MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION
455 HAYWARD AVENUE, OAKDALE, MINNESTOA 55082
Phone 651.330.8220 x22 fax 651.330.7747 www.mscwmo.org

Regular Meeting of the Middle St. Croix Watershed Management Organization
Washington Conservation Center, 455 Hayward Ave
Attend virtually via ZOOM: https://us02web.zoom.us/j/89999768338
Thursday, February 17th, 2022
6:00PM

1. Call to Order – 6:00PM
   - **a.** Approval of Agenda

2. Approval of Minutes
   - **a.** Draft minutes – December 9th, 2021 **pg. 1-6**

3. Treasurer's Report
   - **a.** Report of savings account, assets for February 17th, 2022
   - **b.** Approve payment of bills for February 17th, 2022

4. Public Comment

5. Old Business

6. New Business
   - **a.** PFAS Funding Options – Stu Grubb **pg. 7-9**
   - **b.** 2021 Permit Review Fee Review **pg. 10**
   - **c.** Officer Appointments
   - **d.** 2022 Community First Half Contribution Request
   - **e.** 2021 Savings Deposit **pg.11**
   - **f.** 2021 Year End Budget Summary **pg. 12**
   - **g.** 2021 Adopt-a-Drain Summary and 2022 Invoice **pg. 13-16**
   - **h.** 2021 Audit Engagement

7. Grant and Cost Share Applications
   - **a.** People's Church Reimbursement Request **pg. 17-21**

8. Plan Reviews/Submittals
   - **a.** Plan Review and Submittal Summary **pg. 22-64**
     - i. MN Party Bus-**INFORM**
     - ii. 255 2nd Street-**ACTION**
     - iii. L68 Lift Station-**ACTION**
     - iv. Mass Shoreline-**ACTION**
     - v. Chestnut Street Plaza-**ACTION**
     - vi. Baylon Boathouse-**INFORM**
     - vii. Jambois Hillside Lift-**INFORM**
   - **b.** Erosion and Sediment Control Inspection Reports **-NONE**

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9. Staff Report **pg. 65-68**
10. 1W1P Updates
11. Other
12. Adjourn

Regular Meeting of the Middle St. Croix Watershed Management Organization
Washington Conservation District
Thursday, December 9th, 2021
6:00PM
Present: John Fellegy, Baytown Township; Mike Runk, Oak Park Heights; Tom McCarthy, Lake St. Croix Beach; Beth Olfelt-Nelson, St. Mary's Point; John Dahl, Bayport; Dan Kyllo, West Lakeland Township; Ryan Collins, Stillwater; Brian Zeller, Lakeland Shores; Administrator Matt Downing; Cameron Blake, WCD; Dawn Bulera, Lake St. Croix Beach alt.

Call to Order
Manager Zeller called the meeting to order at 6:02PM.

Approval of Agenda
Manager Fellegy motioned to approve the agenda with this addition and Manager Runk seconded this. The motion carried.

Approval of Minutes
Manager Fellegy pointed out a change for the November 10th minutes- the meeting location was the Washington Conservation District's office, not the Bayport Library. Manager Runk motioned to approve the draft November 10th, 2021 board meeting minutes with that change and Manager Olfelt-Nelson seconded this motion. The motion carried.

Treasurer's Report
The treasurer's report and bills to be paid were presented by Manager Kyllo. The remaining checking account balance on December 9th for the months of October and November 2021 was $448,097.91. First State Bank CDs were valued at $38,549.15. The ending balance in the RBC savings account for October 2021 was $76,963.76.
Bills to be approved this month are: Emmons & Oliver: $943.75 total: Emmons & Oliver: $253.50 total; Washington Conservation District (Administration): $3,741.00; Washington Conservation District (Technical Services): $6,223.50; Total: $11,161.75.
The board asked what the MGM invoice in the packet was referring to and Administrator Downing explained that the MSCWMO was invoicing the management company of the apartment building (MGM) adjacent the Lily Lake project. The MSCWMO agreed to pay for most of the pipework for the Lily Lake project which also improved drainage issues for the apartment building so they agreed to contribute $5,000.
Manger Fellegy noted there was one missing 2nd half member community contribution.
Manager Runk motioned to approve the treasurer's report and Manager Collins seconded this motion. The motion carried.
Manager Zeller motioned to approve payment of the bills and Manager Runk seconded this motion. The motion carried.
Manger Fellegy asked when the year end was and where the MSCWMO was at for the 2021 budget. Administrator Downing will report on the 2021 budget at the January meeting. He noted there would be one additional invoice for December.

Public Comment
There was no public comment.

Old Business
There was no old business.

3M PFAS Reimbursement Request
The MSCWMO consultant at EOR has been reviewing documents and providing technical input on the development of the water supply groundwater model as part of the 3M PFAS settlement. Staff is requesting reimbursement from MPCA totaling $253.50 (EOR October).
Manager Zeller approved submittal of 3M PFAS reimbursement request totaling $253.50. Manager Runk seconded this and the motion passed.

2022 Insurance Renewal
The board discussed the insurance renewal and decided to continue with how the MSCWMO usually does things. Administrator Downing explained his recommendation is to not waive the monetary limits.
Manager Zeller motioned to renew the insurance as per Administrator Downing's recommendation. Manager McCarthy seconded this and the motion carried.

MSCWMO Logo Options
Administrator Downing presented the updated logo options. He took the feedback the board gave at the last meeting to the designer. He also received feedback that it can be helpful from a design standpoint to have a "square" shaped logo which is why the options are presented with both layouts. The board discussed the logo options and aspects of the designs. The board decided on the third option but using the blue color from the first logo option.
Manager Runk moved to approve this as the MSCWMO logo and Manger Zeller seconded this motion.

2021 BMP Maintenance Summary
Cameron Blake from the Washington Conservation District presented the 2021 MSCWMO maintenance report. He explained that the WCD maintenance program operates as a partnership with communities in Washington County to perform maintenance on native plantings and stormwater Best Management Practices (like raingardens and stormwater basins). He explained the scale of work performed is surficial maintenance like inlet cleanouts and vegetative maintenance, not underground structure cleanouts or major structural repairs and retrofits. This can be valuable for smaller communities who don't have the capacity or expertise to maintain these sorts of BMPs, and larger public works departments that can sometimes run out of time to address that kind of smaller scale/hand crew maintenance.
Manager Zeller explained he had been in discussion with the community of Lakeland about the need for maintenance and inspection services. The city of Lakeland already partners for these services though the WCD maintenance program. He recommended producing material to distribute explaining what work the program can do in simple terms that is easy to understand.

The board agreed this was an important program and opportunity for smaller communities. Administrator Downing distinguished between permitted practices that are not inspected through the existing MSCWMO inspection of voluntary practices.

Lily Basin Pay Request

Administrator Downing presented this agenda item. The basin installation was certified as substantially complete by Emmons Olivier Resources, Inc (EOR) as of December 1st, 2021. There are a few items left for correction and a portion of payment is being withheld until those items are resolved. The EOR Engineer and WCD staff verified that all other items were constructed according to plan and that the basin is substantially and functionally complete. Miller Excavating (the contractor), is requesting payment of $203,816.61 for the completed portions project. No previous payments have been made to the contractor. WCD staff recommend payment of the full amount requested.

Administrator Downing explained that one of the times that the MSCWMO will not be paying for at this time is the erosion control blankets that were not the correct type per the design. The incorrect blankets that were installed have plastic netting. It is not feasible to remove and replace with the correct netting so they are working on a solution. The proposed solution includes extended maintenance of the practice (from the first 2 years to 3) and the plants for free to make up the cost difference of that item in the project. Retaining the approximately $37,000 of the final payment should ensure the contractor completes the work as negotiated.

The board asked why the plastic netting can't be removed in the spring after the freeze and Administrator Downing explained that this had been discussed at length with the engineers. This would result in more harm than good for the establishment of the vegetation. It would not help the MSCWMO financially. The proposition of plants and extended maintenance will be a tangible alternative. Alternative LSCB Board Member Bulera asked whose fault this mistake was and if the contractor would be eating the cost for this oversight. Administrator Downing said he didn't receive an explanation from the contractor as to how the oversight happened. The blankets were installed by a subcontractor. But he confirmed the contractor would be providing this value back to the MSCWMO by the solution proposed. The board discussed the types of netting in erosion control blankets. The type the design specified was not plastic and would biodegrade rapidly. The plastic netting can take years to decades depending on the type of plastic.

Board Member Bulera reiterated that she felt the contractor should have to remove the netting

Manager Olfelt-Nelson motioned to approve the partial payment request of $203,816.61 to Miller Excavating for substantial completion of the Lily Lake Park Infiltration Basin Project. Manager Zeller seconded this and the motion passed with all in favor except Alternative LSCB Board member Bulera.

MPCA Flood Hazard Assessment Grant Request

Administrator Downing presented this agenda item. He explained that there is a grant available to do some assessment work for flooding. This would be a joint application with neighboring watersheds (BCWD, CLFLWD, CMSCWD). He explained that the MSCWMO doesn't have an H & H model like some watersheds do (which is a more detailed way to model flooding in a

watershed) so this grant would be a good opportunity to pay for some of the work that a model like that does. He explained that he doesn't see a downside for applying for this grant. He would not recommend the MSCWMO applying on their own but in this context it's a good opportunity. The expected match would be $2,000.
Manager Zeller asked if this information already exists in FEMA mapping and statewide available LIDAR data. Administrator Downing explained this wasn't the case. The work that could be done with this grant would analyze data from GIS, SWA's, and updated rainfall models to identify areas in the watershed that could be prone to flooding, especially useful in landlocked areas. Flooding issues like this have been occurring across the county in recent years in areas that have not been expected. Manager Zeller recalled learning more about this topic after a flooding issue in a property in Afton. He asked what watershed district was spearheading this effort and Administrator Downing explained the engineering firm for all of these watershed districts (EOR) is writing the grant but that CLFLWD had already started some of this work and BCWD and CMSCWD had planned for this kind of work farther down the road.
Administrator Downing confirmed that this kind of data would be valuable for the MSCWMO in directing where to plan for flood mitigation strategies and best management practices. The $2,000 match could come out of In Kind- existing services, or could be from the $2,000 for project contingency in the budget annually.
This would be figured out if the grant is successful. For now Administrator Downing is just asking for board approval to apply.
Manager Runk moved approval to apply for the MPCA Flood Hazard Assessment grant and Manager Olfelt-Nelsons seconded. The motion carried.

Lake St. Croix Small Communities Phase 1
Administrator Downing explained this was one of two grants used to do bluff restoration in LSCB. He asked for board approval to submit the grant for closure to BWSR and receive final payment.
Manager Zeller motioned to approve this, Manager Runk seconded, and the motion carried.

