

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/81079419663>

OR

Attend by CONFERENCE CALL by dialing +1 312 626 6799 – Meeting ID 810 7941 9663

Thursday, August 13th, 2020

6:00PM

1. Call to Order – 6:00PM
 - a. Approval of Agenda
2. Approval of Minutes
 - a. Draft minutes – June 11th, 2020 **pg. 1-3**
4. Treasurer’s Report
 - a. Report of savings account, assets for August 13th, 2020
 - b. Approve payment of bills for August 13th, 2020
5. Public Comment
6. Old Business
7. New Business
 - a. Lily Lake Project Scope **pg. 4-9**
8. Grant and Cost Share Applications
 - a. Lake St. Croix Direct South Phase II CWF Application **pg. 10**
 - b. Ballweg Native Planting Cost Share Request **pg. 11**
9. Plan Reviews/Submittals
 - a. Plan Review and Submittal Summary **pg. 12**
 - i. Central Automotive - INFORM
 - b. Erosion and Sediment Control Inspection Reports **pg. 13-35**
10. Staff Report **pg. 36-38**
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, June 11th, 2020

6:00PM

Present: John Fellegly, Baytown Township; Mike Runk, Oak Park Heights; Tom McCarthy, Lake St. Croix Beach; Beth Olfelt-Nelson, St. Mary's Point; Ryan Collins, City of Stillwater; John Dahl, City of Bayport; Administrator Matt Downing; Cameron Blake, WCD. William Jepsen, member of the public.

Call to Order

The meeting was called to order at 6:05pm by Manager McCarthy.

Approval of Agenda

Administrator Downing amended the agenda to include an item after other: notice from the auditor, Peterson Company. Manager Fellegly motioned to accept the agenda and Manager Runk seconded the motion. The motion passed on a roll call vote with all in favor.

Approval of Minutes

Manager Fellegly motioned to approve the May 14th draft minutes and Manager Dahl seconded the motion. The motion passed on a roll call vote with all in favor.

Treasurer's Report

The treasurer's report was presented by Administrator Downing. The remaining checking account balance for May 2020 was \$308,146.66. First State Bank CDs were valued at \$38,549.15. The ending balance in the RBC savings account for May 2020 is \$65,073.58.

Bills to be approved this month are: Washington Conservation District (Administration): \$ 1,667.00; Washington Conservation District (Technical Services): \$2,602.50; Total: \$4,269.50. Manager Fellegly moved to accept the treasurer's report and pay the bills and Manager Collins seconded this motion. The motion passed on a roll call vote with all in favor.

Manager Fellegly asked why the balance in the bank account was so large and Administrator Downing said it was deposits for some upcoming large grant projects. Manager Dahl said he would follow up with Bayport on the second community contribution and Manager Fellegly said he would do the same with Baytown.

Public Comment

William Jepsen, a resident on Lake McKusick, explained that he was attending the meeting tonight because he was concerned about the lake and shoreline and wanted to start paying attention. Manager Fellegly inquired as to whether he was in the McKusick Lake Association to which Mr. Jepsen replied that the association fell apart due to personality conflicts. Manager Fellegly recalled that the MSCWMO finds it easier to work with HOA's or lake associations, and recalled some projects being done on Lake McKusick. Administrator Downing explained that there is monitoring done on the lake with many reports available on the MSCWMO website. He recalled projects such as shoreline plantings, in-lake work, and raingardens in the watershed.

Administrator Downing also noted that the Brown's Creek Watershed District had also completed projects with Lake McKusick included the diversion drainage project, and IESF, headcut repairs and projects with the Oak Glen Golf Course. He suggested to check both the MSCWMO and BCWD websites for more information. Mr. Jepsen said that he has seen those websites and wanted to compliment Administrator Downing on the quality and detail included in them.

2021 Draft Budget

Administrator Downing presented the board with the draft 2021 budget which was proposed to be unchanged from the 2020 budget. He reminded the board that the 2020 budget included an increase and that he felt the work that needed to be accomplished could be done without another increase in 2021. Manager Fellegly motioned to approve the draft 2021 budget and Manager Olfelt-Nelson seconded the motion. The motion passed on a roll call vote with all in favor.

Perro Creek Girl Scout Planting

Cameron Blake explained the memo associated with the third stage of the Perro Creek shoreline restoration project. Manager Dahl asked if it would be a conflict of interest for him to vote and the board didn't think it would be. Manager Fellegly motioned to approve expenditures from the MSCWMO Cost Share budget not to exceed \$1,200 for the Perro Creek Native Shoreline Restoration. Manager Collins seconded this motion and the motion passed on a roll call vote with all in favor.

