

# MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION

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



## Regular Meeting of the Middle St. Croix Watershed Management Organization

HELD REMOTELY DUE TO COVID -19 PANDEMIC

Attend ONLINE VIA ZOOM by clicking this link: <https://us02web.zoom.us/j/89792114914>

OR

Attend by CONFERENCE CALL by dialing +1 312 626 6799 – Meeting ID 897 9211 4914

Thursday, June 11<sup>th</sup>, 2020

6:00PM

1. Call to Order – 6:00PM
  - a. Approval of Agenda
2. Approval of Minutes
  - a. Draft minutes – May 14<sup>th</sup>, 2020 **pg. 1-4**
4. Treasurer's Report
  - a. Report of savings account, assets for June 11<sup>th</sup>, 2020
  - b. Approve payment of bills for June 11<sup>th</sup>, 2020
5. Public Comment
6. Old Business
7. New Business
  - a. 2021 Draft Budget **pg. 5**
8. Grant and Cost Share Applications
  - a. Perro Creek Girl Scout Planting **pg. 6**
9. Plan Reviews/Submittals
  - a. Plan Review and Submittal Summary **pg. 7-19**
    - i. Central Automotive -ACTION
  - b. Erosion and Sediment Control Inspection Reports **pg. 20-28**
10. Staff Report **pg. 29-31**
11. 1W1P Updates
12. Other
13. Adjourn

Middle St. Croix Watershed Management Organization Member Communities

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

Regular Meeting of the Middle St. Croix Watershed Management Organization  
HELD REMOTELY DUE TO COVID -19 PANDEMIC  
Thursday, May 14th, 2020  
6:00PM

Present: Brian Zeller, Lakeland Shores; John Fellego, Baytown Township; Dan Kylo, West Lakeland Township; Annie Perkins, City of Afton; Mike Runk, Oak Park Heights; Tom McCarthy, Lake St. Croix Beach; Dawn Bulera, Lake St. Croix Beach, Beth Olfelt-Nelson, St. Mary's Point; Ryan Collins, City of Stillwater; John Dahl, City of Bayport; Administrator Matt Downing. Charity Grant, member of a Kahara River group in Madison, WI.

**Call to Order**

The meeting was called to order by Brian Zeller at 6:02 PM.

**Approval of Agenda**

Manager Fellego motioned to approve the agenda and Manager Dahl seconded the motion. The motion passed on a roll call vote with all in favor.

**Approval of Minutes**

Manager Dahl motioned to approve the April 9<sup>th</sup> minutes and Manager Fellego seconded the motion. The motion passed on a roll call vote.

**Treasurer's Report**

The treasurer's report was presented by Manager Kylo. The remaining checking account balance on April 9<sup>th</sup> 2020 was \$193,081.61. First State Bank CDs were valued at \$38,549.15. The ending balance in the RBC savings account for March 2020 is \$65,054.67. The ending balance in the RBC savings account for April 2020 is \$65,073.58.

Bills to be approved this month are: Washington Conservation District (Administration): \$ 2,276.00; Washington Conservation District (Technical Services): \$6,052.00; Washington Conservation District (EMWREP): \$1,575.00; Washington Conservation District (Water Monitoring): \$3,720.00; Total: \$13,623.00. Manager Dahl moved to accept the treasurer's report and pay the bills and Manager Runk seconded this motion. The motion passed on a roll call vote with all in favor.

**Draft MSCWMO Stormwater Treatment Credit Policy**

Manager Zeller asked if Administrator Downing had consulted a legal entity about the how this policy option can be used; specifically if it can be limited to public entities or open to all applicants. Administrator Downing consulted with other watershed districts who had already used their legal council to look at those questions. Those who replied said they did not limit the use of the stormwater treatment credit to public vs. private applicants. The vast majority of when this option is used is for linear redevelopment projects which are almost always public entities. As such, it would be difficult for a private applicant to demonstrate a need to use this option and it is still up to the board's discretion in the end. Administrator Downing said he was comfortable with the internal guidance document to aid the board in implementing their policy. Manager Olfelt-Nelson echoed her previous concern about the wording in the document; she wants it to be clear to the reader that cash-in-lieu of treatment is not something the MSCWMO board wants to do. Administrator Downing explained that the document was meant for internal guidance for the managers, and that what the

applicants see is the plan review process/flow chart. There was further discussion and Administrator Downing reminded the board that they always have the deciding role on a case by case basis. Manager Olfelt-Nelson identified the language “last step” and her preference it be changed to “least preferred step” to aid in layperson interpretation considering board members are often not stormwater experts. She will send her feedback to Administrator Downing separately. Manager Zeller moved to adopt the MSCWMO Stormwater Treatment Credit Policy and Manager Olfelt-Nelson seconded this motion. The motion passed on a roll call vote with all in favor.

