## Regular Meeting of the Middle St. Croix Watershed Management Organization Bayport Public Library, Bayport, MN Thursday, January 9th, 2020 6:00PM

Present: Brian Zeller, Lakeland Shores; Mike Runk, Oak Park Heights; Tom McCarthy, Lake St. Croix Beach; John Fellegy, Baytown Township; Beth Olfelt-Nelson, St. Mary's Point; Dan Kyllo, West Lakeland Township; Anne Perkins, Afton; Joe Paiement, City of Lakeland, Ryan Collins, City of Stillwater, Dawn Bulera, Lake St. Croix Beach Alternate, Cameron Blake, WCD; Administrator Matt Downing.

### **Call to Order**

The meeting was called to order at 6:05PM by Manager Zeller.

### **Approval of Agenda**

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

### **Approval of Minutes**

A motion to approve the December 12<sup>th</sup>, 2019 minutes was made by Manager Fellegy and seconded by Manager Runk, the motion carried.

### **Treasurer's Report**

The treasurer's report was presented by Manager Kyllo. The remaining checking account balance is \$19,557.57. First State Bank CDs are valued at \$38,549.15. The ending balance in the RBC savings account for December 2019 is \$64,251.71.

Bills to be approved this month are: Emmons & Oliver: \$1,352.00; Kennedy & Graven: \$18.00; Paul Spilseth: \$273.07; Washington Conservation District (Water Monitoring): \$7,073.02; Washington Conservation District (Administration): \$2,621.00; Washington Conservation District (Technical Services): \$1,350.75; Washington Conservation District (Grant Hours): \$46,588.83; Washington Conservation District (EMWREP): \$1,575.00; Total: \$60,851.67.

The board clarified that the community billings were for the permit program cost overruns from 2019. Manager Perkins asked what account the bills would be coming out of and Administrator Downing reported that he had just deposited about \$160,000 into the checking account from the county and some grant close outs. One CD has come to maturity and Administrator Downing asked the board if they wanted to keep the CD in the bank. The CD has 1.75% interest and is less than \$23,000.

Manager Zeller motioned to approve the treasurer's report, pay the invoices for the month, and to keep the CD in the bank. Manager Fellegy seconded this and the motion carried.

## **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 \$1,352.00 (EOR

November). Manager Zeller asked if the PCA had any plans to address the PFAS contamination spreading through surface waters in Lake Elmo. Administrator Downing explained the surface hydrology of the area; the chain of lakes (Demontreville, Jane, etc.) were historically connected with piping for flood control purposes (project 1007). Eagle Point Lake and Lake Elmo outlet together and go towards Afton and the St. Croix. The board clarified that the contamination issue started from old dumping sites that were not lined properly, and that historic contamination is continuing to move through the environment despite the dumping sites themselves being brought into compliance. The PCA has not announced plans or strategies for surface water contamination yet.

### **2019 Inspections and Maintenance Summary**

Cameron Blake briefly discussed the maintenance efforts funded by the MSCWMO in 2019. This involved maintenance on the MSCWMO grant projects installed in 2018 as well as installation of projects in 2019. Manager Zeller asked if the maintenance burden shifted to others after some time and Manager Fellegy asked if this program was coming out of the MSCWMO budget. Administrator Downing explained that the maintenance was included in the MSCWMO budget and is a required activity for projects that used Clean Water Funds. All projects installed have a maintenance agreement associated with them and sometimes the responsibility shifts to the landowner or community after the first two years of maintenance are completed. Administrator Downing explained that in 2020 the maintenance was installation time is going to be tracked better for planning/reporting purposes.

### **Liability Insurance Renewal**

Administrator Downing asked the board to approve the renewal of the liability insurance, noting the board's usual decision to waive the monetary limits on the liability. Manager Fellegy asked if the insurance level was sufficient for liability beyond physical assets which the MSCWMO doesn't have. Manager Runk said that was probably covered by the community's insurance. Manager Zeller motioned to renew the insurance at the staff recommended level. Manager Fellegy seconded this and the motion carried. Administrator Downing asked if the board should motion to approve him as a signatory and the board said they did not feel like a motion was necessary.

### **Curell Cost Share Request**

Gabriel Curell is requesting a MSCWMO Landscaping for Habitat grant of \$250 to install native plantings at 1771 Racine Ave S, Lake St Croix Beach. One planting is along Racine Ave and totals 580 sq ft. The second planting is along the side yard and totals 1,530 sq ft. The total cost estimate for these plantings \$2,292.63. All plantings will use native trees, shrubs, grasses and flowers and will be installed in the spring of 2020. This project is in partnership with the Master Water Stewards program. Gabriel Curell is participating in the program. This planting is his Master Water Steward project and 75% of the project costs will be funded by the Master Water Steward grant.

Manager Fellegy motioned to approve reimbursement of expenses not to exceed \$250.00 for the Curell Native Planting. Manager McCarthy seconded this, and the motion carried.

Manager Olfelt-Nelson said she had a master water steward named Nancy in her community and there had been confusion around a shoreline BMP. She was wondering who was responsible for inspection and maintenance of those projects after they are installed. The board discussed different mechanisms for projects and maintenance. There is usually a maintenance requirement in agreements and master water stewards are typically responsible for the maintenance of their projects. The MSCWMO may have helped sponsor Master Water Steward's capstone projects but are not responsible for the projects after that point. Manager Olfelt-Nelson explained that there was a large water retention project being required in her community as part of a variance due to the landowner adding more impervious surface than what was allowed initially. She was wondering if it was the communities' job to inspect this. Administrator Downing explained that MSCWMO does not typically inspect small cost share projects and that larger projects or ones that are required as part of a permit are usually the responsibility of the landowner and the community who gave the permit. Usually inspections are required annually and maintenance is required up to 10 years after the project is installed. Administrator Downing explained that St. Mary's point could enter into an agreement with the MSCWMO or the WCD to implement the inspections or maintenance of BMPs, and acknowledged there is sometimes a gap between installation and maintenance of water quality BMPs.