Plan Review and Submittal Summary: Central Automotive

The construction of a new automotive repair shop is proposed at 59th St and Osgood Ave N in Oak Park Heights. A project application for review was received on April 14th, 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 20th, 2020 utilizing a clay lined detention basin with an iron enhanced sand filter bench to satisfy flexible treatment options. Staff recommends approval with three conditions. The first is to keep maintenance and inspection records, the second was that a dedication/easement is needed over the stormwater features, and the third is a maintenance agreement is required for the IESF bench. Manager Fellegly confirmed that the property owner is responsible for ensuring the system is maintained and functioning and asked who does that oversight. Administrator Downing explained that it's the city's responsibility as the permitting entity and that the MSCWMO is available to help if the city requests it. Manager Fellegly motioned to approve the project with the three recommendations and Manager Runk seconded the motion. The motion passed on a roll call vote with all in favor.

Erosion and Sediment Control Inspection Reports

Manager Fellegly met on site at the Fedorowski property to ensure the ESC inspector Aaron DeRusha's previous recommendations were in place. Administrator Downing explained that the property was mostly in compliance and that they are working with Baytown Township to make sure the builder addresses the remaining issues. Manager Fellegly confirmed that the timeframe

of compliance was up to the township as the permitting authority. Administrator Downing thinks the measures need to be in place shortly as vegetation is needed to prevent erosion on a steep grade. Manager Fellegly asked about the property where the stormwater is originating and Administrator Downing said the landowner has not reached out and the circumstances would only lead to a voluntary conservation practice, Manager Fellegly said he would reach out to the landowner. Manager Dahl said the photos were helpful and realized where the property was in relation to Bayport. He asked what scale the erosion problem was and Administrator Downing explained that there was erosion but due to the site conditions the soil isn't leaving the site. The property owner was not initially responsive to the ESC inspection results but when the issue was raised that it could affect the house the property owner became much more concerned.

Staff Report

Administrator Downing explained that the majority of his time has been focused on large grant projects. The Lily Lake project received the first 50% deposit and work should be starting quickly. The Lake St. Croix Beach project planning is in progress and work should start in the fall. The PFAS work from the state has not resumed yet and Administrator Downing will reach out to the consultant to ask about that progress.

The Perro Creek E. coli testing has not begun because the Florida lab that was going to be used for the analysis was shut down during COVID-19. Administrator Downing said they are working on getting the lab to accept the sample. The original sampling plan the board approved was to have samples analyzed and if the result was human origin then more samples would occur. The board recalled that last year there was a delivery error with one of the samples taken that caused the results to be unusable.

Administrator Downing is the MSCWMO representative at the LSCWD Watershed Based Funding discussions. The discussions are beginning to start up but Administrator Downing is concerned that it may be hard to reach consensus given the large group of diverse entities, especially given the remote setting of the meetings.

1W1P Updates

Manager Fellegly said the next 1W1P meeting is June 29th and it is the first meeting after the draft plan review process. The group is still meeting remotely.

Audit Report

Administrator Downing asked the board to approve the audit report so it could be signed. The deadline from the state is June 30th. Manager Fellegly said he wanted Manager Zeller to sign the report. Manager Fellegly motioned to approve the audit report and Manager Dahl seconded. The motion passed on a roll call vote with all in favor.

Adjourn

The board had consensus that they would like the next board meeting to be remote. Manager Fellegly motioned to adjourn and Manager McCarthy seconded the motion. The motion passed on a roll call vote with all in favor. The meeting adjourned at 6:45pm.

Project Name | Lily Lake Infiltration Basin Project

Date | 7/28/2020

To / Contact info | MSCWMO Board of Managers

Cc / Contact info | Matt Downing, MSCWMO Administrator

From / Contact info | Jay Michels, CPESC (EOR)
 Britta Hansen, PLA (EOR)
 Kyle Crawford, PE (EOR)

Regarding | Scope of Services – Lily Lake Infiltration Basin

Background

Middle St. Croix Watershed Management Organization (MSCWMO) was awarded a FY20 Clean Water Fund grant from the Board of Water and Soil Resources (BWSR) to implement the Lily Lake Phosphorus Reductions for Delisting project in the amount of \$513,500. The MSCWMO will have a required match amount of \$128,375 (25%) resulting in a total project cost of \$641,875. This grant will fund projects to improve water quality in Lily Lake including alum treatments and the construction of an infiltration basin in Lily Lake Park. This Scope of Services (SOS) and Work Plan is for design, engineering, and construction oversight of the Lily Lake Infiltration Basin.