200 Chestnut-INFORM
The MSCWMO originally recommended approval of the project in December 2020 which utilized a green roof to meet volume control standards. The developers have since requested the engineer redesign the project exploring other stormwater management alternatives and a resubmittal was received on July 22nd. MSCWMO staff advised resubmittal following the MIDS alternative compliance sequencing and demonstrate volume control is infeasible onsite to pursue alternative stormwater options. The developer and applicant has since decided to revert the back to the original green roof design approved in 2020. We have been in correspondence with the engineer regarding the recalculation of the proposed water quality volume based on testing results of the water retention capacity of the green roof media. They have provided accredited testing results showing the proposed media meets volume control requirements. This project is back into compliance.

MN Party Bus-INFORM
The applicant was notified after the September MSCWMO meeting by the City of Lakeland Shores that they were not in compliance with their approved site plan and permit. City staff requested the MSCWMO take the lead on enforcement related to permit compliance. MSCWMO staff met with the applicant on September 23rd and informed them of their options. The two options were to remove the impervious and grading that were done to the conditions that were on their approved plan or revise and resubmit an application showing how the stormwater requirements for the site can be met in a different manner. The applicant retained the designer of the original site plan to make modifications and complete the resubmittal. MSCWMO was contacted on October 21st and asked clarifying questions by the designer. A partial application has been received and will be reviewed once completed. They submitted and paid for a single family review which is not correct. Once the correct application and payment is received the MSCWMO will being the review. The owner assured him he will be mailing another check and Administrator Downing will follow up with him tomorrow.

Erosion and Sediment Control Inspection Reports
There are none.

Phase II Lake St. Croix
This agenda item is not in the board packet but requires board action. The previously approved workplan for this grant included survey work done by the WCD engineer. The staff member is unable to do the work as planned due to an injury. They reached out to engineering firm SEH who gave them a cost estimate and specs for the survey. Administrator Downing will ask for clarification and adjusted specs that are standard for the kind of project being designed (10-15ft). The proposed agreement with SEH for the survey is $4,500 not to exceed $5,000. This would be paid out of the grant funding.
Manager Zeller motioned to approve the SEH survey agreement as not to exceed $5,000 for the Phase II LSC grant and Manager Fellegy seconded this. The motion passed.

Staff Report
Administrator Downing presented the staff report. Much of the material has been covered during the meeting. They are receiving final payment for some of the grants. Manager Zeller remarked that the MSCWMO has been extremely successful in leveraging grants; even up to $700,000 across some years. He stated that he finds this unique in comparison to other WMO's in how the MSCWMO's small budget has been so successful in leveraging grant funds. He asked Administrator Downing to send a grant report that he can distribute to other people to show this work. Administrator Downing will send him this.
Administrator Downing continued with the staff report. He submitted the clean water fund MCC application discussed at the last board meeting for small scale work that has been overlooked in these large grant acquisitions. There are some action plans and designs being completed. This includes work to expand the existing LSCB restoration up the shoreline. Another project this includes is enhancing the buffer along a dirt road in Bayport by Perro Creek. Another project could be some restoration work in St. Mary's Point.

1W1P Updates
Manager Fellegy asked Administrator Downing where the process was at. Administrator Downing agreed that there had not been much activity for the Policy Committee. He explained that there has been activity on the staff level in the advisory committee and once some of the implementation items are implemented there will be policy meetings again.

Other
Manager Olfelt-Nelson asked where the planning process was at for the Xcel Energy Allen S. King Power Plant closure. Manager Zeller explained that he receives the after meeting summaries but that Manager Runk probably knows more about the situation. Manager Runk said they were told a report will be coming in January. Manager Zeller said he could send along the summary emails he receives to Administrator Downing for distribution. Manager Runk said they are looking at money from the state to connect the area with utilities to see how many acres are developable. Oak Park Heights hosted a meeting with people form the state legislature involved with funding. The board acknowledged that whatever development is planned will impact the river and communities downstream. Manager Runk explained the subsection would remain after the plant is demolished so the utility structure can still be used for renewable energy transportation. The next meeting is December 15th. Manager Runk explained that there is a lot of pressure on Oak Park Heights because the plant generates 34% worth of the city's budget in taxes. The loss in revenue will have a ripple effect. Commercial development is taxed at 3-4 times that of residential in the perspective of replacing that lost revenue.

Adjourn
Manager Zeller motioned to adjourn the meeting and Manager Fellegy seconded this. The meeting was adjourned at 6:50pm.

Minnesota 3M PFC Settlement
Program Goals (Version 3.0)
March 30, 2019

Background

The State of Minnesota's 2018 Agreement and Order (Agreement) with 3M Company (3M) establishes the 3M Grant for Water Quality and Sustainability Fund (Grant). The Minnesota Pollution Control Agency (MPCA) and the Minnesota Department of Natural Resources (DNR) will use the Grant for projects that are reasonable and necessary to achieve the purposes of the Agreement, based on the following priorities:

1. First and highest priority: Enhance the quality, quantity, and sustainability of the drinking water in the East Metropolitan Area. The goal of this highest priority work is to ensure clean drinking water in sufficient supply to residents and businesses in the East Metropolitan Area to meet their current and future water needs. Examples of projects (not listed by preference) may include, but are not limited to, the development of alternative drinking water sources, the treatment of existing water supplies, water conservation and efficiency, open space acquisition (as related to drinking water supply), and groundwater recharge. For individual households, projects may include, but are not limited to, connecting those residences to municipal water supplies, providing individual treatment systems, or constructing new wells. In selecting and performing activities under this priority, the State will prioritize water supplies where health based values, health risk limits, and/or health risk indices for perfluorochemicals [PFCs, also referred to as per- and polyfluoroalkyl Substances (PFAS)] are exceeded.
2. Second highest priority: Restore and enhance aquatic resources, wildlife, habitat, fishing, resource improvement, and outdoor recreational opportunities in the East Metropolitan Area and in downstream areas of the Mississippi and St. Croix Rivers. Projects may include, but are not limited to, aquatic habitat and water resource protection and restoration, terrestrial and water trails, boat ramps and/or fishing piers, restoration of wildlife habitat, and other terrestrial conservation and recreation improvements. This priority will be addressed after the MPCA and the DNR have reasonably achieved the goal set forth under Priority 1, with the exception of up to $20 million of Grant funds to which the MPCA and the DNR have immediate access.
3. Third highest priority: Fund residual, statewide water resources, habitat restoration, open space preservation, recreation improvements, and other sustainability projects. This priority will only be addressed if any portion of the Grant remains after the MPCA and the DNR have reasonably achieved the goals set forth under Priorities 1 and 2.

Purpose

This document presents a set of goals to guide project planning and implementation under the Grant. These goals build upon the priorities in the Agreement and help provide a common understanding of success. The goals include long-term program goals as well as operational goals focused on specific aspects of planning and implementation. These goals were developed based on input from the Government and 3M Working Group and the Citizen – Business Group.

Long-Term Program Goals

The program goals present the long-term vision of success under the Grant. They are aligned with, and organized by, the priorities in the Agreement. At this time, only goals for Priorities 1 and 2 are described. If funding remains after the MPCA and the DNR have reasonably achieved the goals set forth under Priorities 1 and 2, goals under Priority 3 would be developed.

Priority 1 – Drinking Water Quality, Quantity, and Sustainability

- Provide clean drinking water to residents and businesses to meet current and future needs under changing conditions, population, and health-based values.
- Protect and improve groundwater quality.
- Protect and maintain groundwater quantity.
- Minimize long-term cost burdens for communities.

Priority 2 – Natural Resource Restoration, Protection, and Enhancement

- Restore, protect, and enhance aquatic resources, wildlife, and habitat.
- Reduce fish tissue contamination and remove PFAS-based fish consumption advisories.
- Improve and enhance outdoor recreational opportunities.

Operational Goals

The operational goals are intended to support efficient and effective achievement of the long-term program goals. These operational goals are organized into categories of planning, implementation, governance, public outreach, and monitoring/evaluation/learning.

Planning Goals

- Seek a combination of projects that benefits all affected communities.
- Appropriately consider projects that transcend jurisdictional boundaries within the East Metropolitan Area.
- Appropriately consider projects that incorporate the needs of individual drinking water well owners as well as larger municipal or other drinking water supply systems.
- Rely on science- and evidence-based decision making and technological advances to achieve priorities and evaluate options.

- Seek cost-effective projects that maximize benefits (such as cost-sharing opportunities and adding relevant project components to other planned projects).
- Achieve short- and long-term fiscal responsibility (such as employing smart investment strategies, leveraging funds, and allocating funds for future needs).
- Seek to reduce environmental justice health effects, avoid increasing such effects, and enhance access to and use of natural resources for disadvantaged populations.
- Employ procedures that include consideration of stakeholders' input throughout the project selection process.

Implementation Goals

- Act with an appropriate sense of urgency, utilizing existing information and analyses to the extent possible.
- Utilize new leading technologies and leverage/incorporate existing infrastructure to the extent feasible.
- Address multiple needs with a combination of strategies and approaches.
- Achieve a process that can serve as a model for other communities facing similar issues.

Governance Goals

- Develop a clear planning and decision-making process (such as a process for project evaluation and approval, funding allocation).
- Respect roles and responsibilities of relevant decision-making authorities.
- Respect and carefully consider recommendations provided by the groups to the MPCA and the DNR.
- Ensure that expenditure tracking is transparent and meets all state auditing requirements.

Public Outreach Goals

- Encourage public input and participation in the process.
- Ensure the public is informed of the process and convey information accurately and in a timely manner.
- Ensure public transparency about decision-making.

Monitoring/Evaluation/Learning Goals

- Develop measurable objectives, and evaluate progress against them.
- Employ adaptive management practices of monitoring, assessing progress towards goals, and adjusting processes to achieve goals.
- Provide education to the public about drinking water sources, treatment, and conservation.