### **2019 MSCWMO Annual Water Monitoring Report**

Rebecca Oldenburg from the Washington Conservation District will present the 2019 MSCWMO Annual Water Monitoring Report at the June 11<sup>th</sup> board meeting. Administrator Downing asked for any initial comments now. Manager Olfelt-Nelson said she was grateful the report would be reported in a synthesized way. Manager Dahl asked how the boundaries of the watershed were determined. Administrator Downing explained that the hydrologic boundary of the watershed was determined by the drainage area, which is different in Valley Branch WD, Brown’s Creek WD, etc. Manager Zeller asked if there was updated technology to clarify the boundary with Valley Branch WD. Administrator Downing said there was, and that BCWD also wanted to update their boundary. This boundary clarification usually ends up being a wash between the watershed districts in terms of land area acquired or lost. Manager Zeller wanted to note that there could be unintended financial consequences of these boundary revisions. He wanted to remind the board that watershed districts have taxing authority unlike watershed management organizations; and he didn’t want to see any residents paying double mistakenly as a result of the boundary clarifications in Stillwater specifically. Administrator Downing said the request was made over a year ago upon receipt of new LIDAR data and he also received one from the Carnelian Marine St. Croix WD.

### **MSCWMO-BWSR Lily Lake Alum Maintenance Agreement**

BWSR is requiring a maintenance agreement with the MSCWMO in order to use the Clean Water Fund grant received for the alum treatment in Lily Lake. It will require the MSCWMO to continue to do the routine monitoring of the lake that is already being done in order to determine the effects of the treatment. There will be no extra burden or responsibility than usual for the MSCWMO. Manager Fellegly confirmed that it was a 10-year agreement. Administrator Downing requested a motion for Manager Zeller to sign the agreement so that he can get it to BWSR in time. Manager Fellegly made a motion that Manager Zeller sign the maintenance agreement on behalf of the MSCWMO Board. Manager Collins seconded this motion and it passed on a roll call vote with all in favor.

### **Washington County Cooperative Weed Management Area MOU**

Cameron Blake from the Washington Conservation District explained that joining the MOU would potentially help secure grant funding to control invasive species in the future. The MDA is now using the presence of a MOU to determine whether grant funding will be awarded. Ramsey County also has a MOU signed by many partners. Manager Zeller asked if the DOT has signed onto these agreements due to the spread of invasive species with their roadside seeding. Manager Runk asked about the golden creeper presence in the Stillwater Mulberry Ravine. The Washington Conservation District has been attempting to treat the invasive and will do so again this year. Manager Perkins moved for the MSCWMO to join the Washington County MOU and Manager Fellegly seconded it. The motion passed on a roll call vote with all in favor.

### **3<sup>rd</sup> and Myrtle Development**

A new condominium development is proposed in the currently vacant lot and the intersection of 3<sup>rd</sup> and Myrtle Street in Stillwater. A project application for review was received on February 27<sup>th</sup>, 2020. On March 5<sup>th</sup>, the MSCWMO staff sent a review letter requesting revision and resubmittal to address eleven items. Revised materials were received on March 20<sup>th</sup>, March 31<sup>st</sup>, and April 21<sup>st</sup>, 2020. Staff recommends approval with three conditions. There was coordination with the city engineer as well. Manager Zeller moved to approve the project with three conditions. Manager Felleggy seconded and the motion passed on a roll call vote with all in favor.

### **CenterPoint Energy Natural Gas – Quinlan Ave N.**

CenterPoint Energy proposes to complete a gas line reconstruction along Quinlan Ave N in Lake St. Croix Beach to maintain the integrity of the existing natural gas system. A project application was received on April 16<sup>th</sup>, 2020. The project creates minimal disturbance yet qualifies for review with MSCWMO erosion and sediment control performance standards. Staff recommends approval with four conditions. Manager Felleggy moved to approve the project with four conditions. Manager Runk seconded and the motion passed on a roll call vote with all in favor.

