch, 24-hour storm event.
- a. Inundation period of wet meadows dominated by reed canary grass does not exceed existing inundation period plus ≤ 2 days.
 - b. Bounce does not exceed the existing plus 0.5 to 1.0' for moderately to slightly susceptible wetland type.

Applicability:

- Any project undertaking grading, filling, or other land alteration activities that involve movement of 100 cubic yards of earth or removal of vegetation on greater than 10,000 square feet of land
- Any project that creates or fully reconstructs 6,000 square feet or more of impervious surface
- All major subdivisions or minor subdivisions that are part of a common plan of development. Major subdivisions are defined as subdivisions with 4 or more lots.
- Any project with wetland impacts
- Any project with grading within public waters
- Any project with grading within buffers
- Any project with grading within 40-feet of the bluff line
- Development projects that impact 2 or more of the member communities
- New or redevelopment projects within the St. Croix Riverway that require a building permit that adds five hundred (500) square feet or more of additional impervious surface
- Any project requiring a variance from the current local impervious surface zoning requirements for the property

Middle St. Croix Watershed Management Organization

MEMBER COMMUNITIES:

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- Any land development activity, regardless of size, that the City determines is likely to cause an adverse impact to an environmentally sensitive area or other property, or may violate any other erosion and sediment control standard set by the member community.

SUBMITTAL ITEMS:

Electronic submittals are highly encouraged

- A completed and signed project review application form and review fee
- Grading Plan/Mapping Exhibits
 - a. Property lines and delineation of lands under ownership of the applicant.
 - b. Delineation of existing on-site wetlands, shoreland and/or floodplain areas (including any buffers).
 - c. Ordinary High Water (OHW) elevations and datum, as determined by the MDNR (if applicable).
 - d. Existing and proposed site contour elevations related to NAVD 1988 datum (preferred) or NGVD, 1929. Datum must be noted on exhibits.
 - e. Drainage easements covering land adjacent to ponding areas, wetlands, and waterways up to their 100-year flood levels and covering all ditches and storm sewers. Access easements to these drainage easements and to other stormwater management facilities shall also be shown.
 - f. Minimum building elevation for each lot.
 - g. Identification of downstream water body.
- Permanent Stormwater Management System in compliance with the requirements of the NPDES SDS Construction Stormwater Permit and MSCWMO Performance Standards.
 - a. Impervious areas (Pre- and Post-Construction).
 - b. Construction plans and specifications for all proposed stormwater management facilities.
 - c. Location(s) of past, current or future onsite well and septic systems (if applicable).
- Other exhibits required to show conformance to these Performance Standards
- A Stormwater Pollution Prevention Plan in compliance with the requirements of the NPDES SDS Construction Stormwater Permit
- Grading Plan/Mapping Exhibits:
 - a. Delineation of the subwatersheds contributing runoff from off-site, proposed and existing on-site subwatersheds, and flow directions/patterns.
 - b. Location, alignment, and elevation of proposed and existing stormwater facilities.
 - c. Existing and proposed normal water elevations and the critical (the highest) water level produced from the 100-year 24-hour storms.
 - d. Location of the 100-year flood elevation, natural overflow elevation, and lowest floor elevations.

Middle St. Croix Watershed Management Organization

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

HISTORY & CONSIDERATIONS:

SPECIAL OR IMPAIRED WATER

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

EROSION AND SEDIMENT CONTROL [*A checked box indicates compliance*]

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

Narrative

 - Identify the person knowledgeable and experienced who will oversee the implementation of the SWPPP; the installation, inspection, and maintenance of the BMPs.