#### **Staff Report**

Administrator Downing presented the year end budget tracker, explaining that the MSCWMO came in under budget. He said the website needs work but that he would likely be able to work on it internally from this point. The permit/project review program is still over and he will be talking to one more community, but the checks from the three communities billed so far will help. Manager Zeller asked what the total overage still was and Manager Fellegy estimated it was around \$4,000 and even with the three checks it would still be over. Administrator Downing reminded the board that there would likely still be an overage due to the MSCWMO not charging review fees for units of government. Manager Perkins asked clarifying questions about some of the fields including total receivables. Administrator Downing explained that some of the financials were still being cleaned up with grants being tracked differently than the other MSCWMO budget items. Some discrepancies were because of grant tracking still being mixed in to this version of the budget tracker. Manager Zeller asked for the tracker to be cleaned up and sent back out to the board.

Manager Zeller asked if the county reimbursement should be shown for 2019. Administrator Downing explained that due to BWSR grant technicalities he believed it would be in the MSCWMO interest to keep the county payment as being received in 2020. He explained that BWSR is currently considering the SCC project as a permit required project and so the payment should be considered as going to the MSCWMO future reserves rather than as a match for the CWF grant. The cost of the SCC project was already absorbed by the MSCWMO in 2019. He said BWSR is concerned that the MSCWMO accepting the cash-in-lieu of treatment is a dangerous precedent for the application of the MIDS development standard. Manager Zeller noted again that the minutes would reflect the MSCWMO hesitation of accepting the county's offer of cash-in-lieu and the board only accepted it in the end because it was a government project. Administrator Downing acknowledged this and said BWSR is currently holding the remaining \$90,000 in grant funds but that he was working on resolving the issue. He is also working on closing out other BWSR grants and there is work being done on the feasibility of the phosphorus reduction grant project in Lake St. Croix Beach.

### **1W1P Updates**

The board clarified that although there was not a policy committee meeting in December, there was still content for the board to review and give feedback on. Administrator Downing distributed the implementation summary and asked the board if they felt the activities/programs in the highest priority ranking were reflective of MSCWMO goals. Administrator Downing explained that his perspective was that the MSCWMO would benefit from any activities done because of the position of the WMO as one of the most downstream locations. Manager Zeller asked if the agricultural outreach was going to be addressed as he saw previous efforts as being combative. Manager Fellegy noted the urban/rural tension in the meetings. Manager Zeller stated that he believed there needed to be a clear channel of communication with farmers. Administrator Downing updated the board on the agricultural outreach that had occurred recently, and the strategy proposed in the 1W1P implementation plan. This included providing a resource for assistance rather than regulation, and would be reflective of the interest in producers of soil health and other issues. The board asked clarifying questions on funds distribution within the implementation activities.

The board also discussed the question of overall funds distribution which has yet to be fully addressed by BWSR. Manager Downing explained there was going to be a convening group to decide how to allocate the metro watershed based funds. The MSCWMO needed to pick a representative to be present at those meetings. Manager Fellegy motioned that Administrator Downing should attend the convening group meetings on behalf of the MSCWMO. Manager Perkins seconded this and the motion carried. Manager Perkins asked how this funding distribution was going to affect decision making. Administrator Downing explained that the 1W1P was intended to save money for more project implementation rather than time being spent on the competitive grant process. He said the plan appears to have developed into an internal competitive process instead.

#### Other

Manager Zeller asked if the election of officials was in February, and Administrator Downing confirmed this. Manager Perkins noted that she would be missing the next few meetings. Manager Zeller said he would be talking to Jay Riggs about Administrator Downing's performance and whether the board would be making his appointment as administrator permanent. He asked the board to send him any comments they want him to bring to that discussion.

Manager Runk said he had not received the MSCWMO board packet the last couple meetings. Administrator Downing will follow up on this issue.

#### **Campaign Finance Board Request**

The board was told they all needed to fill out this form, and there was an online option as well as a paper version.

#### Adjourn

Manager Fellegy motioned to adjourn the meeting. Manager Perkins seconded this, and the motion carried.



Our consultant at EOR has been reviewing documents and providing technical input on the development of the water supply groundwater model as part of the 3M PFAS settlement. Staff is requesting reimbursement from MPCA totaling \$338.00 (EOR December).

Recommended Board Action- Approve Submittal of 3M PFAS Reimbursement Request Totaling \$338.00

## Invoice

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



Matt Downing Middle St. Croix WMO C/O WCD 455 Hayward Avenue North Oakdale, MN 55128 Invoice Total \$338.00

January 15, 2020 Invoice No: 00405-0011 - 6

Job 00405-0011 3M Groundwater Model Review

Summary of Work Performed: Review emails and other information from Wood on project updates.