Project Description

The proposed project features a large infiltration basin located in Lily Lake Park. The basin will collect low flows of stormwater running off Greeley Street from the south. The basin will provide 20,000 cubic feet of live storage and will infiltrate into the sandy soils on site. Overflow stormwater will return to the Greeley Street storm sewer. The basin is sized to accommodate the volume from a 1.1" rainfall event.

The contributing drainage area for this BMP consists of residential areas and park land with mature tree canopy cover totaling 15.2 acres. Impervious surfaces (rooftops, roadways, parking areas) make of 36% (5.5 acres) of the drainage area. In January 2018 three soil borings were conducted by American Engineering Testing Inc. utilizing continuous split spoon sampling to a depth of 14.0'. The soil borings demonstrated predominately SP soils (poorly graded sand or poorly graded sand with gravel) with a 1.0' confining layer of ML soils (silt) at 10-12' feet below the surface.

Under current conditions, stormwater from this area is discharge directly to Lily Lake via storm sewer located along South Greeley Street. Under proposed conditions, flow will be diverted from the existing storm line to the infiltration basin at Lily Lake Park.

Detailed Work Plan

The following work plan details activities proposed to implement the Lily Lake Infiltration Basin project. This work plan includes all design and engineering services to complete 100% construction documents, bidding, and construction administration for the project. It is anticipated that design of 100% construction plans and specs as well as project bidding will be completed by fall of 2020, and construction will take place in summer 2021.

Task 1: 100% Design Documents & Project Manual

This task will include advancing 60% design plans to 100% complete construction documents, including construction specifications. Design will include modifications based on input from City of Stillwater and MSCWMO staff. Specific tasks in this phase of the project include:

- Finalize 100% Construction Plans
- Prepare Construction Project Manual
- Prepare Final Statement of Quantities and Cost Estimate
- Finalize Stormwater Modeling
- Project Management and Client Communication

Estimated Hours and Cost:

109 hours = \$14,612; Mileage and equipment expenses = \$30; Total cost = \$14,642

Deliverables:

100% construction plans and specifications

Task 2: Bidding and Construction Administration

This task will include bidding the project, securing a contractor to complete the work, and performing construction administration and oversight during the construction process. Specific tasks include:

- Prepare Bidding Documents
- Advertise Project for Bid
- Answer Contractor Questions During the Bid Process and Manage Pre-Bid Meeting
- Issue Addendums as Necessary
- Tabulate Bids and Prepare Letter of Recommendation for Award
- Review Contractor Submittals
- Management Pre-Construction Meeting
- Provide Construction Benchmarks and Control (2 Visits)
- Provide Regular Construction Observation (12 Visits Assumed)
- Review and Prepare Pay Applications
- Review Site for Punchlist Items
- Provide Project Closeout Documentation
- Complete Record Drawings of Grading & Drainage Improvements

Estimated Hours and Cost:

100 hours = \$13,108; Mileage and equipment expenses = \$850; Total cost = \$13,958

Deliverables:

Project Bidding, Construction, and Record Drawings

Dedicated Team

Proposed primary EOR staff dedicated to the project and their individual roles are identified below:

- Project Manager – Jay Michels, CPESC
- Principal Oversight – Brett Emmons, PE
- Primary Design Engineer – Kyle Crawford, PE
- Landscape Architect – Britta Hansen, PLA
- Civil Technician & Field Services – Dan Mousing, PE
- H&H Modeling Support – Trevor Rundhaug, EIT

Summary

The total estimated cost for the construction phase of the Lily Lake Infiltration Basin Project Work is **\$28,600**. We recommend the Board authorize EOR to complete Tasks 1-2 contingent on execution of the BWSR grant. The tasks outlined in this memo include only the infiltration basin project. A work plan, scope, and fee proposal for the Lily Lake Alum Treatment Project will be presented separately.

Project Name | Lily Lake Alum Treatment

Date | 7-28-2020

To / Contact info | MSCWMO Board of Managers

Cc / Contact info | Matt Downing, MSCWMO Administrator

From / Contact info | Meghan Funke, PhD, PE
Britta Hansen, PLA
Jay Michels, CPESC

Regarding | Alum Treatment Dose Recommendation and Estimated Costs

EOR reviewed the June 14, 2018 DRAFT Lily Lake Internal Load Study Technical Memo from Wenck to evaluate options for a lake alum treatment in 2021. Two alum dose alternatives were recommended in the memo: Alternative 1 – apply 117 g Al/m² over lake depths greater than 9 meters (~30 ft) covering 7.6 acres, and Alternative 2 – apply 117 g Al/m² over lake depths greater than 9 m (~30 ft) and 59 g Al/m² over lake depths between 8 and 9 meters (~25-30 ft) covering 10 acres with total estimated contractor costs of \$83,500 and \$141,252, respectively.