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- a. Identifies the person who will oversee the BMP inspection and maintenance.
- b. Identify the training requirements are satisfied.
- c. Inspections performed once every 7 days.
- d. Inspections performed within 24 hours of a rain event greater than 0.5 in/24 hours.
- e. Inspection and Maintenance records include:
 - i. Date and time of inspection.
 - ii. Name of person(s) conducting inspections.
 - iii. Finding of inspections, including the specific location where corrective actions are needed.
 - iv. Corrective actions taken (including dates, times, and party completing maintenance activities).
 - v. Date and amount of rainfall events greater than 0.5 in/24 hours.
 - vi. Rainfall amounts must be obtained by a properly maintained rain gauge installed onsite, or by a weather station that is within one mile or by a weather reporting system.
 - vii. Requirements to observe, describe, and photograph any discharge that may be occurring during the inspection.
 - viii. All discovered nonfunctional BMPs must be repaired, replaced, or supplemented with functional BMPs within 24 hours after discovery, or as soon as field conditions allow.
- Describes procedures to amend the SWPPP and establish additional temporary ESC BMPs as necessary for site conditions.
- Describes the installation timing for all Erosion Sediment Control (ESC) Best Management Practices (BMPs).
- Describes final stabilization methods for all exposed areas.
- Methods used to minimize soil compaction and preserve topsoil must be described.
- Describes dewatering technique to prevent nuisance conditions, erosion, or inundation of wetlands?
- NA Identifies any specific chemicals and the chemical treatment systems that may be used for enhancing the sedimentation process on the site, and how compliance will be achieved with the permit requirements.
- Describes pollution prevention management measures
 - a. Storage, handling, and disposal of construction products, materials, and wastes.
 - b. Fueling and maintenance of equipment or vehicles; spill prevention and response.
 - c. Vehicle and equipment washing.
 - d. No engine degreasing allowed on site.
 - e. Containment of Concrete and other washout waste.
 - f. Portable toilets are positioned so that they are secure.

Plan sheets

Middle St. Croix Watershed Management Organization

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

- a. Adequately sized – 2-year, 24-hour storm, minimum 1,800 ft³/acre; or no calculative minimum 3,600 ft³/acre.
- b. Designed to prevent short circuiting.
- c. Outlets designed to remove floating debris.
- d. Outlets designed to allow complete drawdown.
- e. Outlets designed to withdraw water from the surface
- f. Outlets have energy dissipation.
- g. Have a stabilized emergency spillway.
- h. Situated outside of surface waters and any natural buffers.

Locations and types of all temporary and permanent Erosion Control BMPs.

- a. Exposed soils have erosion protection/cover initiated immediately and finished within 7 days.
- b. Wetted perimeters of ditches stabilized within 200 feet of surface water within 24 hours.
- c. Pipe outlets have energy dissipation within 24 hours of connecting.

Locations and types of all temporary and permanent Sediment Control BMPs.

- a. Sediment control practices established on down gradient perimeters and upgradient of any buffer zones.
- b. All inlets are protected.
- c. Stockpiles have sediment control and placed in areas away from surface waters or natural buffers.
- d. Construction site entrances minimize street tracking?
- e. Plans minimize soil compaction and, unless infeasible to preserve topsoil.
- f. 50 foot natural buffers preserved or (if not feasible) provide redundant sediment controls when a surface water is located within 50 feet of the project's earth disturbances and drains to the surface water.

Tabulated quantities of all erosion prevention and sediment control BMPs.

Stormwater flow directions and surface water divides for all pre- and post-construction drainage areas.

Locations of areas not to be disturbed (buffer zones).

NA Location of areas where construction will be phased to minimize duration of exposed soil areas.

NA Blufflines are protected from construction activities in urban (40 foot buffer) areas and rural areas (100-foot buffer).