# Professional Services from December 1, 2019 to December 31, 2019

Professional Per	rsonnel
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		Hours	Rate	Amount	
Professional 4		2.00	169.00	338.00	
	Totals	2.00		338.00	
	Total Labor				338.00
			Total this I	nvoice	\$338.00



## MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION 455 Hayward Avenue N. Oakdale, MN 55128

MEMORANDUM

www.mscwmo.org

fax 651.330.7747

TO: Middle St. Croix WMO Board of Managers
FROM: Matt Downing, Interim Administrator
DATE: February 21<sup>th</sup>, 2020

Phone 651.330.8220 x22

## RE: 7b.) Lakeland Shores Local Surface Water Management Plan Review

The City of Lakeland Shores' consultant submitted their Local Surface Water Management Plan (LSWMP) for review by MSCWMO on January 31<sup>st</sup>. By rule the WMO and Metropolitan Council need to be notified of review at the same time and complete their respective reviews in 60 and 45 days. Also by rule, any comments made by Metropolitan Council need to be incorporated in the WMO comments.

MSCWMO staff have reviewed the plan and the Metropolitan Council comments. It is staff recommendation that the comments are sound and be incorporated into the Lakeland Shores LSWMP. Additionally, MSCWMO staff recommend that the consultant ensures that comments made by the WMO on 7-23-2018 are incorporated into the plan.

Attached are the review comment letter from Metropolitan Council and the MSCWMO comments from 7-24-2018.

# Recommended Board Action- Approve Submittal of Comments on the Lakeland Shores Local Surface Water Management Plan

February 21, 2020

Mr. Matt Downing, Interim Administrator Middle St. Croix Watershed Management Organization 445 Hayward Ave. Oakdale, MN 55128

RE: City of Lakeland Shores Comprehensive Surface Water Management Plan 45-Day Review Metropolitan Council Review File 22424-1

Dear Mr. Downing:

The Metropolitan Council (Council) has completed its 45-day review of the City of Lakeland Shores' (City) Local Surface Water Management Plan (Plan), as required under Minnesota Statute 103B.235. The Council reviewed the Plan for consistency with Minnesota Rules Part 8410.0160 and our *2040 Water Resources Policy Plan* (Policy Plan).

The City has unique water planning considerations since it has limited growth opportunities and no formal storm or sewer systems. Council staff are impressed by the City's commitment to infiltrate the majority of stormwater that falls within their jurisdiction. This will help to meet many of the water quality and quantity goals defined the Plan. The Plan builds on the content from previous plans, including but not limited to additional information and policies about the City's local water goals and provides implementation components. It outlines actions to be considered to resolve identified issues and lays out an array of water quantity and quality activities. The Plan clearly describes the responsibilities for the management and regulation of water resources. Finally, the City lays out a clear process for amendments to be made to the Plan.

Council staff do have some suggestions to improve the Plan:

- The Plan identifies the St. Croix River as a shallow open water resource in section 4.2.1. However, Council staff believe the Plan would be stronger if this information was not under the heading of Wetlands. This would also be a good location to reference the impairment status of this resource and any TMDL efforts being accomplished by the City.
- 2. Include drainage areas, volumes, and rates of stormwater runoff. Council staff realize that the Plan has policies (Policies 9.1 and 9.2) to develop a drainage map hydrologic model to calculate the volume and rates. However, in Figure 3, the City has identified and mapped drainage patterns that exist in its jurisdiction. The City should be able to determine and include the areas of the drainage basins. Council staff are unclear if the City need to have Policy 9.1, since Figure 3 meets the proposed policy. Additionally, if the City has a preliminary hydrologic model, the Plan will benefit by including a summary of the volumes and rate estimates. Alternatively, the Plan can reference a Middle St. Croix the Watershed Management Organization model if it exists.

There are a few areas of the Plan, however, that need to be strengthened. To be in full conformance with Minnesota Rules Part 8410.0160 and the Policy Plan, Council staff recommends the Section 7, Implementation, needs to be improved in the following ways:



390 Robert Street North | Saint Paul, MN 55101-1805 P. 651.602.1000 | TTY. 651.291.0904 | metrocouncil.org

- 1. The City needs to commit to actions identified in the implementation program. The Plan indicates actions shown in the Table 14 on pg. 27 are not a "hard and fast commitment" and not a clear commitment to action. Instead these actions should be as complete and accurate as possible giving the timing of the Plan.
- 2. The estimated costs in Table 14 are unclear. Are the cost estimates for each activity for the entire 10-year period or the annual estimate? Council staff think the table would be more understandable if the City replaced the check marks in the table with the estimated costs for each year.
- 3. The Plan generally lays out potential funding sources for activities in Table 11. However, where possible, the funding sources need to be specified by activity in Table 14.
- 4. The implementation program should include annual budget totals.

We appreciate your consideration of our comments as you move forward with approval of the Plan. Of particular note the Implementation Section comments above, and we recommend this be enhanced with, at a minimum, a full schedule with estimates, funding sources, and annual budget totals before the plan is approved. If you have any questions about these comments, please contact Jen Kostrzewski, at 651-602-1078, or at jennifer.kostrzewski@metc.state.mn.us.