These alum dosing alternatives were based on sediment core data collected from the deepest point in the lake and applied over a very small fraction of the total lake bottom surface area (10 out of 44 acres). Significant sediment phosphorus release has been shown to occur in sediments in shallower depths, particularly when the bottom waters in these shallower areas undergo extremely low oxygen conditions when the lake is stratified. We recommend treating at lake depths 15 feet or greater (the depth at which plants generally do not have sufficient sunlight to grow) to treat a larger fraction of the lake sediment area (19 out of 44 acres) that is potentially releasing phosphorus and contributing to degraded water quality in Lily Lake.

Based on several recent alum treatment bids received as part of past EOR alum treatment projects, EOR updated the estimated total treatment contractor costs for Wenck Alternative 1 (\$37,565) and Wenck Alternative 2 (\$43,542) plus two additional alternatives: Alternative 3 – apply 117 g Al/m² over lake depths greater than 20 feet (\$73,127), and Alternative 4 – apply 117 g Al/m² over lake depths greater than 15 feet (\$94,109). The new cost estimates based on recent alum treatment bids suggest that a much larger alum treatment is possible within the available grant budget for this project.

Additional budget is needed to cover contractor mobilization/demobilization (~\$30,000) and engineering technical assistance (68 hours plus mileage = \$10,675 for bidding, permitting, staging access coordination, contractor coordination, and treatment oversight). The technical assistance estimate assumes that WMO staff will collect daily pH measurements during the alum treatment as required by MPCA and conduct follow-up lake monitoring. Note that a formal bidding process is not required for this alum treatment as the expected total treatment cost is below the \$175,000 threshold, reducing the engineering costs originally estimated by Wenck for this treatment.

EOR recommends that the Middle St. Croix WMO Board of Managers pursue contractor quotes for EOR Alternative 4 to be applied as one treatment in 2021 and approve the associated EOR engineering costs of \$10,675, for a total project cost of **\$134,784**.

Table 1. Lily Lake Alum Treatment Dose Alternatives and Cost Estimates

Treatment Option	Treatment Depth	Area (ac)	Al dose (g/m ²)	Alum (gal)	Alum (\$)	S.A. Buffer (gal)	S.A. Cost (\$)	Chemical Costs (\$)
Wenck 1	30+ ft	7.61	117	7,074	\$13,512	3,537	\$24,053	\$37,565
Wenck 2	25-30 ft	2.4	59	1,126	\$2,150	563	\$3,828	\$5,978
	30+ ft	7.61	117	7,074	\$13,512	3,537	\$24,053	\$37,565
	25+ ft	10.02		8,200	\$15,662	4,100	\$27,880	\$43,542
EOR 3	20+ ft	14.82	117	13,772	\$26,304	6,886	\$46,823	\$73,127
EOR 4	15+ ft	19.07	117	17,723	\$33,851	8,861	\$60,258	\$94,109