### **Central Automotive**

The construction of a new automotive repair shop is proposed at 59<sup>th</sup> St and Osgood Ave N in Oak Park Heights. A project application for review was received on April 14<sup>th</sup>, 2020. As submitted the project proposed stormwater management with an infiltration basin, however, the project is located within a high vulnerability drinking water source management and area and wellhead protection area with prohibited infiltration. Staff recommends the applicant revise and resubmit. The group discussed where this location was referring to and whether it was a redevelopment vs. a development project. The project is going to be built where there was an old car wash. Manager Zeller motioned to follow staff's recommendation and advise the applicant to revise and resubmit. Manager Felleggy seconded and the motion passed on a roll call vote with all in favor.

Manager Dahl asked if there were tests done on site to ensure it has a clean bill of health.

Administrator Downing explained that the MSCWMO only reviewed the stormwater components of the projects and that the city or state had other organizations to review the other environmental components. The group discussed the DWSMA and its implications for infiltration practices.

Administrator Downing said this project would probably be coming back to the board next month.

### **Erosion and Sediment Control Inspection Reports**

The first erosion and sediment control inspection report was the Scanlan Residence in Lakeland Shores, which received an A. The second inspection was the Stordahl Home Reconstruction in Lakeland, which received a B. Manager Felleggy asked of the MSCWMO inspects our own projects. Administrator Downing explained that these types of inspections were for active construction projects for cities that asked for assistance in conducting them. They are typically done after rain events. The last site was the MN Party Bus project which was brought into compliance with the help of the inspector.

### **Staff Report**

The Lower St. Croix Beach project is progressing and will likely be completed in the fall within the grant's timeline.

### **1W1P Updates**

The draft plan is still under the 60-day review process. The Policy Committee's next planned meeting is at the end of June which is when a public hearing would typically be scheduled. The group is still trying to find a way to engage with the public on this given the COVID-19 restrictions. Manager Zeller asked to add this topic to the July agenda.

### **Other**

Manager Olfelt-Nelson asked if bmp maintenance had started yet and Cameron Blake said it has. The group discussed if it would be possible to meet in person for the June meeting and where this could take place. Manager Dahl will ask the Bayport Library if their bigger room could be used. Manager Fellego offered his town hall's meeting space. The group agreed a Zoom meeting would work again depending on the changing circumstances. Manager Zeller asked Administrator Downing to invite the new DNR Area Hydrologist.

### **Adjourn**

Manager Fellego moved to adjourn the meeting and Manager Kylo seconded this motion. The motion passed and the meeting adjourned at 6:53PM.

**MSCWMO 2021 Draft Budget**

	2020 MSCWMO Budget	2021 MSCWMO Budget	% CHANGE
<b>ADMINISTRATION</b>			
Administration - General	\$ 31,160.00	\$ 31,160.00	0.00%
Accounting	\$ 1,550.00	\$ 1,550.00	0.00%
Legal Fees - General	\$ 1,000.00	\$ 1,000.00	0.00%
Audit	\$ 2,100.00	\$ 2,100.00	0.00%
Insurance & Bonds	\$ 2,600.00	\$ 2,600.00	0.00%
Office supplies/equipment/postage	\$ 625.00	\$ 625.00	0.00%
Minutes/Clerical	\$ 1,180.00	\$ 1,180.00	0.00%
Copying/printing/reproduction/minutes	\$ 625.00	\$ 625.00	0.00%
<b>Admin Total</b>	<b>\$ 40,840.00</b>	<b>\$ 40,840.00</b>	<b>0.00%</b>
<b>PROJECT FUNDS</b>			
Project Contingency	\$ 2,000.00	\$ 2,000.00	0.00%
Engineering - Project	\$ 5,700.00	\$ 5,700.00	0.00%
Development Plan Reviews	\$ 5,040.00	\$ 5,040.00	0.00%
Erosion Monitoring Program	\$ 2,250.00	\$ 2,250.00	0.00%
BMP Cost-Share (general)	\$ 20,000.00	\$ 20,000.00	0.00%
BMP TA & Admin	\$ 27,768.00	\$ 27,768.00	0.00%
Community TA	\$ 3,000.00	\$ 3,000.00	0.00%
Water Resource Educator	\$ 6,300.00	\$ 6,300.00	0.00%
Website	\$ 800.00	\$ 800.00	0.00%
Inspections and Tracking Database	\$ 900.00	\$ 900.00	0.00%
<b>Project Total</b>	<b>\$ 73,758.00</b>	<b>\$ 73,758.00</b>	<b>0.00%</b>
<b>WATER MONITORING</b>			
Water Monitoring	\$ 22,000.00	\$ 22,000.00	0.00%
<b>Water Monitoring Total</b>	<b>\$ 22,000.00</b>	<b>\$ 22,000.00</b>	<b>0.00%</b>
<b>LONG TERM PROJECT SAVINGS</b>			
Water Monitoring - Set aside for equipment replacement & Monitoring Costs	\$ 750.00	\$ 750.00	0.00%
WMP Update	\$ 5,000.00	\$ 5,000.00	0.00%
<b>Savings Total</b>	<b>\$ 5,750.00</b>	<b>\$ 5,750.00</b>	<b>0.00%</b>
<b>MSCWMO Member Contribution Budget</b>	<b>\$ 142,348.00</b>	<b>\$ 142,348.00</b>	<b>0.00%</b>