Sincerely,

Sam Paske Assistant General Manager, Environmental Services Division

Jen Kostrzewski, Water Resources Section

cc: Brian Zeller, Mayor of Lakeland Shores Francisco Gonzalez, Metropolitan Council District 12 Angela Torres, Metropolitan Council Sector Representative Raya Esmaeili, Metropolitan Council Referrals Coordinator

Page - 2 | February 19, 2020 | METROPOLITAN COUNCIL

#### City of Lakeland Shores LSWMP-MSCWMO Review 7-24-2018

- Comment Number Comment
  - 1 2015-2025
  - Update to steps to syncronize with "5. Permit Review Process" of the City Stormwater Ordinnce adopted in 2 Feb. 2016.
  - 3 Verify that this section is still accurate with the update Comprehensive Plan.
  - Average Annual Values for Weather Data have changed since 2008. Update the temp. and precip. The rest 4 can be udated or deleted.
  - Add reference to Section 8 Stormwater Mangement Rate Control in the City Stormwater Ordinnce adopted in 5 Feb. 2016.
  - Update table to be consistent with section 7.2.2 (page 87) of the MSCWMO 2015-2025 Watershed 6 Management Plan
  - Add: North and East Groundwater Study, 2014-2024 Washington County Groundwater Plan, 2016 7 Washington County Geologic Atlas
  - 8 Update current status of TCE and PFC monitoring, findings and actions
  - Add other relevant potential pollutant sources from the MSCWMO 2015-2025 Watershed Mangement Plan: underground/above ground storage tanks, subsurface sewage treatment systems, abandon wells, eroding 9 gullies, eroding shorelines, and construction sites.
  - Add policy 1.9 Notify the MSCWMO of existing and future potential damages to property, public safety, and 10 water resources due to flood events.
  - Revise to include the area of direct discharge identified in the Lake St. Croix Direct Discharge South Subwatershed Analysis (pages 46 and 37) Link: http://mscwmo.org/wp-
  - content/subwatershed/LSCD South Draft Final op.pdf Two small gullies convey stormwater runoff from 11 2.9 acres to Lake St. Croix east of the intersection of Quinlan Ave N and 45th Street N.
  - Add the City will collaborate with the MSCWMO to identify and implment practices to address sources and 12 discharges of pollutants.

13 Add the City will notify the MSCWMO of capital or street improvement projects prior to the start of design.

- 14 ....City Ordinance and MSCWMO standards.... Add policy 2.7 The City will collaborate with the MSCWMO to identify and implment practices to address sources and discharges of pollutants and notify the MSCWMO of capital and street improvmement projects 15 prior to the start of design.
- Add .. Through publishing educational announcements, articles, and events in the City newsletter and 16 encouraging city staff and council members to attend relevent education events
- Add the annual maintenance plan as an appendix to the updated LSWMP. Change language to implement 17 inspection and mainteanance program.
- Change policy 7.2 to the City promotes storwmater infiltration, where appropriate, through it's stormwater 18 ordinance.
- Add Policy 7.7 During permit application processes the City will require a groundwater monitoring and or protection plan for land use activities that have a high risk of contaminating groundwater or require large
- 19 volumes of groundwater for operations.
- 20 Add Policy 7.8 Collaborate with Washington County to identify failing septic systems.
- 21 Add the City-wide drainage patterns map to the Appendix of the plan. Delete this goal.
- 22 Update the implementation table.
- 23 Add the most recent 5 year CIP to the appendix.

Change the last sentence: The City will continue to collaborate with the MSCWMO to implement the goals of the 2015-2025 MSCWMO Watershed Management Plan. Specifically, the City will continue to implement it's recently adopted stormwater ordinance and work with the MSCWMO to implement practices identified in the 24 Lake St. Croix Direct Discharge South Subwatershed Analayis.

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# MEMORANDUM

TO:Middle St. Croix WMO Board of ManagersFROM:Matt Downing, Interim Administrator

**DATE:** February  $21^{st}$ , 2020

# RE: 7d.) 2019 Budgeted Savings Deposit

The 2019 MSCWMO Budget included \$7,000 for deposit into savings for future costs including water monitoring equipment replacement and repair, and watershed management plan update costs. \$1,443 was spent in 2019 on these items, leaving \$5,557 in the budget for savings.

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

Recommended Board Action- Approve Staff to Deposit \$5,557 from the 2019 Budget to Savings

# **Feasibility Report**

# 2020 Bluff Stabilization Project Lake St. Croix Beach, Minnesota

SEH No. LAKES 145436 4.00

March 3, 2020



Building a Better World for All of Us<sup>®</sup> Engineers | Architects | Planners | Scientists



March 3, 2020

RE: 2020 Bluff Stabilization Project Feasibility Report Lake St. Croix Beach, Minnesota SEH No. LAKES 145436

Honorable Mayor and City Council City of Lake St. Croix Beach 16455 20th Street South Lake St. Croix Beach, MN 55043

Dear Honorable Mayor and City Council:

A Feasibility Study has been completed and the enclosed report prepared for the 2020 Bluff Stabilization Project. This report summarizes the planned improvements, provides a preliminary opinion of probable cost and identifies funding sources. The project will include the following improvements:

- 1. Bluff toe reinforcement with riprap
- 2. Bluff sloughing repair

Our opinion of probable cost for these improvements is in the range of \$158,400 - \$251,700. This opinion is based on the actual cost of similar projects adjusted for inflation and on a preliminary cost estimate provided to the City by a local contractor. Actual costs could be higher or lower depending on impacts of weather, river elevation at the time of construction and adjustments made during construction. The project is proposed to be funded with Lake St. Croix Small Communities Urban Phosphorus Reductions (CWF grant ID C19-2910) grant proceeds and City funds. It is recommended that the City Council review this report and, if acceptable, proceed with implementation.