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MEMORANDUM

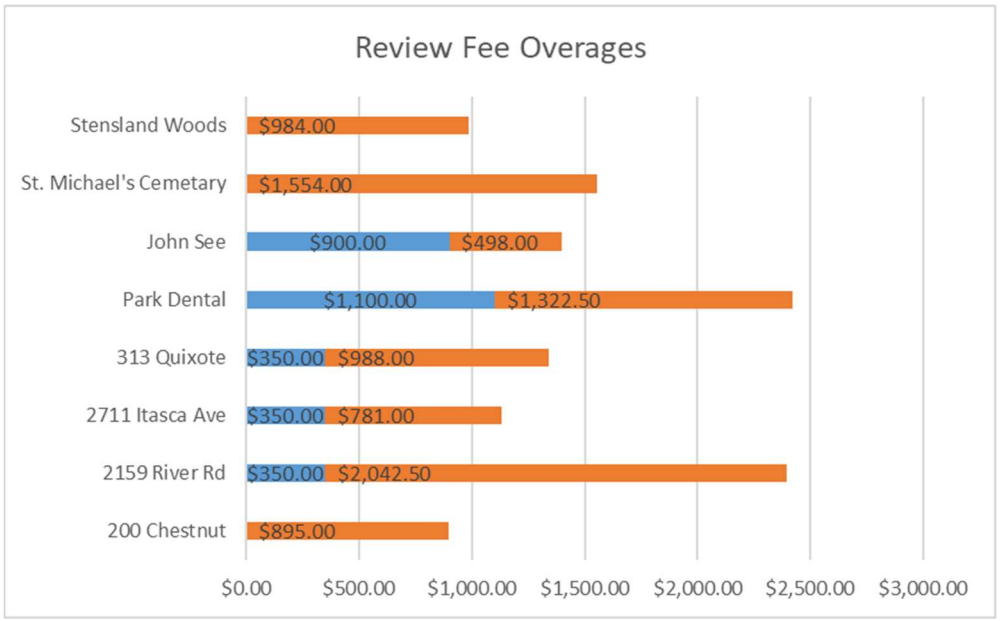
TO: Middle St. Croix WMO Board of Managers
FROM: Matt Downing, Administrator
DATE: December 29th, 2021

RE: 6a.) 2021 Permit Review Workload and Revenue Analysis

The MSCWMO conducts reviews of building permits submitted to member communities and recommends steps to be taken to ensure compliance with the MSCWMO standards that have been adopted by these communities. To accomplish this task, the MSCWMO budgeted $5,040 in 2021 and requires a review fee by non-public entity applicants. The board has approved a fee schedule that scales with the size and scope of proposed projects to offset the cost of the review.

2021 was an above average year for review workload with $16,668 of labor costs were incurred. Review fees totaling $5,550 have been secured, the associated review costs were $14,841.50 resulting in a $9,341.50 deficit. The remaining deficit was from time spent where no application has been formally received, or on reviews of public entity projects.

Policy set by the Board in 2021 was overages in review time over $500 to be presented for approval to invoice. If the decision is made to request additional fees to cover review costs, the MSCWMO will send a request to the permitting entity (community) for the difference in fee vs. actual total cost. A summary graph has been prepared detailing the fee vs. actual total cost for each project review invoice recommended in 2021. Total revenue recommended for recovery is $9,291.



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MEMORANDUM

TO: Middle St. Croix WMO Board of Managers
FROM: Matt Downing, Administrator
DATE: December 29th, 2021

RE: 6e.) 2021 Budgeted Savings Deposit

The 2021 MSCWMO Budget included $5,750 for deposit into savings for future costs including water monitoring equipment replacement and repair, and watershed management plan update costs. None of these funds were expended in 2021 and the entire balance can be deposited.

I am requesting board approval to deposit the funds into the RBC savings account.

Recommended Board Action- Approve Staff to Deposit $5,750 from the 2021 Budget to Savings

MSCWMO 2021 Budget Tracker

MSCWMO 2021 Budget Tracker	2020 MSCWMO Budget	2021 MSCWMO Budget	January	February	March	April	May	June	July	Aug	Sept	October	November	December	Encumbered	Total to date	% to date
Administration - General	$31,160	$31,160	3,042.00	3,762.50	2,058.00	1,170.00	2,896.50	2,437.50	1,228.50	4,072.50	3,459.00	1,911.00	3,373.50	3,297.00		32,708.00	105%
Accounting	$1,550	$1,550	144.00	144.00	144.00		144.00	144.00		144.00	144.00		202.50	183.00		1,393.50	90%
Legal Fees - General	$1,000	$1,000					366.00									366.00	37%
Audit	$2,100	$2,100						3,000.00								3,000.00	143%
Insurance & Bonds	$2,600	$2,600					2,282.00									2,282.00	88%
Office supplies/equipment/postage	$625	$625														0.00	0%
Minutes/Clerical	$1,180	$1,180	132.00	198.00	132.00		198.00	198.00		198.00		198.00	132.00			1,386.00	117%
Copying/printing/reproduction/minutes	$625	$625														0.00	0%
Subtotal Expenditures	**$40,840**	**$40,840**	**3,318.00**	**4,104.50**	**2,334.00**	**1,170.00**	**5,886.50**	**5,779.50**	**1,228.50**	**4,414.50**	**3,603.00**	**2,109.00**	**3,708.00**	**3,480.00**		**41,135.50**	**101%**
PROJECT FUNDS																	
Project Contingency	$2,000	$2,000														0.00	0%
Engineering - Project	$5,700	$5,700														0.00	0%
Development Plan Reviews	$5,040	$5,040	2,001.00	2,514.00	1,624.50	3,160.50	2,697.00	1,834.50	1,243.50	1,210.50	3,493.50	2,496.00	2,595.00	418.50		25,288.50	239%
Erosion Monitoring Program	$2,250	$2,250			165.00	33.00	330.00		703.50	1,042.50	297.00	412.50				2,983.50	133%
BMP Cost-Share (general)	$20,000	$20,000						270.71		250.00				15,000.00		15,520.71	78%
BMP Program Administration	$27,768	$27,768	3,049.50	2,146.00	2,997.00	2,586.00	2,126.50	3,581.75	1,616.00	3,057.00	3,453.50	1,461.00	2,253.00	754.50		29,081.75	105%
Community TA	$3,000	$3,000		543.00	670.50			804.75	390.00				925.50			3,333.75	111%
Water Resource Educator	$6,300	$6,300				1,575.00		1,575.00				1,575.00		1,575.00		6,300.00	100%
Website	$800	$800	117.00	186.40	40.00		98.50	50.00			165.00	72.00	33.00	198.00		959.90	120%
Inspection and Track Database	$900	$900														0.00	0%
Total Water Monitoring	$22,000	$22,000				4,919.66			4,767.48			5,401.32		4,858.42		19,946.88	91%
Future projects																	
Savings-Water Monitoring - Set aside for equipment replacement & Monitoring Costs	$750	$750												750.00		750.00	100%
Savings-WMP Update	$5,000	$5,000												5,000.00		5,000.00	100%
Subtotal Expenditures	**$101,508**	**$101,508**	**5,167.50**	**5,389.40**	**5,497.00**	**12,274.16**	**5,252.00**	**8,116.71**	**8,720.48**	**5,560.00**	**7,409.00**	**11,417.82**	**5,806.50**	**28,554.42**		**109,164.99**	**108%**
TOTAL ANNUAL BUDGET	**$142,348**	**$142,348**															

RECIEVABLES	20 Roll Over	21 Allocated	January	February	March	April	May	June	July	August	September	October	November	December		Undeposited	Total
Development Review Fees						1,050.00			700.00		700.00		2,200.00	900.00			$5,550
3M PFAS			2,241.00				676.00				608.25			1,183.00			$4,708
CWF Lake St. Croix Direct South						80,000.00											$80,000
CWF Lake St. Croix Direct South P2						79,000.00											$79,000
Lily Lake Delisting																	$0
																	$0
																	$0
																	$0
Subtotal Recievables			**$2,241**	**$0**	**$0**	**$160,050**	**$676**	**$0**	**$700**	**$0**	**$1,308**	**$0**	**$2,200**	**$2,083**	**$0**	**$0**	**$169,258**

TOTAL RECIEVABLES		**$90,258**

TOTAL BUDGET (Annual+ Recievables)	**$232,606**

TOTAL EXPENDITURES (Annual+Recievables)	**$ 150,300.49**

Adopt-a-Drain in Middle St. Croix, 2021

Annual Report

21
new participants in 2021

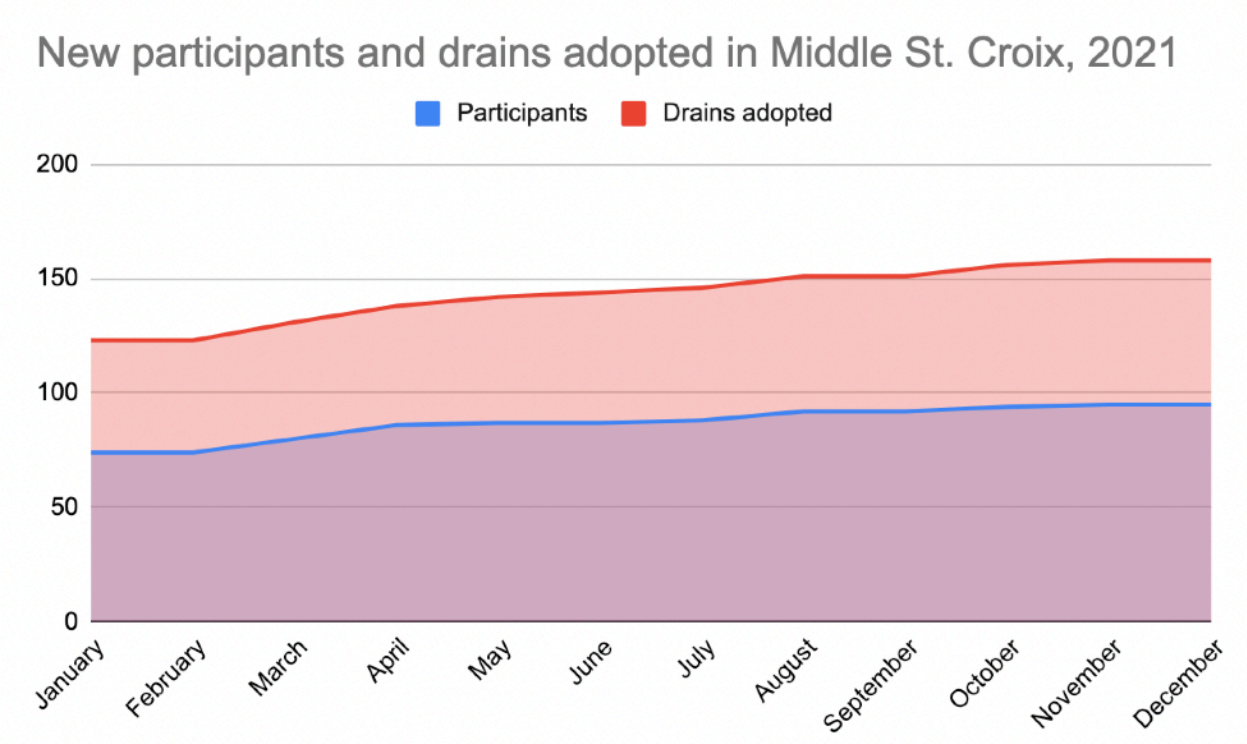
35
drains adopted in 2021



Adopt a Storm Drain
adopt-a-drain.org

95
total participants

158
total adoptions

2021 Reporting Data

23 Middle St. Croix participants reported cleanings, which represents 24.2% of all participants in the watershed.

Middle St. Croix participants collected 578.7 lbs of debris from their adopted storm drains in 2021.

Debris Type	Amount (lbs)
Brown leaves	286.2
Grass and green leaves	74.2
Sediment and dirt	203.2
Trash	15.1
Salt	0.0

In 2020, the total amount reported was 815 lbs.