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455 Hayward Avenue N. Oakdale, MN 55128  
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## MEMORANDUM

**TO:** Middle St. Croix WMO Board of Managers  
**FROM:** Cameron Blake, WCD Senior Technician  
**DATE:** June 2, 2020  
**RE:** **8a) Perro Creek Shoreline Restoration Cost Share Application**

Since 2018, the Bayport Girl Scouts Troop 56631 of Bayport has been working in partnership with the City of Bayport and the MSCWMO to restore native buffers on both sides of Perro Creek. In 2018 and 2019 the Girl Scouts installed a total of 200 linear feet along the Southwest side of Perro Park in Bayport. The buffers reduce shoreline erosion, block grass clippings from discharging into the creek, and re-establish native habitat along the creek corridor.

Material costs for plants for the last 100 linear feet is \$1,200.00. Technical staff recommend allocating \$1,200.00 from the 2020 MSCWMO Cost Share for the purchase of materials to support the Girl Scouts restoration of the next 100 linear feet of Perro Creek native buffer.

### Example Motion

Motion board member 1, second board member 2 to approve expenditures from the MSCWMO Cost Share budget not to exceed \$1,200 for the Perro Creek Native Shoreline Restoration.



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## MEMORANDUM

**TO:** Matt Downing, Administrator  
**FROM:** Rebecca Nestingen, PE  
**DATE:** June 5<sup>th</sup>, 2020

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

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

- **Central Automotive.** The construction of a new automotive repair shop is proposed at 59<sup>th</sup> St and Osgood Ave N in Oak Park Heights. A project application for review was received on April 14<sup>th</sup>, 2020. As submitted the project proposed stormwater management with an infiltration basin, however, the project is located within a high vulnerability drinking water source management and area and wellhead protection area with prohibited infiltration. A revised submittal was received May 20<sup>th</sup>, 2020 utilizing a clay lined detention basin with an iron enhanced sand filter bench to satisfy flexile treatment options. *Staff recommends approval with three conditions.*



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May 1, 2020-June 5, 2020

Eric Johnson, Administrator  
City of Oak Park Heights  
14168 Oak Park Blvd. N.  
Oak Park Heights, MN 55082

RE: Central Automotive, Oak Park Heights

Dear Mr. Johnson,

The Middle St. Croix Watershed Management Organization (MSCWMO) received an application for project review on April 14th, 2020 for the proposed Central Automotive development, located within MSCWMO boundaries and in the City of Oak Park Heights. Revised submittal materials were received May 20<sup>th</sup>, 2020. The proposed project qualifies for full review under the MSCWMO 2015 MSCWMO Watershed Management Plan (WMP). The revised submittals contain sufficient information to determine compliance with the performance standards identified in Section 7.0 of the MSCWMO Watershed Management Plan. The MSCWMO recommends ~~revision and resubmittal to address the following comments~~ approval with the following three conditions:

1. SWPPP is incomplete
  - a. Inspection and Maintenance records shall include:
    - i. 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.
    - ii. Requirements to observe, describe, and photograph any discharge that may be occurring during the inspection.
- ~~2. Demonstrate rate control with the following model corrections~~
  - ~~a. Use separate pervious/impervious runoff calculations~~
  - ~~b. Use appropriate CN to represent wooded conditions~~
  - ~~c. Tc for S-22 does not seem reasonable because it is a smaller drainage area yet the time is longer than the existing Tc. There will not be much sheet flow for this DA, mostly shallow concentrated or channel flow.~~
- ~~3. The maximum ponding depth allowed for infiltration is 18".~~
- ~~4. The site is located in a high vulnerability Drinking Water Source Management Area (DWSMA) and Wellhead Protection Area (WHPA) therefore infiltration is probated.~~
2. Dedications or easements are needed over the stormwater facility
3. Maintenance agreement is required.

The enclosed checklist contains detailed information on project review and the policies and performance standards of the WMP. Feel free to contact me at 651-330-8220 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". The signature is fluid and cursive, with a long horizontal stroke at the end.

Matt Downing  
MSCWMO, Interim Administrator

Enclosure

**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



# PROJECT REVIEW

**MSCWMO Project Review ID:** 20-006

**Project Name:** Central Automotive

**Applicant:** Anderson Engineering

**Purpose:** Construction of a new automotive repair shop

**Location:** 59<sup>th</sup> St and Osgood Ave N, Oak Park Heights, MN

**Review date:** ~~05/01/20~~ 06/04/20

**Recommendation:** Approval with three conditions ~~Revise and resubmit. See red items in checklist and the following comments:~~

1. SWPPP is incomplete (see checklist for required items)
  - a. Inspection and Maintenance records include:
    - i. 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.
    - ii. Requirements to observe, describe, and photograph any discharge that may be occurring during the inspection.
- ~~2. Demonstrate rate control with the following model corrections~~
  - ~~a. Use separate pervious/impervious runoff calculations~~
  - ~~b. Use appropriate CN to represent wooded conditions~~
  - ~~c. Tc for S-22 does not seem reasonable because it is a smaller drainage area yet the time is longer than the existing Tc. There will not be much sheet flow for this DA, mostly shallow concentrated or channel flow.~~
- ~~3. The maximum ponding depth for infiltration allowed is 18".~~
- ~~4. The site is located in a high vulnerability Drinking Water Source Management Area (DWSMA) and Wellhead Protection Area (WHPA) therefore infiltration is probated.~~
2. Dedications or easements are needed over the stormwater facility
3. Maintenance agreement is required.

## 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).

**Middle St. Croix Watershed Management Organization**

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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.
- 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?

## **Middle St. Croix Watershed Management Organization**

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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*

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

- a. Adequately sized – 2-year, 24-hour storm, minimum 1,800 feet/acre; or no calculative minimum 3,600ft<sup>3</sup>/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.

**Middle St. Croix Watershed Management Organization**

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

- 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).
- 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

### **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



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.

**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.)	
21040 sf *1.1" = 1929 cu. ft.	<b>BMP</b>	<b>Volume</b>
	BMP #1	4313 cu. ft.
<b>Total Required</b>	<b>Total Proposed</b>	<b>4313 cu.ft.</b>
<b>1929cu. ft.</b>		

**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.
- MIDS calculator submission removes 60% of the annual total phosphorous.

**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

**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.

NA None of the following conditions exist that prohibit infiltration of stormwater on the site

- a. Areas where vehicle fueling and maintenance occur.
- b. Areas with less than three (3) feet of separation distance from the bottom of the infiltration system to the elevation of the seasonally saturated soils or the top of bedrock.
- c. Areas where industrial facilities are not authorized to infiltrate industrial stormwater under an National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Industrial Stormwater Permit issued by the MPCA.
- d. Areas where contaminants in soil or groundwater will be mobilized by infiltrating stormwater.
- e. Areas of Hydrologic Soil Group D (clay) soils
- f. Areas within 1,000 feet up-gradient, or 100 feet down-gradient of active karst features unless allowed by a local unit of government with a current MS4 permit.

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

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

Pretreatment 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.

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

**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

- a. A minimum of one boring was conducted at the location of the infiltration facility for facilities up to 1,000 ft<sup>2</sup>; between 1,000 and 5,000 ft<sup>2</sup>, two borings, between 5,000 and 10,000 ft<sup>2</sup>, three borings and greater than 10,000 ft<sup>2</sup> 4 borings plus an additional boring for every 2,500 ft<sup>2</sup> beyond 12,500 ft<sup>2</sup>
- 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.