Sincenely,

Jøhn D. Parotti, PE City Engineer (Lic. MN,WI)

\\sehnr\projects\ko\l\lakes\145436\river - bluff\riviera at 13th\feasibility rpt 2020\_03\_03.docx

Engineers | Architects | Planners | Scientists

Short Elliott Hendrickson Inc., 156 High Street, Suite 300, New Richmond, WI 54017-1128 SEH is 100% employee-owned | sehinc.com | 715.246.9906 | 888.881.4281 | 888.908.8166 fax

2020 Bluff Stabilization Project Feasibility Report Lake St. Croix Beach, Minnesota

SEH No. LAKES 145436

March 3, 2020

I hereby certify that this report was prepared by me or under my direct supervision, and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

	Jeh DRati	
John D. Parotti, PE City Engineer		
Date: March 3, 2020	Lic. No.: 24677	

Short Elliott Hendrickson Inc. 156 High Street, Suite 300 New Richmond, WI 54017-1128 715.246.9906



# Table of Contents

Letter of Transmittal Certification Page Table of Contents

1.0	Bac	kground	1
2.0		sting Conditions	
3.0	Pro	posed Improvements	2
4.0	Per	mits and Approvals	2
	4.1	Middle St. Croix Watershed Management Organization (WMO)	2
	4.2	Minnesota Pollution Control Agency (MPCA)	2
	4.3	Minnesota Department of Natural Resources (DNR)	2
5.0	Imp	lementation	2
	-	Opinion of Probable Cost	
		Cost Recovery	
6.0	Pub	olic Input	
7.0	Sun	nmary	3

# List of Appendices

Appendix A Drawings

/Users/jnparotti/Library/Mobile Documents/com~apple~CloudDocs/Documents/Dad/SEH/Feasibility Rpt 2020\_01\_31.docx

# Feasibility Report 2020 Bluff Stabilization Project

Prepared for City of Lake St. Croix Beach

# 1.0 Background

The City of Lake St. Croix Beach maintains approximately <sup>3</sup>/<sub>4</sub> of a mile of shore along the St. Croix River (a.k.a. Lake St. Croix). This shoreline includes public beach, part of the City's levee system and private dock access.

The majority of the shoreline in Lake St. Croix Beach is bound by a steep bluff slope on the landward side. These steep slopes are subjected to erosion due to high water, wave action and damage from moving sheets of ice. This erosion leads to weakening of the bluff toe. When the toe becomes unstable to the point of failure, sloughing of the bluff slope occurs.

Bluff toe failure and sloughing has presented costly maintenance issues for the City over the past few decades. The City has constructed several projects to install riprap toe reinforcement, metal stairs and vegetative restoration. A few residents with homes on the riverward side of Riviera Avenue have also installed riprap to stabilize the bluff adjacent to their property. The majority of the City shoreline has been reinforced with riprap which has been very successful in slowing damage to the bluffs due to sloughing.

One section of shore bluff remains unprotected with riprap. This section is located approximately from the north property line of 1390 Riviera Avenue to the north property line of 16770 13<sup>th</sup> Street South and is approximately 500 linear feet in length. The City has observed significant sloughing on this section of bluff in recent flood events (2011, 2014 and 2019). As a result, significant soil loss is occurring resulting in sediment being washed into the St. Croix River. In addition, the sloughing has led to the top of the slope migrating toward Riviera Avenue. If the slope is not stabilized, soil loss will continue resulting in additional sediment deposition into the St. Croix and the migrating slope will eventually result in road failure at Riviera Avenue.

# 2.0 Existing Conditions

This project area includes approximately 500 linear feet of shoreline. The landward bluff slope varies from 1.25h:1v to 2h:1v. The soil conditions are typically very granular. The combination of steep slopes and granular soils result in a bluff that is very susceptible to erosion due to sloughing, particularly when the bluff toe is weakened by shore erosion.

Riviera Avenue South is a City street which follows roughly parallel to the top of the bluff. In some locations the top of the bluff has migrated to within 12 feet of the edge of the road pavement due to sloughing. If the sloughing is left unaddressed, road failure will eventually occur, leading to costly emergency repairs.

# 3.0 Proposed Improvements

This project will install riprap reinforcement at the toe of the bluff slope. This approach has been used successfully on the majority of the shoreline in the City of Lake St. Croix Beach. An excavation will be made at the bottom of the slope to allow for the installation of the riprap below the natural grade. Riprap will be installed in the excavation in a manner that approximates the natural slope to the extent possible while providing the necessary structural reinforcement. The riprap will be installed up to elevation 695 which is 3 feet above the 1 percent chance occurrence flood event (commonly referred to as the 100-yr flood). The project will start from the north end of the existing rip rap section to avoid a short gap of unarmored shoreline which can be susceptible to increased erosion due to the abrupt change in surface roughness.

It is the City's intent to work toward reinforcing all of the bluff located on City property. This project area is approximately 500 feet long. However, based on preliminary cost estimates obtained by the City, the available funding may limit the project to 300 linear feet. Therefore, bidding documents will be prepared with one or more alternates that could be awarded if bids allow or if additional funding can be secured.

# 4.0 Permits and Approvals

# 4.1 Middle St. Croix Watershed Management Organization (WMO)

The project is located entirely within the Middle St. Croix Watershed Management Organization (MSCWMO or WMO) boundaries. Since the City and WMO are partnering on this project, WMO staff will be a part of the project team. Guidance from WMO staff will be followed with respect to submittal of the project documents for WMO review and approval.

# 4.2 Minnesota Pollution Control Agency (MPCA)

The project disturbed area is estimated to be just under 1 acre and therefore would not require an MPCA construction storm water permit. The final design and disturbance limits will be reviewed and, if the project exceeds the 1 acre disturbance threshold, the permit would be required.