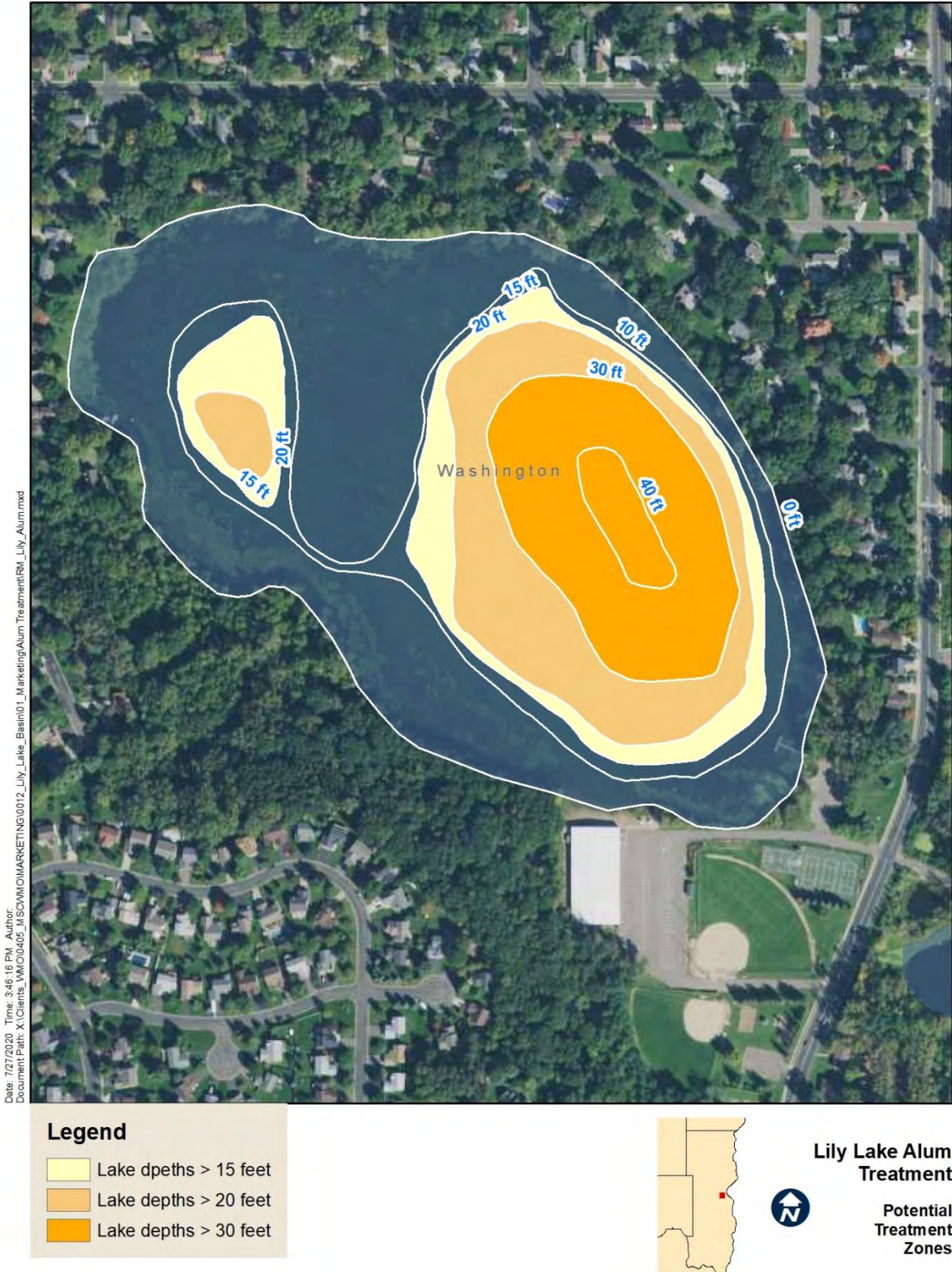


Figure 1. Lily Lake Potential Alum Treatment Zones

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MEMORANDUM

TO: Middle St. Croix WMO Board of Managers
FROM: Matt Downing, Administrator
DATE: August 3rd, 2020

RE: 8a.) Lake St. Croix Direct South (Small Communities) Phase II Grant Application

The MSCWMO was awarded a \$200,000 grant from the Clean Water Fund in 2019 for the implementation best management practices in the southern end of the watershed directly draining to the St. Croix. The goals of this grant will be accomplished with the Lake St. Croix Beach Bluff Stabilization project that is currently underway and will be closed out by the end of 2020.

The basis of the first grant application was the 2014 Stormwater Retrofit Analysis in which 19 practices were identified and ranked according to their benefit to meeting MSCWMO's goal towards the St. Croix TMDL. Since the first phase of grant funding will accomplish that grants' goal with one practice, there is plenty of work to still be performed in this area.

I am seeking board approval to submit another CWF application for FY21 for \$158,000 to continue the work that has been started in the south drainage area. If awarded, this grant would require \$39,500 in local match. The communities of Lake St. Croix Beach and Bayport have already expressed interest in potential partnership if awarded.

Recommended Board Action- Approve the submittal of a FY21 Clean Water Fund grant application for \$158,000, for work to be completed in the Lake St. Croix Direct South drainage area.

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MEMORANDUM

TO: Middle St. Croix WMO Board of Managers
FROM: Lauren Haydon, BMP Design Senior Technician, Washington Conservation District
DATE: August 7, 2020

RE: 8b.) Ballweg Native Planting – 1980 Quinlan Ave S, Lakeland

The Ballweg's are applying for the Landscaping for Habitat grant. They would like to install a 500 sq ft native planting on the corner of their property. Their property is located four blocks west of the St. Croix River, making it an ideal location for water quality improvement project.