Month	New participants	Drains adopted	Debris collected (lbs)	Time spent (hours)
January*			125.0	8.1
February			35.0	0.4
March	6	8	32.5	2.1
April	6	7	24.0	0.8
May	1	4	19.5	0.4
June	0	2	11.5	0.9
July	1	2	2.4	0.8
August	4	5	0.1	0.0
September			161.5	1.1
October	2	5	70.0	1.1
November	1	2	97.2	4.8
December				
TOTALS	**21**	**35**	**578.7**	**20.5**

*January total includes year-end reports from 2020.

Geographic Breakdown: City and Subwatershed

Drains adopted: Cumulative total
Debris collected: 2021 data only.

City	Drains adopted	Debris collected (lbs)	Time spent (hours)
Stillwater	121	533.8	18.4
Oak Park Heights	20	12	0.5
Bayport	10	25.4	0.4
West Lakeland Twp.	7	7.5	1.2

Subwatershed	Drains adopted	Debris collected (lbs)	Time spent (hours)
Lake St Croix Direct North	59	241.2	11.3
McKusick Lake	34	105.6	4.2
Lily Lake	30	199.0	3.5
Lake St Croix	19		
Middle St. Croix Wetlands	9	7.9	1.3
Perro Creek	6	25.0	0.3
Market Place Pond	1		

METRO WATERSHED PARTNERS

MINNESOTA WATER
LET'S KEEP IT CLEAN

INVOICE

651-523-2812
jlarson25@hamline.edu

Metro Watershed Partners
Hamline University
1536 Hewitt Ave. MS-A1760
Saint Paul, MN 55104

Attention: Matt Downing
Middle St Croix WMO
455 Hayward Avenue
Oakdale, MN 55128
Date: 12/17/21

Project Title: Clean Water Minnesota

Description	Cost
2022 Membership: Clean Water MN and Adopt-a-Drain	$500.00
TOTAL	$500.00

Benefits of membership

- You and your colleagues are invited to attend our monthly meetings, to network and share information with other watershed education professionals, and to hear monthly speakers on topics relevant to our work. The Watershed Partners meet on the second Wednesday of the month from 9 – 11am. Right now all meeting are held on Zoom.
- You and your colleagues are invited to be added to our listserv on Mobilize, where you can receive meeting notifications and partner updates, and send messages to, and receive announcements from, other partners. If you would like to be added to Mobilize, please email Jana Larson (jlarson25@hamline.edu) and request to be added.
- Your organization will be listed as a supporting partner on cleanwatermn.org/about-us
- Your organization will be listed as a supporting partner on adopt-a-drain.org whenever someone clicks on a drain in your service area, and on email communication to adopters in your area.
- You will have access to an administrative portal on Adopt-a-Drain.org that allows you to access data about drains and program participants in your area.
- You will receive an annual report that includes summary data about drains and program participants in your area.
- You are able to access print resources to promote Adopt-a-Drain to residents in your area here: https://www.cleanwatermn.org/partners/adopt-a-drain-resources/ (password: CleanWater)
- Portable educational exhibits are available for checkout. Find more information at: https://www.cleanwatermn.org/partners/
- For an additional fee, participants in your area can receive yard signs and a printed "welcome kit" in the mail. Please contact Jana Larson for more information.

Duration of service: January 1 - December 31st, 2022. Unspent funds will rollover to support program activities in 2023.

MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION
455 Hayward Avenue N. Oakdale, MN 55128
Phone 651.330.8220 x22 fax 651.330.7747 www.mscwmo.org

MEMORANDUM

TO: Middle St. Croix WMO Board of Managers
FROM: Tara Kelly, WCD Staff
DATE: January 27, 2022

RE: **7a.) People's Church Landscaping for Habitat Planting - Cost Share Application**

In November 2021, the MSCWMO Board of Managers approved cost share reimbursement of $500 for the People's Church native prairie restoration project in Bayport.

The Peoples Church of Bayport has completed the restoration of 2 acres of native prairie located at on the South side of 5th Avenue, across from the Bayport Fire Station. The site was originally restored with funding from the Board of Water and Soil Resources Capacity funding and the MSCWMO Water Quality grant. Part of this larger restoration was damaged when a neighbor drained a low area of his property and discharged the runoff through the restoration. The neighbor graded and seeded the damaged area two years ago, but it has become clear the seed that was used was turf grass seed and not prairie seed.

The members of People's Church have worked to restore this area. The site was treated with herbicide this summer and the prairie seed was seeded into the soil this fall. The cost share was used to cover the cost of the seed for this area, totaling $304.41. Staff recommend approval of reimbursement in the amount of $301.41.

Example Motion

Motion Board Manager 1, second Board Manager 2 to approve a cost share reimbursement in the amount of $301.41 for the People's Church Prairie Restoration.

Paul Spilseth
Peoples Congregational Church
4283 McDonald Dr
Stillwater, Mn 55082
November 5, 2021

Tara Kelly
Middle St. Croix Watershed
455 Hayward Ave
Oakdale, Mn 55128

Dear Tara,

Enclosed are receipts from our reseeding project at Peoples Park in Baytown. The seed cost $304.41 and we documented 23 hours of volunteer time.

Thank you for your assistance with this project. I am confident that it will be successful

Sincerely,

Paul Spilseth

Table 1

Date	To whom	Costs	In kind	People	Hours	Total Hours
10/18/21	Minnesota Native Landscapes	$304.41				
10/18/21			Soil preparation	3	2	6
10/25/21			Soil preparation	3	1	3
10/29/21			Seeding	7	2	14
						0
						0
		$304.41	Total	13	5	23

From: **MNL** bre.bauerly@mnlcorp.com
Subject: Your MNL: Heal the Earth order has been received!
Date: October 18, 2021 at 8:04 AM
To: spils@mac.com

Thank you for your order

Hi Paul,

Just to let you know — we've received your order #12657, and it is now being processed:

[Order #12657] (October 18, 2021)

Product	Quantity	Price
MNL Upland Dry Prairie Mix - 1/4 Acre Shortgrass	1	$270.00
Subtotal:		$270.00
Shipping:		$13.50 via Rate
Tax:		$20.91
Payment method:		Credit Card (Stripe)
Total:		$304.41

Billing address

Shipping address

Paul Spilseth
People's Congregational Church
4283 McDonald Dr
Stillwater, MN 55082
6512716742
spils@mac.com

Paul Spilseth
People's Congregational Church
4283 McDonald Dr
Stillwater, MN 55082
6512716742

Thank you for ordering on MNL's online shop. We are excited to share the joys of native plants and seeds with you!

Plants are shipped weekly on Tuesday and are generally delivered in 1-3 business days after leaving the greenhouse.

Seed orders are currently taking under 5 business days to process, and ship out once they are mixed and ready.

You will receive an email when your order is shipping. Shipping will generally take 1-3 days to arrive to your address.

For seeding and planting tips, please enjoy our How To Video:
https://mnnativelandscapes.com/how-to-seed-and-plant-with-mnl/

All orders will be shipped via Speedee Delivery. A note will be sent with the package tracking information.

MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION
455 Hayward Avenue N. Oakdale, MN 55128
Phone 651.330.8220 x22 fax 651.330.7747 www.mscwmo.org

MEMORANDUM

TO: Matt Downing, Administrator
FROM: Rebecca Nestingen, PE
DATE: February 4, 2022

RE: 8a) 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):

- **MN Party Bus.** The applicant was notified after the September MSCWMO meeting by the City of Lakeland Shores that they were not in compliance with their approved site plan and permit. City staff requested the MSCWMO take the lead on enforcement related to permit compliance. MSCWMO staff met with the applicant on September 23rd and informed them that their options were to:
    - Remove the impervious and grading that were done to the conditions that were on their approved plan
    - **OR**
    - Revise and resubmit an application showing how the stormwater requirements for the site can be met in a different manner

  The applicant retained the designer of the original site plan to make modifications and complete the resubmittal. The resubmittal was reviewed and did not meet MSCWMO design standards to the applicant was requested to revise and resubmit. The designer has requested assistance with design from MSCWMO.
- **255 2nd Street.** Twin Cities Habitat for Humanity submitted a project review application on December 16th, 2021 for a single family residential home at 25 2nd Street, Bayport, MN. The project is outside of the St. Croix Riverway and does not construct or reconstruct more than 6,000 square feet of impervious surfaces therefore permanent stormwater management BMPs were not required. An erosion and sediment control plan meeting the standards of MSCWMO was provided on February 2, 2022. *MSCWMO staff recommends project approval.*
- **L68 Lift Station Restoration Project.** Metropolitan Council Environmental Services (MCES) submitted a project review application on January 6th, 2022 for landscape restoration at the lift station L68 site at 498 Maine Street South, Bayport, MN. The project is within the St. Croix Riverway but does not add or reconstruct any impervious therefore permanent stormwater management BMPs were not required. Disturbance of existing vegetation and ground cover triggered the project review and requires an erosion and sediment control (ESC) plan. Minor amendments are needed to the ESC plan to meet MSCWMO standards. *MSCWMO staff recommend project approval with the one condition that the lacking ESC plan items are addressed.*
- **Mass Project.** Cates Fine Homes submitted a project review application on January 12th, 2022 for a shoreland stabilization project at 1145 Quentin Ave S, Lakeland, MN. The project is within the St. Croix Riverway but does not add or reconstruct any impervious therefore permanent stormwater management BMPs were not required. A project review is triggered because it involves filling of more than 100 cubic yards of material and requires and ESC plan. Minor amendments are needed to the ESC plan to meet MSCWMO standards and details of proposed vegetation upslope of riprap is

incomplete. *MSCWMO staff recommend project approval with the two condition that the lacking ESC plan items are addressed and upslope vegetation details are provided.*

- **Chestnut Street Civic Plaza.** TKDA on behalf of the City of Stillwater submitted a project review application on January 17th, 2022 for the conversion of Chestnut Street between Main Street and Lift Bridge concourse to a non-motorized plaza. The project reconstructs 0.7 acres of impervious and utilizes soil cells to provide the stormwater treatment for the project. A rate control analysis was not required since the overall impervious area is reduced and the improved hydrological condition will lead to a reduction in peak discharges. A 96-inch underground detention system further reduces peak discharges. *MSCWMO staff recommends conditional approval of the project with conditions to demonstrate soil cells meet flexible treatment option requirements and design/construction standards, SWPPP is amended to meet MSCWMO standards, and a proposed maintenance agreement is provided.*
- **Baylon Boathouse.** Solution Blue submitted a project review application on January 19th, 2022 for a boathouse reconstruction at 165 Lakeland Shores Road, West Lakeland Township, MN. The project is within the St. Croix Riverway but does not add any impervious therefore permanent stormwater management BMPs were not required. There are a number of concerns with the project not meeting the Washington County Lower St. Croix Bluffland and Shoreland Management ordinance and Floodplain Management ordinance. The project will likely require a variance and conditional use permit from the County Zoning Administrator. The ESC plan is also lacking and does not meet all MSCWMO standards. *MSCWMO staff recommends revise and resubmit to meet ESC standards and demonstrate compliance or obtain variances to County Development Code.*
- **Jambois Hillside Lift.** The property owner Louis Jambois submitted a project review application on January 25th, 2022 for a hillside lift at 447 Quixote Ave N, Lakeland, MN. The project is within the St. Croix Riverway but does not add more than 500 square feet of impervious therefore permanent stormwater management BMPs were not required. A MSCWMO project review is triggered by construction within the bluffline. An ESC plan meeting MSCMWO standards was not provided. *MSCWMO staff recommends revise and resubmit with an ESC plan meeting MSCWMO standards.*

MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION

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

February 4, 2022

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

RE: 255 2nd Street N

Dear Mr. Bell,

The Middle St. Croix Watershed Management Organization (MSCWMO) received required submittal items application on December 16th, 2021 for a single family residential home at 255 2nd Street within MSCWMO boundaries and in the City of Bayport. The proposed project qualifies for full review under the MSCWMO 2015-2025 Watershed Management Plan (WMP). The project, as submitted, contains sufficient information to determine conformance with the Policies and Performance Standards contained within Section 7.0 of the MSCWMO Watershed Management Plan. **The MSCWMO recommends approval of the project.**

This approval does not constitute approval by the City of Bayport. The enclosed checklist contains detailed information on project review and the policies and performance standards of the WMP. Please contact me at 651-330-8220 x22 or mdowning@mnwcd.org if you have any questions.