# 4.3 Minnesota Department of Natural Resources (DNR)

If the work extends below elevation 679.6, a DNR public waters permit may be required. Past projects have not triggered this permit therefore, a public waters permit is not anticipated for this project at this time. Upon acceptance of this report by both the WMO and the City, a survey of the project area will be completed and design will be developed based on that survey. If the final design reveals a need for a public waters permit, the required application materials will be prepared and submitted.

It is recommended that a copy of this report will be provided to DNR Area Hydrologist Jenifer Sorensen regardless of whether a public waters permit is required. Input received from Ms. Sorensen should be considered as the project moves into the design and construction document stage.

# 5.0 Implementation

# 5.1 Opinion of Probable Cost

The Engineer's opinion of probable cost for the installation of riprap at the toe of the shoreline is \$839 per linear foot. This estimate is based on the construction cost of past projects in Lake St. Croix Beach adjusted for inflation plus allowances for contingencies (10%) and soft

costs (20% for engineering, administration and legal). The inflation factor was determined by using the Construction Cost Indices for the Minneapolis area as published by the Engineering News Record (ENR).

City staff has also consulted with a contractor who has completed similar projects for Lake St. Croix Beach in the past. The contractor estimates that the construction cost would be approximately \$400 per linear foot of shoreline. With a contingency of 10% and soft cost allowance of 20% the estimated cost of the project would be \$528 per linear foot.

It should be noted that the available funding (see below) is less than the estimated cost to reinforce all 500 linear feet of shoreline addressed in this report. Therefore, the project will be bid for the length of shoreline with an estimated cost that can be constructed with the funding available for a 2020 project. Approximately 300 linear feet of shoreline is estimated to cost between \$158,400 and \$251,700 (including contingency and soft cost allowances). Therefore, the base project will include 300 linear feet of shoreline. One or more alternates will be prepared to offer the City the flexibility of awarding more work if bids are lower than the estimate or if additional funding can be obtained.

Length of Shoreline	Low Estimate	High Estimate
300 linear feet	\$158,400	\$251,700
400 linear feet	\$211,200	\$335,600
500 linear feet	\$264,000	\$419,500

# 5.2 Cost Recovery

Recovery of project costs will occur with a combination of Lake St. Croix Small Communities Urban Phosphorus Reductions (CWF grant ID C19-2910) grant proceeds and City funds. The grant will cover 75% of the project costs up to \$200,000 (\$160,000 for construction). The City match is 25% plus any costs over and above the available grant funding. The estimated City contribution is \$50,000.

## **Funding Summary Table**

	Construction	Soft Costs	Total
Grant Funds	\$160,000	\$40,000	\$200,000
City Funds			\$50,000
Total			\$250,000

# 6.0 Public Input

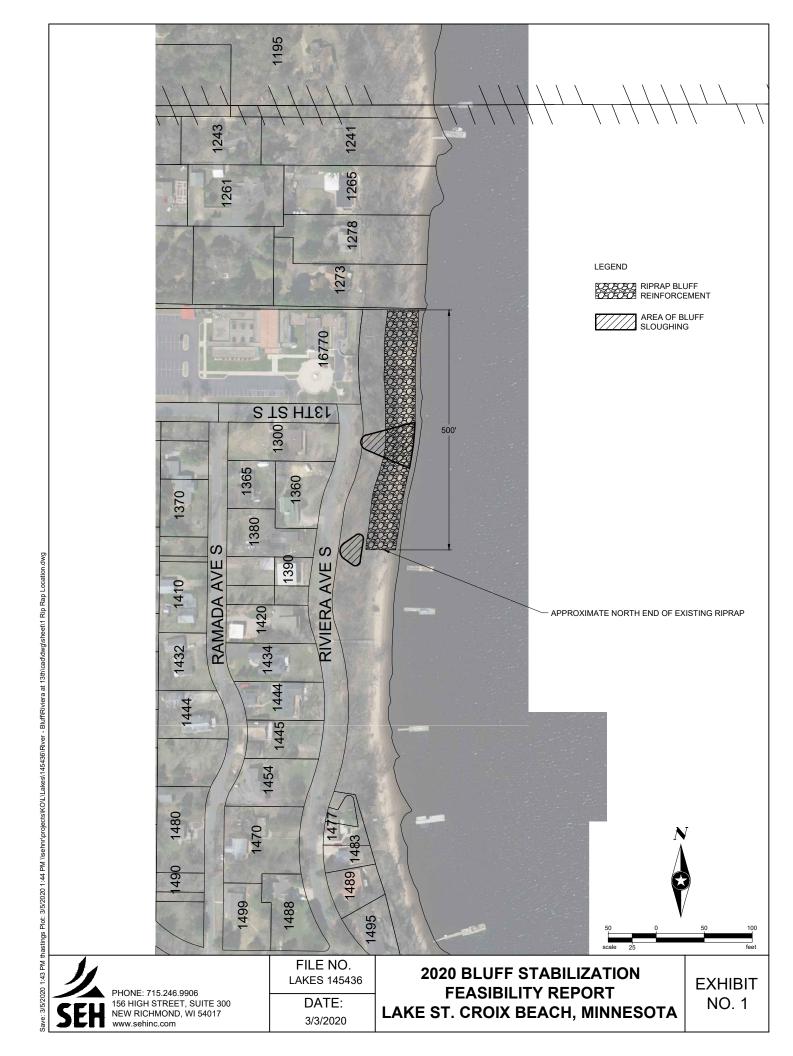
The City wishes to include a public input component to the project process. Upon acceptance of this report by both the WMO and the City, it is recommended that a date be selected for a public open house to receive public input.