Total Contractor Estimate: \$2305.80 (*Materials Estimate: \$582.00*)

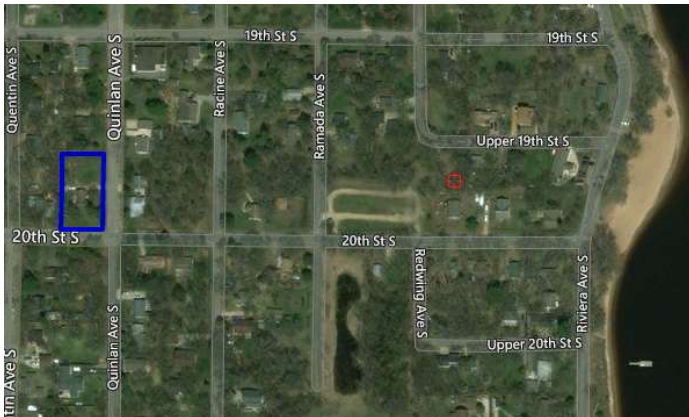
Amount of Phosphorus Removed: n/a

Cost Share Requested: \$250.00

Requested Board Action:

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

Location & Photos:





MEMORANDUM

TO: Matt Downing, Administrator
FROM: Rebecca Nestingen, PE
DATE: August 7th, 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 59th St and Osgood Ave N in Oak Park Heights. A project application for review was received on April 14th, 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 20th, 2020 utilizing a clay lined detention basin with an iron enhanced sand filter bench to satisfy flexile treatment options. The board voted for project approval with three conditions on July 6th, 2020. *Staff have since received documentation satisfying the three conditions of approval.*

**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



**EROSION & SEDIMENT CONTROL
INSPECTION REPORT**

Matt and Shannon Stordahl
16884 Island Terr
Lakeland, MN 55044

July 1, 2020
MSCWMO Permit #: **19-006**
Electronic-Mailed (x)

Project: Stordahl Home Reconstruction

Dear Mr. & Mrs. Stordahl:

The Middle St. Croix Watershed Management Organization (MSCWMO) conducted an inspection for erosion and sedimentation control issues at the site noted above on **6-30-2020**. 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): **6"-8" as indicated by NOAA radar returns on 6-29-20**

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

St. Croix River

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

Erosion prevention requirements

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

Comments:

Area adjacent to house was being actively worked prior to rain event.

Sediment control requirements

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

Comments:

Silt fence and perimeter controls had been repaired before time of site visit. Redundant perimeter controls had been effective and in good repair in this area during all prior inspections.

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 checked="" type="checkbox"/>	<input 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?

Extreme rains overwhelmed perimeter controls and created a gully from the top of the bluff to the St. Croix River following the existing tram line, washing out material along the support structures. Gully is approx. 3-4 ft deep, 200 linear ft long, and 3-4 ft wide. Up to 10 ft deep in spots. Slope is more than 40%. Sediment delta is triangular, approx. 45 ft each leg, and 50 ft along water's edge. Delta is 1-3 ft deep and composed of coarse sands. Discharge below the water line is relatively minor due to the large grain size of the sand depositing on the bank rather than the river.

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: 2 raingardens- NW corner and SE corner	<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: All damaged perimeter controls had been repaired before inspection. Basin for future rain garden should be dug asap S and SW of the house/driveway, and the spoil piles used to create a berm to direct water from the roof and driveway away from the bluff and into the basin. See item 8 and photos for details. Area S and SE of the house must be smoothed and covered with erosion blanket and/or temporary seeding such as oats. Additional biologs should be stacked at the crest of the bluff on the uphill side of the silt fence where the gully started to ensure no further over land flow can make it into the gully, and spaced at intervals uphill toward the house to serve as checks before water hits the silt fence. Further consultation with MSCWMO will be necessary to develop a plan to repair the gully. The sediment delta on the beach should be recovered if feasible and moved to the bench at the bottom of the tram. 40+% slope prohibits machinery accessing the river except by water. Do not work below the water line unless permitted by DNR.			
7. Potential areas of future concern: Monitor the gully closely and watch for further erosion, especially the crest of the bluff where the gully may start retreating toward the house.			
8. Additional details: Homeowner Matt Stordahl self-reported the gully to me the day after the rain event. Mr. Stordahl, his builder Adam Novacek, and myself assessed the gully and developed a plan to direct water away from the bluff into a temporary basin that will become a rain garden upon completion of the project. The redundant perimeter controls used prior to this extreme event had been 100% effective at preventing erosion on the bluff, but none of the measures could have been reasonably expected to withstand this event. Water from the south and west facing roofs found a path along a recently dug and re-filled utility line to the existing tram, and followed the depression of the tram support structures to the river, creating the gully. Site disturbance is below threshold for MPCA permit.			