Sincerely,

Matt Downing
Administrator
Middle St. Croix Watershed Management Organization

MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION
455 Hayward Avenue, Oakdale, MN 55128
Phone 651.330.8220 x22 fax 651.330.7747 www.mscwmo.org

MSCWMO PROJECT REVIEW- SINGLE LOT RESIDENTIAL SUBMITTALS

This document is for guidance. Applicants should consult the MSCWMO Watershed Management Plan for specific requirements. MSCWMO may request other items during the review process in addition to those listed.

MSCWMO Project Review ID: 21-013

Project Name: 255 2nd Street N

Applicant: Twin Cities Habitat for Humanity

Purpose: Single Family Residential

Location: 255 2nd Street N, Bayport, MN

Review date: 02/03/2022

Recommendation: Approve.

ALL SUBMITTALS MUST CONTAIN THE FOLLOWING ITEMS:

☒ 1. Review Fee: Single lot residential $350 fee.

☒ 2. Grading plan showing grading limits, existing and proposed contours related to NAVD 1988 datum (preferred) or NGVD 1929.

☒ 3. Location of existing and proposed permanent structures.

NA 4. Ordinary High Water (OHW) elevations and location of all existing water bodies.

NA 5. Location of all bluff lines.

☒ 6. Lowest floor elevations of structures built adjacent to stormwater management features and other water bodies must be a minimum of two feet above the 100-year flood elevation.

☒ 7. Delineation of existing wetland, shoreland, ordinary high water levels, drain tiling, and floodplain areas.

NA 8. Details of proposed buffer upslope of water resources including size and vegetation characteristics (when applicable).

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

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

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

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

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

E. Final Stabilization
   i. For residential construction only, individual lots are considered final stabilized if the structures are finished and temporary erosion protection and downgradient sediment control has been completed.
   ii. Grading and landscape plans shall include soil tillage and soil bed preparation methods that are employed prior to landscape installation to a minimum depth of 8" and incorporate amendments to meet Minnesota State Stormwater Manual predevelopment soil type bulk densities.
      1. Observe minimum setbacks for areas within the dripline of existing trees, over utilities within 30 in of the surface, where compaction is required by design and inaccessible slopes.

NA 10. Details of proposed structural stormwater practices (Meets Minnesota Stormwater Manual guidelines) – Not Applicable <6,000 sf new/reconstructed impervious (outside St. Croix Riverway)

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

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

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

Volume Retention Required (cu. ft.)	Volume Retention Provided (cu. ft.)
XXXX sf * 1.1"= XXX cf XXX cf total required	**BMP #1 Volume =** **BMP #2 Volume =** **Total =**

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

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

MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION

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

February 4, 2022

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

RE: L68 Lift Station Restoration

Dear Mr. Bell,

The Middle St. Croix Watershed Management Organization (MSCWMO) received required submittal items application on January 6th, 2022 for landscape restoration at the lift station L68 site at 498 Maine Street South within MSCWMO boundaries and in the City of Bayport. The proposed project qualifies for full review under the MSCWMO 2015-2025 Watershed Management Plan (WMP). The project, as submitted, contains sufficient information to determine conformance with the Policies and Performance Standards contained within Section 7.0 of the MSCWMO Watershed Management Plan. **The MSCWMO recommends approval of the project with one condition:**

1. The lacking erosion and sediment control (ESC) plan items are addressed (see review checklist)

This approval does not constitute approval by the City of Bayport. The enclosed checklist contains detailed information on project review and the policies and performance standards of the WMP. Please contact me at 651-330-8220 x22 or mdowning@mnwcd.org if you have any questions.

Sincerely,

Matt Downing
Administrator
Middle St. Croix Watershed Management Organization

MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION
455 HAYWARD AVE. N.
OAKDALE, MINNESTOA 55128
Phone 651.330.8220 x22 fax 651.330.7747 www.mscwmo.org

PROJECT REVIEW

MSCWMO Project Review ID: 22-001

Project Name: L68 Lift Station Restoration Project

Applicant: Michael Villari, PE – MCES Project Manager

Purpose: Installation of native landscaping and removal of non-native trees and shrubs

Location: 498 Maine Street South, Bayport, MN

Review date: 01/27/2022

Recommendation: Approve with one condition:

1. Highlighted items are added to and addressed in the erosion and sediment control plan.

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.

NA Permanent Stormwater Management System in compliance with the requirements of the NPDES SDS Construction Stormwater Permit and MSCWMO Performance Standards.

a. Impervious areas (Pre- and Post-Construction).

b. Construction plans and specifications for all proposed stormwater management facilities.

c. Location(s) of past, current or future onsite well and septic systems (if applicable).

☒ Other exhibits required to show conformance to these Performance Standards

☒ A Stormwater Pollution Prevention Plan in compliance with the requirements of the NPDES SDS Construction Stormwater Permit

☒ Grading Plan/Mapping Exhibits:

a. Delineation of the subwatersheds contributing runoff from off-site, proposed and existing on-site subwatersheds, and flow directions/patterns.

b. Location, alignment, and elevation of proposed and existing stormwater facilities.

c. Existing and proposed normal water elevations and the critical (the highest) water level produced from the 100-year 24-hour storms.

d. Location of the 100-year flood elevation, natural overflow elevation, and lowest floor elevations.

NA Hydrologic/Hydraulic Design Exhibits:

a. All hydrologic and hydraulic computations completed to design the proposed stormwater management facilities shall be submitted. Model summaries must be submitted. The summaries shall include a map that corresponds to the drainage areas in the model and all other information used to develop the model.

b. A table (or tables) must be submitted showing the following:

i. A listing of all points where runoff leaves the site and the existing and proposed stormwater runoff rates and volumes.

ii. A listing of the normal water levels under existing and proposed conditions and the water levels produced from the storm and runoff events listed above for all on-site wetlands, ponds, depressions, lakes, streams, and creeks.

NA Dedications or easements for the portions of the property which are adjacent to the facility and which lie below the 100 year flood level. For sites within public right-of-way, no easement is required.

NA A proposed maintenance agreement, which may be in the format of Appendix K, or other form approved by the city.

HISTORY & CONSIDERATIONS:

SPECIAL OR IMPAIRED WATER

☒ This site drains to, and is within one mile of special or impaired water and complies with enhanced protections.

a. Scenic or Recreational river C.1., C.2., C.3.

b. Scientific and Natural area C.1., C.2., C.3.

c. Waterbody with a TMDL C.1., C.2.

C.1. Stabilization initiated immediately and all soils protected in seven days/provide temp basin for five acres draining to common location.

C.2. Treat water quality volume of one inch of runoff by retaining on site unless not feasible due to site conditions (See Part III.D.1. design requirements).

C.3. Maintain buffer zone of 100 linear feet from Special Water.

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

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

Narrative

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

a. Identifies the person who will oversee the BMP inspection and maintenance.

b. Identify the training requirements are satisfied.

c. Inspections performed once every 7 days.

d. Inspections performed within 24 hours of a rain event greater than 0.5 in/24 hours.

e. Inspection and Maintenance records include:

i. Date and time of inspection.

ii. Name of person(s) conducting inspections.

iii. Finding of inspections, including the specific location where corrective actions are needed.

iv. Corrective actions taken (including dates, times, and party completing maintenance activities).

v. Date and amount of rainfall events greater than 0.5 in/24 hours.

vi. Rainfall amounts must be obtained by a properly maintained rain gauge installed onsite, or by a weather station that is within one mile or by a weather reporting system.

vii. Requirements to observe, describe, and photograph any discharge that may be occurring during the inspection.

viii. All discovered nonfunctional BMPs must be repaired, replaced, or supplemented with functional BMPs within 24 hours after discovery, or as soon as field conditions allow.

☒ Describes procedures to amend the SWPPP and establish additional temporary ESC BMPs as necessary for site conditions.

☒ Describes the installation timing for all Erosion Sediment Control (ESC) Best Management Practices (BMPs).

☒ Describes final stabilization methods for all exposed areas.

☒ Methods used to minimize soil compaction and preserve topsoil must be described.

NA Describes dewatering technique to prevent nuisance conditions, erosion, or inundation of wetlands?

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

☒ Describes pollution prevention management measures

a. Storage, handling, and disposal of construction products, materials, and wastes.

b. Fueling and maintenance of equipment or vehicles; spill prevention and response.

c. Vehicle and equipment washing.

d. No engine degreasing allowed on site.

e. Containment of Concrete and other washout waste.

f. Portable toilets are positioned so that they are secure.

Plan sheets

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

a. Adequately sized – 2-year, 24-hour storm, minimum 1,800 feet/acre; or no calculative minimum 3,600ft3/acre.

b. Designed to prevent short circuiting.

c. Outlets designed to remove floating debris.

d. Outlets designed to allow complete drawdown.

e. Outlets designed to withdraw water from the surface

f. Outlets have energy dissipation.

g. Have a stabilized emergency spillway.

h. Situated outside of surface waters and any natural buffers.

☐ 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**. Update erosion control note #9 on L-13

b. Wetted perimeters of ditches stabilized within 200 feet of surface water within 24 hours.

c. Pipe outlets have energy dissipation within 24 hours of connecting.

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

a. Sediment control practices established on down gradient perimeters and upgradient of any buffer zones.

b. All inlets are protected.

c. Stockpiles have sediment control and placed in areas away from surface waters or natural buffers.

d. Construction site entrances minimize street tracking?

e. Plans minimize soil compaction and, unless infeasible to preserve topsoil.

f. 50 foot natural buffers preserved or (if not feasible) provide redundant sediment controls when a surface water is located within 50 feet of the project's earth disturbances and drains to the surface water.