# 7.0 Summary

This report only addresses the feasibility and estimated costs for improvements as described above. The improvements are feasible from an engineering standpoint and are cost effective. It is recommended that the City accept this report and order the project improvements contingent on Middle St. Croix Watershed Management Organization approval.

# Appendix A

Drawings





### FY 2020 STATE OF MINNESOTA BOARD OF WATER and SOIL RESOURCES CLEAN WATER FUND COMPETITIVE GRANTS PROGRAM GRANT AGREEMENT

Vendor:	0000795682	VN#:	
PO#:	3000011725	Date Paid:	

This Grant Agreement is between the State of Minnesota, acting through its Board of Water and Soil Resources (Board) and Middle St. Croix River WMO, 455 Hayward Ave Oakdale Minnesota 55128 (Grantee).

This grant is for	the following Grant Programs :	
C20-6055 Lily Lake Phosphorus Reductions for Delisting \$513,500		\$513,500
Total Grant Awarded: \$513,500		

#### Recitals

- 1. The Laws of Minnesota 2019, 1<sup>st</sup> Special Session, Chapter 2, Article 2, Section 7(b)&(j), appropriated Clean Water Funds (CWF) to the Board for the FY 2020 Clean Water Fund Projects & Practices Grants.
- 2. The Board adopted the FY20 Clean Water Fund Competitive Grant Policy and authorized the FY20 Clean Water Fund Program through Board Order #19-32.
- 3. The Board adopted Board Order #20-05 to allocate funds for the FY 2020 Clean Water Fund Competitive Grants Program.
- 4. The Grantee has submitted a BWSR approved work plan for this Program, which is incorporated into this Grant Agreement by reference.
- 5. The Grantee represents that it is duly qualified and agrees to perform all services described in this Grant Agreement to the satisfaction of the State.
- 6. As a condition of the grant, Grantee agrees to minimize administration costs.

#### Authorized Representative

The State's Authorized Representative is Marcey Westrick, Clean Water Coordinator, BWSR, 520 Lafayette Road North, Saint Paul, MN 55155, 651-284-4153, or her successor, and has the responsibility to monitor the Grantee's performance and the authority to accept the services and performance provided under this Grant Agreement.

The Grantee's Authorized Representative is:

MSCWMO Administrator 455 Hayward Ave N Oakdale, MN 55128 651-330-8220

If the Grantee's Authorized Representative changes at any time during this Grant Agreement, the Grantees must immediately notify the Board.

#### **Grant Agreement**

#### 1. Terms of the Grant Agreement.

- 1.1. *Effective date:* The date the Board obtains all required signatures under Minn. Stat. § 16B.98, Subd. 5. **The State will notify** the Grantee when this Grant Agreement has been executed. The Grantee must not begin work under this Grant Agreement until it is executed.
- 1.2. *Expiration date: December 31, 2022*, or until all obligations have been satisfactorily fulfilled, whichever comes first.
- Survival of Terms: The following clauses survive the expiration date or cancellation of this Grant Agreement: 7. Liability; 8. State Audits; 9. Government Data Practices; 11. Publicity and Endorsement; 12. Governing Law, Jurisdiction, and Venue; 14. Data Disclosure; and 19. Intellectual Property Rights.

### 2. Grantee's Duties.

- 2.1. The Grantee will comply with required grants management policies and procedures set forth through Minn. Stat § 16B.97, Subd.4(a)(1). The Grantee is responsible for the specific duties for the Program as follows:
- 2.2. *Implementation:* The Grantee will implement their work plan, which is incorporated into this Grant Agreement by reference.
- 2.3. *Reporting:* All data and information provided in a Grantee's report shall be considered public.
  - 2.3.1. The Grantee will submit an annual progress report to the Board by February 1 of each year on the status of Program implementation by the Grantee. Information provided must conform to the requirements and formats set by the Board. All individual grants over \$500,000 will also require a reporting expenditure by June 30 of each year.
  - 2.3.2. The Grantee will prominently display on its website the Clean Water Legacy Logo and a link to the Legislative Coordinating Commission website.
  - 2.3.3. Final Progress Report: The Grantee will submit a final progress report to the Board by February 1, 2023 or within 30 days of completion of the project, whichever occurs sooner. Information provided must conform to the requirements and formats set by the Board.
- 2.4. *Match:* The Grantee will ensure any local match requirement will be provided as stated in Grantee's approved work plan.

### 3. Time.

The Grantee must comply with all the time requirements described in this Grant Agreement. In the performance of this Grant Agreement, time is of the essence.

### 4. Terms of Payment.

- 4.1. Grant funds will be distributed in three installments: 1) The first payment of 50% will be distributed after the execution of the Grant Agreement. 2) The second payment of 40% will be distributed after the first payment of 50% has been expended and reporting requirements have been met. An eLINK Interim Financial Report that summarizes expenditures of the first 50% must be signed by the Grantee and approved by BWSR. Selected grantees may be required at this point to submit documentation of the expenditures reported on the Interim Financial Report for verification. 3) The third payment of 10% will be distributed after the grant has been fully expended and reporting requirements are met. The final, 10% payment must be requested within 30 days of the expiration date of the Grant Agreement. An eLINK Final Financial Report that summarizes final expenditures for the grant must be signed by the Grantee and approved by the Grantee and approved by BWSR.
- 4.2. All costs must be incurred within the grant period.
- 4.3. All incurred costs must be paid before the amount of unspent funds is determined. Unspent grant funds must be returned within 30 days of the expiration date of the Grant Agreement.
- 4.4. The obligation of the State under this Grant Agreement will not exceed the amount listed above.
- 4.5. This grant includes an advance payment of 50% of the grant's total amount. Advance payments allow the Grantee to have adequate operating capital for start-up costs, ensure their financial commitment to landowners and contractors, and to better schedule work into the future.