Maintenance and Compliance Summary

Overall Site Grade: **C**

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

Respectfully,

Aaron DeRusha
MSCWMO Inspector
Cc: Matt Downing, MSCWMO

GRADE DESCRIPTIONS

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

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

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

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

F The site is in severe non-compliance.

6/30/2020
1635 Rivercrest Rd N, Lakeland
Stordahl Home Construction Gully



Washed out utility trench, water found way from S and W facing roofs into trench, under silt fence, and down the bluff.

6/30/2020
1635 Rivercrest Rd N, Lakeland
Stordahl Home Construction Gully



Basin to be dug, blue circle
Spoils used to create diversion berm, brown rectangle
Basin and diversion used to direct water away from bluff line

6/30/2020
1635 Rivercrest Rd N, Lakeland
Stordahl Home Construction Gully



Area to be smoothed, blanketed, and seeded.
Add additional biologs to provide checks across area.
Add stacked biologs on uphill side of biologs above crest of bluff.

6/30/2020
1635 Rivercrest Rd N, Lakeland
Stordahl Home Construction Gully



Utility line washout hole

6/30/2020
1635 Rivercrest Rd N, Lakeland
Stordahl Home Construction Gully

Approx 3-4 ft wide



Approx 3-4 ft deep,
up to 8 ft

6/30/2020
1635 Rivercrest Rd N, Lakeland
Stordahl Home Construction Gully



Sediment delta on upper bench above beach.

6/30/2020
1635 Rivercrest Rd N, Lakeland
Stordahl Home Construction Gully



6/30/2020
1635 Rivercrest Rd N, Lakeland
Stordahl Home Construction Gully

Approx 40 ft

Approx 40 ft

Approx 2 ft deep

6/30/2020
1635 Rivercrest Rd N, Lakeland
Stordahl Home Construction Gully



6/30/2020
1635 Rivercrest Rd N, Lakeland
Stordahl Home Construction Gully

Approx 45 ft

Approx 45 ft

Approx 50 ft

7/7/2020
1635 Rivercrest Rd N, Lakeland
Stordahl Home Construction Repairs



7/7/2020
1635 Rivercrest Rd N, Lakeland
Stordahl Home Infiltratio/sediment
basin receiving roof drainage from tile



7/7/2020
1635 Rivercrest Rd N, Lakeland
Redirected roof drainage



**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



**EROSION & SEDIMENT CONTROL
INSPECTION REPORT**

Thomas Scanlan
125 Lakeland Shores Rd
Lakeland Shores, MN 55043

July 8, 2020
MSCWMO Permit #: **UNKNOWN**
Electronic-Mailed (x)

Project: 125 Lakeland Shores Rd- Scanlan Residence

Dear Mr. Scanlan,

The Middle St. Croix Watershed Management Organization (MSCWMO) conducted an inspection for erosion and sedimentation control issues at the site noted above on **7-8-2020**. 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): 5"+ one week ago

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

St. Croix River

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

Erosion prevention requirements

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

Comments:

Bluff is not disturbed. Trail down to river shoreline is blanketed, vegetated, and stable.

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:

Biologs are present on the E and W sides of the garage construction.

Maintenance and inspections

	Yes	No	NA
1. Are all previously stabilized areas maintaining ground cover?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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:

Driveway is paved, no tracking.

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:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. If infiltration/filtration systems are being constructed, are they marked and protected from compaction and sedimentation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Description of areas of non-compliance noted during the inspection, required corrective actions, and recommended date of completion of corrective actions: None at this time.			
7. Potential areas of future concern: Continue monitoring for potential sediment moving over bluff. Site is in good condition at this time.			

Maintenance and Compliance Summary

Overall Site Grade: **A**

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 or Matt Downing at 651-330-8220 x29 if you have any questions.

Respectfully,

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

GRADE DESCRIPTIONS

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

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

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

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

F The site is in severe non-compliance.

**MIDDLE ST. CROIX WATERSHED MANAGEMENT
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Oakdale, MN 55128
Phone: (651) 330-8220 x29
www.mscwmo.org



**EROSION & SEDIMENT CONTROL
INSPECTION REPORT**

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

July 8, 2020

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

Project: 2nd Street Commercial Development- MN Party Bus

Dear Mr. Lind,

The Middle St. Croix Watershed Management Organization (MSCWMO) conducted an inspection for erosion and sedimentation control issues at the site noted above on **7-8-2020**. 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): 5"+ last week

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

St. Croix River

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

Erosion prevention requirements

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

Comments:

Site is open, but being worked by machinery.

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

Sediment control requirements

	Yes	No	NA
1. Are perimeter sediment controls installed properly on all down gradient perimeters?	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments:

Rock wall with landscaping fabric is capturing nearly all sediment. One small (less than half a cubic foot) spot of sediment escaped on the NW corner of the wall.