☐ Tabulated quantities of all erosion prevention and sediment control BMPs.

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

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

☒ 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]*

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

Rate and Flood Control Standards

NA 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.

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

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

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

NA In sub-areas of a landlocked watershed, the proposed project does not increase the predevelopment volume or rate of discharge from the sub-area for the 10-year return period event.

NA Flowage easements up to the 100-yr flood level have been secured for stormwater management facilities (such as ditches and storm sewers).

NA Lowest floor elevations of structures built adjacent to stormwater management features and other water bodies are a minimum of two feet above the 100-year flood elevation and a minimum of two feet above the natural overflow of landlocked basins.

Volume Control Standards

NA 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.)	
	BMP	**Volume**
xx,xxx sf *1.1" = xxx cu. ft.	BMP #1	x,xx cu. ft.
xx,xxx sf *1.1" = x,xxx cu. ft.	BMP #2	x,xxx cu. ft.
	Total Proposed	**x,xxx cu.ft.**
Total Required x,xxx cu. ft.		

Flexible Treatment Options (when applicable)

NA Applicant demonstrated qualifying restrictions as defined in Section 7.2.2 (4) of the 2015 MSCWMO Watershed Management Plan that prohibits the infiltration of the entire required volume.

NA MIDS calculator submission removes 75% of the annual total phosphorous.

Infiltration/Filtration Design Standards

NA 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.

NA 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	

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

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

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

b. For infiltration basin volume control management facilities the period of inundation shall be calculated using the maximum water depth below the surface discharge elevation and the soil infiltration rate.

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

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

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.

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

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

NA 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.

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

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

WETLAND PERFORMANCE STANDARDS

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

NA Any potential changes to the hydrology of the wetland (i.e. changes to the outlet elevation or contributing drainage area) must be reviewed to evaluate the impact of both the existing and proposed wetland conditions and approved by the MSCWMO.

NA Land-altering activities shall not increase the bounce in water level or duration of inundation from a 2.0-inch 24-hour storm for any downstream wetland beyond the limit specified in Table 7.2 for the individual wetland susceptibility class.

MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION
455 HAYWARD AVENUE, OAKDALE, MINNESTOA 55128
Phone 651.330.8220 x22 fax 651.330.7747 www.mscwmo.org

February 4, 2022

Michelle Elsner
690 Quinnell Ave. N
Lakeland, MN 55043-0643

RE: Maas Project MSCWMO Project Review

Dear Ms. Elsner:

The Middle St. Croix Watershed Management Organization (MSCWMO) received the required submittal items on January 12th, 2022 for a shoreland stabilization project at 1145 Quentin Ave S within MSCWMO boundaries and in the City of Lakeland. The proposed project qualifies for full review under the MSCWMO 2015 Watershed Management Plan (WMP).

The project, as submitted, contains sufficient information to determine conformance with the Policies and Performance Standards contained within Section 7.0 of the MSCWMO Watershed Management Plan. **The MSCWMO recommends approval of the project with the following two conditions:**

1. Lacking erosion and sediment control (ESC) plan items are addressed (see review checklist for details), and
2. Upslope vegetation details are provided.

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

Sincerely,

Matt Downing
MSCWMO Administrator
mdowning@mnwcd.org

MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION
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MSCWMO PROJECT REVIEW- SINGLE LOT RESIDENTIAL SUBMITTALS

This document is for guidance. Applicants should consult the MSCWMO Watershed Management Plan for specific requirements. MSCWMO may request other items during the review process in addition to those listed.

MSCWMO Project Review ID: 22-002

Project Name: Maas Project

Applicant: Jennifer Cates Peterson

Purpose: Shoreland Stabilization

Location: 1145 Quentin Ave S, Lakeland

Review date: 01/27/2022

Recommendation: Approval with two conditions:

1. Provide details of proposed buffer upslope of water resources including size and vegetation characteristics.
2. Erosion and sediment control plan shall be revised to address the highlighted items.

ALL SUBMITTALS MUST CONTAIN THE FOLLOWING ITEMS:

☒ 1. Review Fee: Single lot residential $350 fee.

☒ 2. Grading plan showing grading limits, existing and proposed contours related to NAVD 1988 datum (preferred) or NGVD 1929.

☒ 3. Location of existing and proposed permanent structures.

☒ 4. Ordinary High Water (OHW) elevations and location of all existing water bodies.

☒ 5. Location of all bluff lines.

☒ 6. Lowest floor elevations of structures built adjacent to stormwater management features and other water bodies must be a minimum of two feet above the 100-year flood elevation.

☐ 7. Delineation of existing wetland, shoreland, ordinary high water levels, drain tiling, and floodplain areas.

☐ 8. Details of proposed buffer upslope of water resources including size and vegetation characteristics (when applicable).

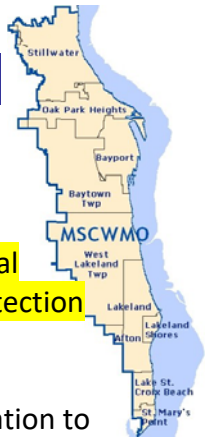
☐ 9. Erosion/sediment control plan demonstrating locations, specifications, and details of the following items:

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

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

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

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



E. Final Stabilization
   i. For residential construction only, individual lots are considered final stabilized if the structures are finished and temporary erosion protection and downgradient sediment control has been completed.
   ii. Grading and landscape plans shall include soil tillage and soil bed preparation methods that are employed prior to landscape installation to a minimum depth of 8" and incorporate amendments to meet Minnesota State Stormwater Manual predevelopment soil type bulk densities.
      1. Observe minimum setbacks for areas within the dripline of existing trees, over utilities within 30 in of the surface, where compaction is required by design and inaccessible slopes.

NA 10. Details of proposed structural stormwater practices (Meets Minnesota Stormwater Manual guidelines) – *no added impervious surface*

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

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

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

Volume Retention Required (cu. ft.)	Volume Retention Provided (cu. ft.)
5637 sf * 1.1"= xx.xx cf xx.xx cf total required	**BMP #1 Volume =** **BMP #2 Volume =** **Total =**

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

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

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

February 4, 2022

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

RE: Chestnut Street Civic Plaza

Dear Mr. Sanders:

The Middle St. Croix Watershed Management Organization (MSCWMO) received submittal items on January 17th, 2022 for the conversion of Chestnut Street between Main Street and Lift Bridge concourse to a non-motorized plaza located within MSCWMO boundaries and in the City of Stillwater. The proposed project qualifies for full review under the MSCWMO 2015 Watershed Management Plan (WMP).

The project reconstructs 0.7 acres of impervious and utilizes soil cells to provide the stormwater treatment for the project. A rate control analysis was not required since the overall impervious area is reduced and the improved hydrological condition will lead to a reduction in peak discharges. A 96-inch underground detention system further reduces peak discharges. **The MSCWMO recommends approval with the following three conditions:**

1. It's demonstrated that the soil cells meet flexible treatment option requirements and design/construction standards,
2. The SWPPP is amended to meet MSCWMO standards (see the attached review checklist), and
3. A proposed maintenance agreement is provided.

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

Sincerely,

Matt Downing
Administrator
Middle St. Croix Watershed Management Organization

MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION
455 HAYWARD AVE. N.
OAKDALE, MINNESTOA 55128
Phone 651.330.8220 x22 fax 651.330.7747 www.mscwmo.org

PROJECT REVIEW

MSCWMO Project Review ID: 22-005

Project Name: Chestnut Street Civic Plaza

Applicant: Matt Wassman, TKDA

Purpose: Conversion of Chestnut Street between Main St and Lift Bridge concourse to a non-motorized plaza

Location: Chestnut Street E, Stillwater, MN 55082

Review date: 02/02/2022

Recommendation: MSCWMO staff recommends conditional approval of the project with the following conditions:

- demonstrate soil cells meet flexible treatment option requirements and design/construction standards,
- SWPPP is amended to meet MSCWMO standards, and
- a proposed maintenance agreement is provided.

Applicability:

☒ Any project undertaking grading, filling, or other land alteration activities that involve movement of 100 cubic yards of earth or removal of vegetation on greater than 10,000 square feet of land

☒ Any project that creates or fully reconstructs 6,000 square feet or more of impervious surface

☐ All major subdivisions or minor subdivisions that are part of a common plan of development. Major subdivisions are defined as subdivisions with 4 or more lots.

☐ Any project with wetland impacts

☐ Any project with grading within public waters

☐ Any project with grading within buffers

☐ Any project with grading within 40-feet of the bluff line

☐ Development projects that impact 2 or more of the member communities

☐ New or redevelopment projects within the St. Croix Riverway that require a building permit that adds five hundred (500) square feet or more of additional impervious surface

☐ Any project requiring a variance from the current local impervious surface zoning requirements for the property

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

SUBMITTAL ITEMS:
Electronic submittals are highly encouraged

☒ A completed and signed project review application form and review fee

☒ Grading Plan/Mapping Exhibits

a. Property lines and delineation of lands under ownership of the applicant.

b. Delineation of existing on-site wetlands, shoreland and/or floodplain areas (including any buffers).

c. Ordinary High Water (OHW) elevations and datum, as determined by the MDNR (if applicable).

d. Existing and proposed site contour elevations related to NAVD 1988 datum (preferred) or NGVD, 1929. Datum must be noted on exhibits.

e. Drainage easements covering land adjacent to ponding areas, wetlands, and waterways up to their 100-year flood levels and covering all ditches and storm sewers. Access easements to these drainage easements and to other stormwater management facilities shall also be shown.

f. Minimum building elevation for each lot.

g. Identification of downstream water body.

☒ Permanent Stormwater Management System in compliance with the requirements of the NPDES SDS Construction Stormwater Permit and MSCWMO Performance Standards.

a. Impervious areas (Pre- and Post-Construction).

b. Construction plans and specifications for all proposed stormwater management facilities.

c. Location(s) of past, current or future onsite well and septic systems (if applicable).

☐ Other exhibits required to show conformance to these Performance Standards *Please submit soil cell dimension details and MIDS calculator for volume control credit*

☒ 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.

NA Hydrologic/Hydraulic Design Exhibits:

a. All hydrologic and hydraulic computations completed to design the proposed stormwater management facilities shall be submitted. Model summaries must be submitted. The summaries shall include a map that corresponds to the drainage areas in the model and all other information used to develop the model.

b. A table (or tables) must be submitted showing the following:

i. A listing of all points where runoff leaves the site and the existing and proposed stormwater runoff rates and volumes.

ii. A listing of the normal water levels under existing and proposed conditions and the water levels produced from the storm and runoff events listed above for all on-site wetlands, ponds, depressions, lakes, streams, and creeks.

NA Dedications or easements for the portions of the property which are adjacent to the facility and which lie below the 100 year flood level. For sites within public right-of-way, no easement is required.