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

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

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

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 17 lbs 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.

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

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

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

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

## **WETLAND PERFORMANCE STANDARDS**

NA Direct discharge of stormwater to wetlands and all other water bodies without water quality treatment is prohibited.

### **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

- 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**

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

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

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



**EROSION & SEDIMENT CONTROL  
INSPECTION REPORT**

Rick Fedorowski  
15385 50<sup>th</sup> St N  
Baytown Township, MN

June 4, 2020  
MSCWMO Review#: N/A  
Electronic-Mailed (x)

**Project: Fedorowski Home Construction**

Dear Mr. Fedorowski:

The Middle St. Croix Watershed Management Organization (MSCWMO) conducted an inspection for erosion and sedimentation control issues at the site noted above on **5-28-2020**. The following report summarizes the field inspection findings and describes areas of compliance/non-compliance. Our inspections will be using the procedures and protocols defined in the Minnesota Pollution Control Agency (MPCA) National Pollutant Discharge Elimination System (NPDES) General Stormwater Permit for Construction Activity.

**Inspection information**

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

Rainfall amount (if applicable): 2.6" rain event two days ago

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

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

**Erosion prevention requirements**

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

**Comments:**

**Steep slopes south of house have noticeable erosion, although unlikely it was caused solely due to construction activity.**

**Mr. Fedorowski is aware of the erosion and has provided a plan for his landscaper, Lind Landscape and Design, to plant ~30 trees, with a mix of root structure types, and other plantings on the slope. Exposed soil will be covered with heavy duty (coconut fiber) type erosion control blankets with long staples (8-10"). The exposed west side of the largest gully**

was recommended to be seeded with oats or other cover plantings and secured with erosion blanketing. Work is expected to be completed within the next two weeks.

If slope continues to erode it is recommended wood chip logs or bio-logs be placed and staked onto the slope at short intervals to slow the water until vegetation can establish.

Areas around the house are expected to receive final grade, topsoil, and sod as soon as possible.

## Sediment control requirements

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

### Comments:

A woodpile “fence” contains the entire perimeter of the site. Since the logs seal to the ground, no gaps exist, and the practice was approved/recommended by the previous WMO administrator, this is an acceptable perimeter control practice. The NW corner of the site receives drainage from a part of the steep slope and would leave the site toward the intersection of Stagecoach Trl and 50<sup>th</sup> St. The entire perimeter of this area was walked and no sediment has breached the wood fence, indicating water is not leaving the site untreated. The areas outside the fence bordering Stagecoach Trl and 50<sup>th</sup> are well vegetated, providing excellent buffer filtration of any water that would leave the site.

The site also benefits from grading such that nearly all water drains back into the site and does not leave the property. Although soil cover on the site is currently sparse, the intent of the erosion control review is met since water does not leave the vast majority of the site.

## Maintenance and inspections

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

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

Comments:

## Other

	Yes	No	NA
1. Are pollution prevention management measures for solid waste, hazardous material, concrete, and truck washing in place?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Is any dewatering occurring on site?  If yes, what BMPs are being used to ensure that clean water is leaving the site and the discharge is not causing erosion or scour?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. If chemical flocculants are used, is there a chemical flocculant plan in place?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Will a permanent stormwater management system be created for this project if required and in accordance with Section 15 of the NPDES permit?  If yes, describe:  <b>2 raingardens- NW corner and SE corner, 664 sf and 1,115 sf. Per Mr. Fedorowski the raingarden SE of the house will be reconstructed to improve infiltration by Lind Landscaping, although most water from the recent rain was already drawn down.</b>  <b>The raingarden along 50<sup>th</sup> St will become multiple raingardens due to moving of the proposed driveway. The size of the additional raingardens will provide more treatment than the submitted plans.</b>  <b>An additional pond will be constructed south of the house providing additional treatment for the house and patio area.</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. If infiltration/filtration systems are being constructed, are they marked and protected from compaction and sedimentation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Description of areas of non-compliance noted during the inspection, required corrective actions, and recommended date of completion of corrective actions:  <b>Steep/exposed slopes should be stabilized. Mr. Fedorowski has a plan in place to address this in the next two weeks and is at this time compliant.</b>  <b>Other exposed soils should be covered as soon as possible. Mr. Fedorowski also has plans to grade and sod the yard as soon as possible.</b>			