LAKE, STREAM AND WETLAND BUFFERS

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

STORMWATER MANAGEMENT *[A checked box indicates compliance]*

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

Rate and Flood Control Standards

- The peak rate of stormwater runoff from a newly developed or redeveloped site shall not exceed the 2-, 10-, and 100-year 24-hour storms with respective 2.8, 4.2, and 7.3-inch rainfall depths with MSCWMO approved time distribution based on Atlas 14 for existing and proposed conditions. The runoff curve number for existing agriculture areas shall be less than or equal to the developed condition curve number. The newly developed or redeveloped peak rate shall not exceed the existing peak rate of runoff for all critical duration events, up to and including the 100-year return frequency storm event for all points where discharges leave a site during all phases of development.
- Predevelopment conditions assume "good hydrologic conditions" for appropriate land covers as identified in TR-55 or an equivalent methodology. Runoff curve numbers have been increased where predevelopment land cover is cropland:
 - Hydrologic Soil Group A: Runoff Curve Number 56
 - Hydrologic Soil Group B: Runoff Curve Number 70
 - Hydrologic Soil Group C: Runoff Curve Number 79
 - Hydrologic Soil Group D: Runoff Curve Number 83
- Computer modeling analyses includes secondary overflows for events exceeding the storm sewer systems level-of-service up through the critical 100-year event.
- NA In sub-areas of a landlocked watershed, the proposed project does not increase the predevelopment volume or rate of discharge from the sub-area for the 10-year return period event.
- Flowage easements up to the 100-yr flood level have been secured for stormwater management facilities (such as ditches and storm sewers).
- Lowest floor elevations of structures built adjacent to stormwater management features and other water bodies are a minimum of two feet above the 100-year flood elevation and a minimum of two feet above the natural overflow of landlocked basins.

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Volume Control Standards

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

Volume Retention Required (cu. ft.)	Volume Retention Provided (cu. ft.)	
111,378 sf *1.1" = 10,210 cu. ft.	BMP	Volume
	BMP #1	5,262 cu. ft.
	BMP #2	11,769 cu. ft.
Total 10,210 cu. ft.	Total Proposed	17,031 cu.ft.

Flexible Treatment Options (when applicable)

- Applicant demonstrated qualifying restrictions as defined in Section 7.2.2 (4) of the 2015 MSCWMO Watershed Management Plan that prohibits the infiltration of the entire required volume.
- MIDS calculator submission removes 75% of the annual total phosphorous.

Infiltration/Filtration Design Standards

- Proposed stormwater management features meet or exceed NPDES General Construction Permit requirements are **designed in conformance with the most recent edition of the State of Minnesota Stormwater Manual.**
- None of the following conditions exist that prohibit infiltration of stormwater on the site
 - a. Areas where vehicle fueling and maintenance occur.
 - b. Areas with less than three (3) feet of separation distance from the bottom of the infiltration system to the elevation of the seasonally saturated soils or the top of bedrock.
 - c. Areas where industrial facilities are not authorized to infiltrate industrial stormwater under an National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Industrial Stormwater Permit issued by the MPCA.
 - d. Areas where contaminants in soil or groundwater will be mobilized by infiltrating stormwater.
 - e. Areas of Hydrologic Soil Group D (clay) soils
 - f. Areas within 1,000 feet up-gradient, or 100 feet down-gradient of active karst features unless allowed by a local unit of government with a current MS4 permit.
- Minimum setbacks from the Minnesota Department of Health for infiltration practices are met

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

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

Water quality volume will be discharged through infiltration or filtration media in 48 hours or less.

- a. For bioretention (biofiltration and bioinfiltration) volume control management facilities above ground with vegetation the period of inundation shall be calculated using the maximum water depth below the surface discharge elevation and the soil infiltration rate.
- b. For infiltration basin volume control management facilities the period of inundation shall be calculated using the maximum water depth below the surface discharge elevation and the soil infiltration rate.

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

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

The least permeable soils horizon identified in the soil boring dictated the infiltration rate.

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

Filtration basin demonstrates a basin draw down between 24 hours and 48 hours.

NA Filtration system Iron Enhanced Sand Filter is sized to bind soluble phosphorous removal for 30 year functional life of the system using the published value of 17lbs.phosphorous removal per 20 yards of 5% by weight iron filings to 95% sand.

Identify as build survey and method to demonstrate infiltration or filtration basin is functioning.

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- Construction plans provide adequate construction guidance to prevent clogging or compaction and demonstrate performance.
 - a. Excavation within 2.0 feet of final grade for infiltration/filtration systems is prohibited until contributing drainage areas are constructed and fully stabilized.
 - b. Rigorous sediment and erosion controls planned to divert runoff away from the system.
 - c. Installation of volume control facilities must occur in dry soil conditions. Excavation, soil placement and rapid stabilization of perimeter slopes must be accomplished prior to the next precipitation event.
 - d. Excavation shall be performed by an excavator with a toothed bucket. Use excavator bucket to place materials. Construction equipment shall not be allowed into the basin.
 - e. Prior to the release of any remaining fee or security, the permit holder must provide documentation that constructed volume control facilities perform as designed.
- There is a way to visually verify the system is operating as designed.
- A minimum 8.0' maintenance access is provided to all stormwater facilities.