☐ A proposed maintenance agreement, which may be in the format of Appendix K, or other form approved by the city.

HISTORY & CONSIDERATIONS:

SPECIAL OR IMPAIRED WATER

☒ This site drains to, and is within one mile of special or impaired water and complies with enhanced protections.

a. Scenic or Recreational river C.1., C.2., C.3.

b. Scientific and Natural area C.1., C.2., C.3.

c. Waterbody with a TMDL C.1., C.2.

C.1. Stabilization initiated immediately and all soils protected in seven days/provide temp basin for five acres draining to common location.

C.2. Treat water quality volume of one inch of runoff by retaining on site unless not feasible due to site conditions (See Part III.D.1. design requirements).

C.3. Maintain buffer zone of 100 linear feet from Special Water.

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

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

Narrative

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

a. Identifies the person who will oversee the BMP inspection and maintenance.

b. Identify the training requirements are satisfied. *SWPPP Preparer Certification?*

c. Inspections performed once every 7 days.

d. Inspections performed within 24 hours of a rain event greater than 0.5 in/24 hours.

e. Inspection and Maintenance records include:

i. Date and time of inspection.

ii. Name of person(s) conducting inspections.

iii. Finding of inspections, including the specific location where corrective actions are needed.

iv. Corrective actions taken (including dates, times, and party completing maintenance activities).

v. Date and amount of rainfall events greater than 0.5 in/24 hours.

vi. Rainfall amounts must be obtained by a properly maintained rain gauge installed onsite, or by a weather station that is within one mile or by a weather reporting system.

vii. Requirements to observe, describe, and photograph any discharge that may be occurring during the inspection.

viii. All discovered nonfunctional BMPs must be repaired, replaced, or supplemented with functional BMPs within 24 hours after discovery, or as soon as field conditions allow.

☒ Describes procedures to amend the SWPPP and establish additional temporary ESC BMPs as necessary for site conditions.

☒ Describes the installation timing for all Erosion Sediment Control (ESC) Best Management Practices (BMPs).

☒ Describes final stabilization methods for all exposed areas.

☒ Methods used to minimize soil compaction and preserve topsoil must be described.

☒ Describes dewatering technique to prevent nuisance conditions, erosion, or inundation of wetlands?

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

☒ Describes pollution prevention management measures

a. Storage, handling, and disposal of construction products, materials, and wastes.

b. Fueling and maintenance of equipment or vehicles; spill prevention and response.

c. Vehicle and equipment washing.

d. No engine degreasing allowed on site.

e. Containment of Concrete and other washout waste.

f. Portable toilets are positioned so that they are secure.

Plan sheets

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

a. Adequately sized – 2-year, 24-hour storm, minimum 1,800 feet/acre; or no calculative minimum 3,600ft3/acre.

b. Designed to prevent short circuiting.

c. Outlets designed to remove floating debris.

d. Outlets designed to allow complete drawdown.

e. Outlets designed to withdraw water from the surface

f. Outlets have energy dissipation.

g. Have a stabilized emergency spillway.

h. Situated outside of surface waters and any natural buffers.

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

a. Exposed soils have erosion protection/cover initiated immediately and finished within 7 days.

b. Wetted perimeters of ditches stabilized within 200 feet of surface water within 24 hours.

c. Pipe outlets have energy dissipation within 24 hours of connecting.

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

a. Sediment control practices established on down gradient perimeters and upgradient of any buffer zones.

b. All inlets are protected.

c. Stockpiles have sediment control and placed in areas away from surface waters or natural buffers.

d. Construction site entrances minimize street tracking?

e. Plans minimize soil compaction and, unless infeasible to preserve topsoil.

f. 50 foot natural buffers preserved or (if not feasible) provide redundant sediment controls when a surface water is located within 50 feet of the project's earth disturbances and drains to the surface water.

☒ Tabulated quantities of all erosion prevention and sediment control BMPs.

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

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

☒ 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

NA 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.

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

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

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

NA In sub-areas of a landlocked watershed, the proposed project does not increase the predevelopment volume or rate of discharge from the sub-area for the 10-year return period event.

NA Flowage easements up to the 100-yr flood level have been secured for stormwater management facilities (such as ditches and storm sewers).

NA Lowest floor elevations of structures built adjacent to stormwater management features and other water bodies are a minimum of two feet above the 100-year flood elevation and a minimum of two feet above the natural overflow of landlocked basins.

Volume Control Standards

☒ Calculations/computer model results indicate stormwater volume is controlled for new development and redevelopment requirements per the MSCWMO Design Standards.

1. New Nonlinear Development 1.1" * new impervious surfaces
2. Reconstruction/Redevelopment Projects 1.1" * reconstructed impervious surfaces
3. Linear Projects 0.55" * new and/or fully reconstructed impervious surface and 1.1" from net increase in impervious area
4. Sites with Restrictions- flexible treatment options documentation has been provided.

Volume Retention Required (cu. ft.)		Volume Retention Provided (cu. ft.)	
		BMP	**Volume**
30,492 sf *0.55" = 1398 cu. ft.		BMP #1	2094 cu. ft.
Total Required	**1,398 cu. ft.**	**Total Proposed**	**2,094 cu.ft.**

Flexible Treatment Options (when applicable)

☒ Applicant demonstrated qualifying restrictions as defined in Section 7.2.2 (4) of the 2015 MSCWMO Watershed Management Plan that prohibits the infiltration of the entire required volume.

☐ MIDS calculator submission removes 75% of the annual total phosphorous.

Infiltration/Filtration Design Standards

☐ Proposed stormwater management features meet or exceed NPDES General Construction Permit requirements are designed in conformance with the most recent edition of the State of Minnesota Stormwater Manual.

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

a. Areas where vehicle fueling and maintenance occur.
b. Areas with less than three (3) feet of separation distance from the bottom of the infiltration system to the elevation of the seasonally saturated soils or the top of bedrock.
c. Areas where industrial facilities are not authorized to infiltrate industrial stormwater under an National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Industrial Stormwater Permit issued by the MPCA.
d. Areas where contaminants in soil or groundwater will be mobilized by infiltrating stormwater.
e. Areas of Hydrologic Soil Group D (clay) soils

f. Areas within 1,000 feet up-gradient, or 100 feet down-gradient of active karst features unless allowed by a local unit of government with a current MS4 permit.

☒ Minimum setbacks from the Minnesota Department of Health for infiltration practices are meet
Waterproof membrane is provided on building side of soil cells

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

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

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

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

b. For infiltration basin volume control management facilities the period of inundation shall be calculated using the maximum water depth below the surface discharge elevation and the soil infiltration rate.

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

a. A minimum of one boring was conducted at the location of the infiltration facility for facilities up to 1,000 ft²; between 1,000 and 5,000 ft², two borings, between 5,000 and 10,000 ft², three borings and greater than 10,000 ft² 4 borings plus an additional boring for every 2,500 ft² beyond 12,500 ft²

b. Soil borings extend a minimum of five feet below the bottom of the infiltration practice. If fractured bedrock is suspected, the soil boring goes to a depth of at least ten feet below the proposed bottom of the volume control facility.

c. A minimum of three feet of separation to the seasonal water table and/or bedrock.

d. Identify unified soil classification.

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

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

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

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

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

☐ 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.

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

WETLAND PERFORMANCE STANDARDS

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

NA Any potential changes to the hydrology of the wetland (i.e. changes to the outlet elevation or contributing drainage area) must be reviewed to evaluate the impact of both the existing and proposed wetland conditions and approved by the MSCWMO.

NA Land-altering activities shall not increase the bounce in water level or duration of inundation from a 2.0-inch 24-hour storm for any downstream wetland beyond the limit specified in Table 7.2 for the individual wetland susceptibility class.

MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION

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

February 4, 2022

Carrie Seifert, Town Clerk
West Lakeland Township
959 Paris Avenue Circle N
West Lakeland Township, MN 55082

RE: Baylon Boathouse

Dear Mrs. Seifert,

The Middle St. Croix Watershed Management Organization (MSCWMO) received an application for project review on January 19th, 2022 for a boathouse reconstruction at 165 Lakeland Shores Road located within MSCWMO boundaries and in the West Lakeland Township. The proposed project qualifies for full review under the MSCWMO 2015 MSCWMO Watershed Management Plan (WMP). The project is within the St. Croix Riverway but does not add any impervious therefore permanent stormwater management BMPs were not required. There are a number of concerns with the project not meeting the Washington County Lower St. Croix Bluffland and Shoreland Management ordinance and Floodplain Management ordinance. The project will likely require a variance and conditional use permit from the County Zoning Administrator. The ESC plan is also lacking and does not meet all MSCWMO standards identified in Section 7.0 of the MSCWMO Watershed Management Plan. **The MSCWMO recommends the applicant revise and resubmit to meet ESC standards and demonstrate compliance or obtain variances to County Development Code.**

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,

Matt Downing
MSCWMO, Administrator

Enclosure

MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION
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MSCWMO PROJECT REVIEW- SINGLE LOT RESIDENTIAL SUBMITTALS

This document is for guidance. Applicants should consult the MSCWMO Watershed Management Plan for specific requirements. MSCWMO may request other items during the review process in addition to those listed.

MSCWMO Project Review ID: 22-003

Project Name: Baylon Boathouse

Applicant: John Hink

Purpose: Replace Boathouse

Location: 165 Lakeland Shores Road, West Lakeland Township, MN

Review date: 01/28/2022

Recommendation: Revise and resubmit to address the highlighted items and compliance with Riverway and Floodplain ordinances.

ALL SUBMITTALS MUST CONTAIN THE FOLLOWING ITEMS:

☒ 1. Review Fee: Single lot residential $350 fee.

☒ 2. Grading plan showing grading limits, existing and proposed contours related to NAVD 1988 datum (preferred) or NGVD 1929.

☒ 3. Location of existing and proposed permanent structures.

☒ 4. Ordinary High Water (OHW) elevations and location of all existing water bodies.

☒ 5. Location of all bluff lines. Construction is proposed within the bluffline and does not comply with bluffline setbacks and prohibition of construction on slopes greater than 12% per the Lower St. Croix Riverway Shoreland and Bluffland ordinance. A variance will likely be required from County Zoning Administration.

☐ 6. Lowest floor elevations of structures built adjacent to stormwater management features and other water bodies must be a minimum of two feet above the 100-year flood elevation. *FFE is 685.5' and RFPE is 694.0' so the low floor elevation does not meet requirements. A properly flood-proofed lower level and conditional use permit will likely be required from County Zoning Administration. The structure is also in a Zone AE floodplain that does not have a delineated floodway so applicants will need to provide certification prepared by experienced Professional Engineers that show the site is food fringe and encroachment will not cause a rise greater than allowable.*

☐ 7. Delineation of existing wetland, shoreland, ordinary high water levels, drain tiling, and floodplain areas. *Floodplain are and BFE is not noted on plans.*

☐ 8. Details of proposed buffer upslope of water resources including size and vegetation characteristics (when applicable). *What is the construction access for the project? Will there be vegetation removal required for access?*

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

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

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

C. Inspections and Maintenance
   i. Applicant must inspect all erosion prevention and sediment control practices once every 7 days or after a ½" rain event to ensure integrity and effectiveness. All nonfunctional practices must be repaired, replaced or enhanced the next business day after discovery.

ii. Plans shall include contact information including email and a phone number of the person responsible for inspection and compliance with erosion and sediment control.