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:

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

Other

	Yes	No	NA
1. Are pollution prevention management measures for solid waste, hazardous material, concrete, and truck washing in place?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Is any dewatering occurring on site? If yes, what BMPs are being used to ensure that clean water is leaving the site and the discharge is not causing erosion or scour?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. If chemical flocculants are used, is there a chemical flocculant plan in place?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Will a permanent stormwater management system be created for this project if required and in accordance with Section 15 of the NPDES permit? If yes, describe: 3 raingardens providing 1,545 cf of treatment with sediment pretreatment devices.	<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: None, erosion measures are holding well given the amount of rain.			
7. Potential areas of future concern: Monitor NW corner for sediment escaping. Compaction in future rain gardens may be an issue			

Maintenance and Compliance Summary

Overall Site Grade: **A**

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 or Matt Downing at 651-330-8220 x29 if you have any questions.

Respectfully,

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

GRADE DESCRIPTIONS

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

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

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

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F The site is in severe non-compliance.

MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION

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



Staff Report- June/July 2020

Administration

- Prepared August meeting materials
- Coordinated Lily Lake Grant work plan activities
- Prepared CWF grant application
- Provided support to City of Lakeland on the Humphries Park Flood Basin

Project Reviews

- Central Automotive-INFORM

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

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

Activities This Month: Workplan has been approved and planning has started. Emmons, Olivier Resources (EOR) was tasked with providing a scope and budget for designing and managing both portions of the project: the Alum Treatment and the Filtration Basin installation. Both quotes are within the grant budget and we will start moving forward with final designs.

Staff: Bryan Pynn-WCD; Matt Downing-MSCWMO

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: Investigated retrofitting a previously installed garden on Lake Drive. Landowner has been contacted and the utility company has been contacted to establish feasibility.

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. Project was put out to bid by the city early August. Anticipate project will begin in fall.

Staff: Bryan Pynn - WCD; Matt Downing - MSCWMO

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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: First sample of 2020 was collected late July, another sample round is planned for August.

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 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 Greeley Street catchment. Routine visits to swap batteries, download data, and perform routine maintenance were completed. Lake monitoring on Lily and McKusick has continued with seven samples having been collected on each lake. The first source testing for *E. coli* occurred on Perro Creek.

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

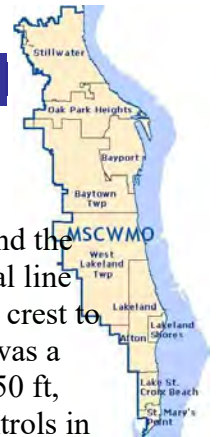
Erosion and Sediment Control Inspections

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: Inspections occurred at 1635 Rivercrest Rd (Stordahl) in Lakeland, and 2nd St Commercial (MN Party Bus) and 125 Lakeland Shores Rd (Scanlan) in Lakeland Shores. After the extreme rain event (6-8" recorded in Lakeland) on June 29,

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the homeowner at 1635 Rivercrest self-reported a blowout event on the bluff behind the house. Water coming off the roof found soft soil from a recently trenched electrical line directed toward a tram system on the bluff, and severely eroded the bluff from the crest to the toe, creating an incision four to eight feet deep. Impact to the St. Croix River was a sediment delta of coarse sand on the beach below the bluff approximately 45 ft x 50 ft, and 2 ft deep. The homeowner had appropriate and well maintained perimeter controls in place before the event, but they could not withstand such intensity. Follow up with the homeowner included immediate construction of a sediment/infiltration basin, redirecting further roof runoff away from the bluff and into the basin, repairing damaged perimeter controls and gullies above the bluff, and plans to repair the incision with geotextile lined riprap. Inspection reports and photos are attached.

Coordination with RESPEC staff was completed to update the MapFeeder database used to house and generate inspection reports for erosion control and BMP maintenance activities.

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.

June/July Activities: the Bayport basin was planted and the final stretch of the Perro Creek native shoreline restoration was completed. Vegetative maintenance is occurring at MSCWMO projects including: Greely Gully Stabilization, Stillwater Middle School IESF, Stillwater Country Club, and several smaller MSCWMO BMP's that were installed in 2019.

Staff: Cameron Blake, WCD

Meetings

- Lily Lake Delisting Strategy -Ongoing at will (remote)
- St. Croix Workshop on the Water – 6/17/20
- Stillwater Riverbank Stabilization Review – 7/13/20
- Lower St. Croix 1W1P Steering Team-7/16/20