7. Potential areas of future concern:

**Check raingardens when completed for infiltration rate**

**Ensure steep slopes continue to grow vegetation and are stabilized after tree and seed plantings, and blanket installations.**

## Maintenance and Compliance Summary

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Overall Site Grade: **B**

**The site can at this time, due to the timelines for work provided by Mr. Fedorowski, be considered compliant. Non-compliance may be re-assessed if work is not completed.**

**MSCWMO does not have enforcement authority. Any enforcement action related to building and erosion control measures is the responsibility of Baytown Township.**

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

Respectfully,

Aaron DeRusha  
MSCWMO Inspector  
612-816-7995  
Cc: Matt Downing, MSCWMO

### GRADE DESCRIPTIONS

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

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

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

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

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



Fedorowski 15385 50<sup>th</sup> St, 5-28-2020, slope



Fedorowski 15385 50<sup>th</sup> St, 5-28-2020, slope erosion



Fedorowski 15385 50<sup>th</sup> St, 5-28-2020, rain garden area



Fedorowski 15385 50<sup>th</sup> St, 5-28-2020, rain garden area



Fedorowski 15385 50<sup>th</sup> St, 5-28-2020, wood pile "silt fence"



# MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION

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



## Staff Report- May 2020

### Administration

- Prepared June meeting materials
- Performed required work to secure Lily Lake Grant

### Project Reviews

- Central Automotive-ACTION

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

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

**Activities This Month:** Workplan has been approved and planning has started. Working internally to identify next steps on implementation. Will be reaching out to consultants about design and coordination.

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

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

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

**Activities This Month:** Basins have been planted and grants are closed out. Awaiting final payment.

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

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

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

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

**Staff:** Bryan Pynn, WCD

### Watershed Based Funding- Lily Lake Raingardens

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

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

**Staff:** Bryan Pynn, WCD

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

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

**Activities This Month:** Coordination has begun for the tree removal and revegetation plan. Anticipate project will begin in fall.

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

### 3M PFAS Settlement MPCA Staff Reimbursement Grant

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

**Activities This Month:** Due to the COVID-19 shutdown little work has been performed.

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

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

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

**Activities This Month:** Sampling for 2020 will resume late May/early June.

**Staff:** Rebecca Oldenburg Giebel, WCD

### Water Monitoring Program

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

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

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collected from the surface of the lakes and analyzed for total phosphorus, total Kjeldahl nitrogen, and chlorophyll.

**Activities This Month:** Monitoring continues to occur at Perro Creek and Greely Street catchment. Routine visits to swap batteries and download data were completed. Lake monitoring on Lily and McKusick has continued with three samples having been collected on each lake.

**Staff:** Rebecca Oldenburg Giebel, WCD, Aaron DeRusha, WCD

### Erosion and Sediment Control Inspections

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

**Activities This Month:** A joint inspection with the Baytown Township building inspector was completed after complaints about slope erosion were received regarding the Fedorowski project at 15385 50<sup>th</sup> St N. Erosion on the steep slope behind the house was confirmed, but the condition of the site does not indicate the erosion was entirely caused by construction activity, and erosion was likely occurring before ground was broken below the slope. The site benefits from grading such that no water leaves the site, and no sediment was found to have left the site. Mr. Fedorowski provided timelines for tree/vegetation plantings and erosion blanket installation to stabilize the slope within two weeks via his landscaper, and construction of rain gardens that will provide more treatment than the submitted plans. Inspection report and photos are attached.

**Staff:** Aaron DeRusha WCD

### BMP Maintenance

**Description:** The MSCWMO has a maintenance obligation for its Capital Improvement Projects and projects funded by Clean Water Fund grants. The MSCWMO partners with the Washington Conservation District to fulfill this maintenance requirement.

**Activities this month:** Inlet and senesced vegetation clean out was completed. Vegetative maintenance has started, which focuses on removal of noxious and invasive species while promoting native species. The Greeley Gully Stabilization was inspected and its condition reported to the administrator.

**Staff:** Cameron Blake, WCD

### Meetings

- Lily Lake Delisting Strategy -Ongoing at will (remote)
- Lower St. Croix WBIF Convening Group-6/3/20