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

E. Final Stabilization
   i. For residential construction only, individual lots are considered final stabilized if the structures are finished and temporary erosion protection and downgradient sediment control has been completed.
   ii. Grading and landscape plans shall include soil tillage and soil bed preparation methods that are employed prior to landscape installation to a minimum depth of 8" and incorporate amendments to meet Minnesota State Stormwater Manual predevelopment soil type bulk densities.
      1. Observe minimum setbacks for areas within the dripline of existing trees, over utilities within 30 in of the surface, where compaction is required by design and inaccessible slopes.

NA 10. Details of proposed structural stormwater practices (Meets Minnesota Stormwater Manual guidelines) – *NA, less than 500 sf new/reconstructed impervious*

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

F. Volume control facilities meet the following setback requirements:

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

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

Volume Retention Required (cu. ft.)	Volume Retention Provided (cu. ft.)
XXX sf * 1.1"= XXX cf XXX cf total required	**BMP #1 Volume =** **BMP #2 Volume =** **Total =**

H. Construction Standards

i. To prevent soil compaction, the proposed volume control facility must be staked off and marked during construction to prevent heavy equipment and traffic from traveling over it.

ii. Facilities may not be excavated within 2.0 feet of final grade until the contributing drainage area has been constructed and fully stabilized.

iii. Facilities are in-place during construction activities, all sediment and runoff must be diverted away the facility, using practices such as pipe capping or diversions.

iv. Facilities installation must occur in dry soil conditions. Excavation, soil placement and rapid stabilization of perimeter slopes must be accomplished prior to the next precipitation event.

v. Excavation shall be performed by an excavator with a toothed bucket. Use excavator bucket to place materials. Construction equipment shall not be allowed into the basin.

vi. Prior to the release of any remaining fee or security, the owner must provide documentation that constructed volume control facilities perform as designed.

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

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February 4, 2022

Michelle Elsner
690 Quinnell Ave. N
Lakeland, MN 55043-0643

RE: Jambois Hillside Lift Project Review

Dear Ms. Elsner:

The Middle St. Croix Watershed Management Organization (MSCWMO) received an application for project review on January 25th, 2022 for a hillside lift at 447 Quixote Ave within MSCWMO boundaries and in the City of Lakeland. The proposed project qualifies for full review under the MSCWMO 2015 Watershed Management Plan (WMP).

The project, as submitted, does not contain sufficient information to determine conformance with the Policies and Performance Standards contained within Section 7.0 of the MSCWMO Watershed Management Plan. **MSCWMO staff recommends the applicant revise and resubmit with an ESC plan meeting MSCWMO standards.** The enclosed checklist contains detailed information on project review qualifications and the policies and performance standards of the WMP. MSCWMO review process information can be downloaded from www.mscwmo.org. Please contact me at 651-330-8220 x22 or mdowning@mnwcd.org if you have any questions.

Sincerely,

Matt Downing
MSCWMO Administrator
mdowning@mnwcd.org

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MSCWMO PROJECT REVIEW- SINGLE LOT RESIDENTIAL SUBMITTALS

This document is for guidance. Applicants should consult the MSCWMO Watershed Management Plan for specific requirements. MSCWMO may request other items during the review process in addition to those listed.

MSCWMO Project Review ID: 22-004

Project Name: Hillside Lift/Elevator

Applicant: Louis Jambois

Purpose: Construct a small open-air elevator/lift from the blufftop behind our home down to the St. Croix River.

Location: 447 Quixote Ave N, Lakeland, Minnesota 55043

Review date: 02/02/2022

Recommendation: Revise and resubmit with highlighted items and a completed erosion and sediment control plan. ESC plan should include site restoration plans for construction access.

ALL SUBMITTALS MUST CONTAIN THE FOLLOWING ITEMS:

☒ 1. Review Fee: Single lot residential $350 fee.

☒ 2. Grading plan showing grading limits, existing and proposed contours related to NAVD 1988 datum (preferred) or NGVD 1929.

☒ 3. Location of existing and proposed permanent structures.

☐ 4. Ordinary High Water (OHW) elevations and location of all existing water bodies.

☒ 5. Location of all bluff lines.

☐ 6. Lowest floor elevations of structures built adjacent to stormwater management features and other water bodies must be a minimum of two feet above the 100-year flood elevation.

☒ 7. Delineation of existing wetland, shoreland, ordinary high water levels, drain tiling, and floodplain areas.

☒ 8. Details of proposed buffer upslope of water resources including size and vegetation characteristics (when applicable).

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

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

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

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

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

E. Final Stabilization

i. For residential construction only, individual lots are considered final stabilized if the structures are finished and temporary erosion protection and downgradient sediment control has been completed.

ii. Grading and landscape plans shall include soil tillage and soil bed preparation methods that are employed prior to landscape installation to a minimum depth of 8" and incorporate amendments to meet Minnesota State Stormwater Manual predevelopment soil type bulk densities.

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

NA 10. Details of proposed structural stormwater practices (Meets Minnesota Stormwater Manual guidelines)

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

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

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

Volume Retention Required (cu. ft.)	Volume Retention Provided (cu. ft.)
XX sf * 1.1"= xx.xx cf xx.xx cf total required	**BMP #1 Volume =** **BMP #2 Volume =** **Total =**

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

   v. Excavation shall be performed by an excavator with a toothed bucket. Use excavator bucket to place materials. Construction equipment shall not be allowed into the basin.
   vi. Prior to the release of any remaining fee or security, the owner must provide documentation that constructed volume control facilities perform as designed.

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

Staff Report- December 2021/January 2022

Administration

- Prepared February meeting materials
- Coordination of Grant and Permit Program
- Began Planning for 2022
- Engaged with citizens regarding project concerns

Project Reviews

- MN Party Bus-**INFORM**
- 255 2nd Street-**ACTION**
- L68 Lift Station-**ACTION**
- Mass Shoreline-**ACTION**
- Chestnut Street Plaza-**ACTION**
- Baylon Boathouse-**INFORM**
- Jambois Hillside Lift-**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: Basin is 95% constructed, made partial payment to the contractor. Preliminary planting has been done this fall, final planting and minor punchlist items will be done in the spring.
Staff: Bryan Pynn-WCD; Matt Downing-MSCWMO

Watershed Based Funding- Lily Lake Raingardens/LSCB Bluff

Description: $39,636 CWF Watershed Based Funding was reallocated to Lake St Croix Small Communities Phosphorus Reduction CWF grant in 2020.
Activities This Month: Grant has been submitted to BWSR for closure and final payment.
Staff: Bryan Pynn - WCD

Lake St. Croix Small Communities Phosphorus Reduction Grant – PHASE I

Description: $200,000 grant for stormwater quality improvement south of Bayport (2019-2021). Partnership with City of Lake St. Croix Beach to stabilize the bluff on the north side of town.
Activities This Month: Grant has been submitted to BWSR for closure and final payment.
Staff: Bryan Pynn - WCD; Matt Downing – MSCWMO

Lake St. Croix Small Communities Phosphorus Reduction Grant – PHASE II

Description: $158,000 grant for stormwater quality improvement south of Bayport (2021-2023). Implement practices in the LSCD South SWA area to achieve a load reduction of up to 7lbs of TP/yr.
Activities This Month: SEH completed survey work late December. WCD is working on concepts and will be reaching back out to participants to gauge final interest and get contracts signed. Final design and bid packet will proceed after that (mid-March bidding target)
Staff: Bryan Pynn - WCD; Matt Downing - MSCWMO

3M PFAS Settlement MPCA Staff Reimbursement Grant

Description: Up to $40,000 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: Subgroup 1 meeting was attended, no updates pertaining to the WMO. Preliminary work started on identification of projects eligible for second phase of funding (more details given at meeting).
Staff: Matt Downing, MSCWMO; Stu Grub, EOR

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: Prep work for the 2022 sampling season is underway, with special planning occurring for pre and post alum treatment sampling on Lily Lake slated for spring. Data analysis of lake and stream samples has begun. All sample results will be presented in the 2021 monitoring summary.
Staff: Rebecca Oldenburg Giebel, WCD

Erosion and Sediment Control Inspections

Description: The MSCWMO has contracted with the WCD to conduct erosion and sediment control inspections for construction projects that have been reviewed and recommended for permit approval by partner communities.
Activities This Month: None.
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: 2021 Inspection Reporting and 2022 Inspection and Maintenance planning with MSCWMO/WCD staff. There is new functionality with the shift to the WCD Database that will benefit both the maintenance and inspection activity reporting throughout the field season.
Staff: Cameron Blake, WCD

Erosion and Sediment Control Inspection, BMP Project, and Plan Review Database

Description: The MSCWMO has partnered with WCD to develop a new erosion control inspection, BMP project tracking, and project plan review applicant database via ESRI's ArcGIS Online. The database will increase efficiency of erosion control and BMP project reporting, the application process for project plan reviews, and serve as a replacement to the current Mapfeeder software.
Activities this Month: Historic data from the retired Mapfeeder database has been transitioned to the new database. The BMP implementation, inspection, and maintenance modules are nearing completion. Dashboards to summarize activities such as number of sites visited, inspections performed, practices implemented, maintenance performed, and nutrient loads removed have been created. The plan review and erosion control modules continue to function as designed.
Staff: Rebecca Nestingen, WCD; Aaron DeRusha, WCD

Small Scale Habitat & Water Quality Enhancement Projects

Description: The MSCWMO has requested Conservation Corps crew time under FY22 Clean Water Funding to support small-scale habitat and water quality enhancement projects in 2022. Projects will include a vegetative buffer enhancement along Perro Creek in Bayport, a 215-foot buffer expansion between Riviera Avenue S and the St. Croix River in Lake St. Croix Beach, and a dune/floodplain enhancement along the St. Croix in St. Mary's Point. The MSCWMO has partnered with WCD to develop proposals for each project.
Activities This Month: In process of drafting action plans and proposed budgets for all planned 2022 activities. Will reach out to partners at that point to garner support and sign contracts.
Staff: Bryan Pynn – WCD; Brett Stolpestad – WCD

Meetings

- MSCWMO-EMWREP 2022 Planning Meeting – December 16th
- LSC Steering Team – December 22nd
- MSCWMO Inspection Reporting – January 6th
- MSCWMO Team Meeting– January 11th

- Perro/LSCB Planning – January 14th
- EMWREP Steering Team – January 19th
- MSCWMO 2022 Maintenance – January 25th
- LSC Steering Team – January 26th
- PFAS Funding Options – January 27th