WETLAND PERFORMANCE STANDARDS

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

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MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION

455 HAYWARD AVENUE, OAKDALE, MINNESOTA 55082
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Staff Report- July 2019

Administration

- Revised MSCWMO-WCD Agreement
- Prepared Draft 2020 MSCWMO Budget
- Resolved 2018 Audit submittal to BWSR
- Coordinated with SCRA on grants due 6/30

Project Reviews

- Stordahl Reconstruction, Lakeland
- Zvago, Stillwater
- Culligan Building Expansion, Stillwater
- DeWall Subdivision, Lakeland

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 is being utilized to work in partnership with the Stillwater Country Club to design a basin to reduce 25.0 lbs. of phosphorus per year discharging into Lake St. Croix.

Activities This Month: Tree cleared. Pipe installation occurring week of 7/29. Grading and shaping to follow. Expect 3-5 weeks construction period, weather permitting. WCD BMP Maintenance Crew will be planting the basin upon completion. Adjacent homeowners have been notified of activities and schedule.

Staff: Bryan Pynn, WCD

SCRA 2018 LSCI Grant

Description: \$30,000 St. Croix River Association Grant to reduce erosion and nutrients discharging to Lake St. Croix.

Activities This Month: Confirmed in June with St. Croix River Association that the remaining \$23,000 can be applied toward the Stillwater Country Club Project. Will be applied toward current construction.

Staff: Bryan Pynn, WCD

Washington County Transportation Cash-In-Lieu-of-Treatment Funding

Description: Due to steep grades, the fully developed downtown area including several historic properties, and presence of shallow bedrock in some areas Washington County Public Works, Transportation Division proposed and agreed to cash-in-lieu of treatment for the CSAH 23 (3rd Street) Reconstruction project approved by the board of managers on June 14, 2018. The total cash in lieu of treatment amount is \$118,720.00. The funding is being utilized (in conjunction with Lake St. Croix Direct Discharge Phase II and Phase III grant

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funding and St. Croix River Association Lake St. Croix Small Communities Grant) to fund the installation of the Stillwater Country Club bioretention basin.

Activities This Month: Contacted Allen Brandt and Frank Ticnor at Washington County Public Works Transportation Division to inquire about timing for payment (June). The response was not this year. Awaiting response regarding when next year payment(s) will be received.

Staff: Bryan Pynn, WCD Matt Downing, MSCWMO

Lily Lake Final – 45

Description: \$58,000 grant to identify and partially design stormwater practices to reduce phosphorous discharges to Lily Lake by at least 45 lbs. per year.

Activities This Month: Provided materials to BWSR for grant reconciliation (mandatory before closing out grants). Waiting for response.

Staff: Bryan Pynn, WCD

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: Construction beginning week of August 5th. Tara Kline (WCD) is PM for this project.

Staff: Tara Kline/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: Project has been awarded to All Weather Services for \$28,465. Gas lines have been moved. Construction tentatively beginning mid-August.

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: No action. Will reach out to Lake St Croix Beach in late-August to start design and construction budget conversations.

Staff: Bryan Pynn, WCD

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.

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Activities This Month: Requested the MPCA SWIFT Account be transferred to Matt Downing from Mike Isensee. Requesting reimbursement of time for Mr. Grub and Administrator Isensee for time in June. Mr. Grub attended a meeting on July 17th.
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 location on the creek will be sampled monthly for the rest of the 2019 season 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: The first of three sampling rounds were collected by WCD staff and the samples were shipped to the contracted laboratory in Florida for analysis.

Staff: Jessica Thiel, Rebecca Oldenburg Giebel, WCD, Matt Downing MSCWMO

Meetings

- Permitting Coordination Meeting, Oak Park Heights, July 24th