### 5. Conditions of Payment.

- 5.1. All services provided by the Grantee under this Grant Agreement must be performed to the State's satisfaction, as set forth in this Grant Agreement and in the BWSR approved work plan for this Program. Compliance will be determined at the sole discretion of the State's Authorized Representative and in accordance with all applicable federal, State, and local laws, policies, ordinances, rules, FY20 Clean Water Fund Competitive Grant Program Policy, and regulations. The Grantee will not receive payment for work found by the State to be unsatisfactory or performed in violation of federal, State or local law.
- 5.2. Minnesota Statutes §103C.401 (2018) establishes BWSR's obligation to assure program compliance. If the noncompliance is severe, or if work under the grant agreement is found by BWSR to be unsatisfactory or performed in violation of federal, State, or local law, BWSR has the authority to require the repayment of grant funds or withhold payment on grants from other programs.

### 6. Assignment, Amendments, and Waiver

- 6.1. **Assignment.** The Grantee may neither assign nor transfer any rights or obligations under this Grant Agreement without the prior consent of the State and a fully executed Assignment Agreement, executed and approved by the same parties who executed and approved this Grant Agreement, or their successors in office.
- 6.2. **Amendments.** Any amendments to this Grant Agreement must be in writing and will not be effective until it has been approved and executed by the same parties who approved and executed the original Grant Agreement, or their successors in office. Amendments must be executed prior to the expiration of the original Grant Agreement or any amendments thereto.

6.3. *Waiver.* If the State fails to enforce any provision of this Grant Agreement, that failure does not waive the provision or its right to enforce it.

### 7. Liability.

The Grantee must indemnify, save, and hold the State, its agents, and employees harmless from any claims or causes of action, including attorney's fees incurred by the State, arising from the performance of this Grant Agreement by the Grantee or the Grantee's agents or employees. This clause will not be construed to bar any legal remedies the Grantee may have for the State's failure to fulfill its obligations under this Grant Agreement.

### 8. State Audits.

Under Minn. Stat. § 16B.98, Subd. 8, the Grantee's books, records, documents, and accounting procedures and practices of the Grantee or other party relevant to this Grant Agreement or transaction are subject to examination by the Board and/or the State Auditor or Legislative Auditor, as appropriate, for a minimum of six years from the end of this Grant Agreement, receipt and approval of all final reports, or the required period of time to satisfy all State and program retention requirements, whichever is later.

8.1. The books, records, documents, accounting procedures and practices of the Grantee and its designated local units of government and contractors relevant to this grant, may be examined at any time by the Board or Board's designee and are subject to verification. The Grantee or delegated local unit of government will maintain records relating to the receipt and expenditure of grant funds.

### 9. Government Data Practices.

The Grantee and State must comply with the Minnesota Government Data Practices Act, Minn. Stat. Ch. 13, as it applies to all data provided by the State under this Grant Agreement, and as it applies to all data created, collected, received, stored, used, maintained, or disseminated by the Grantee under this Grant Agreement. The civil remedies of Minn. Stat. § 13.08 apply to the release of the data referred to in this clause by either the Grantee or the State.

#### 10. Workers' Compensation.

The Grantee certifies that it is in compliance with Minn. Stat. § 176.181, Subd. 2, pertaining to workers' compensation insurance coverage. The Grantee's employees and agents will not be considered State employees. Any claims that may arise under the Minnesota Workers' Compensation Act on behalf of these employees and any claims made by any third party as a consequence of any act or omission on the part of these employees are in no way the State's obligation or responsibility.

#### 11. Publicity and Endorsement.

- 11.1. Publicity. Any publicity regarding the subject matter of this Grant Agreement must identify the Board as the sponsoring agency. For purposes of this provision, publicity includes notices, informational pamphlets, press releases, research, reports, signs, and similar public notices prepared by or for the Grantee individually or jointly with others, or any subcontractors, with respect to the program, publications, or services provided resulting from this Grant Agreement.
- 11.2. Endorsement. The Grantee must not claim that the State endorses its products or services

### 12. Governing Law, Jurisdiction, and Venue.

Minnesota law, without regard to its choice-of-law provisions, governs this Grant Agreement. Venue for all legal proceedings out of this Grant Agreement, or its breach, must be in the appropriate State or federal court with competent jurisdiction in Ramsey County, Minnesota.

#### 13. Termination.

- 13.1. The State may cancel this Grant Agreement at any time, with or without cause, upon 30 days' written notice to the Grantee. Upon termination, the Grantee will be entitled to payment, determined on a pro rata basis, for services satisfactorily performed.
- 13.2. In the event of a lawsuit, an appropriation from a Clean Water Fund is canceled to the extent that a court determines that the appropriation unconstitutionally substitutes for a traditional source of funding.
- 13.3. The State may immediately terminate this grant contract if the State finds that there has been a failure to comply with the provisions of this grant contract, that reasonable progress has not been made or that the purposes for which the funds were granted have not been or will not be fulfilled. The State may take action to protect the interests of the State of Minnesota, including the refusal to disburse additional funds and requiring the return of all or part of the funds already disbursed.

### 14. Data Disclosure.

Under Minn. Stat. § 270C.65, Subd. 3, and other applicable law, the Grantee consents to disclosure of its social security number, federal employer tax identification number, and/or Minnesota tax identification number, already provided to the State, to federal and State tax agencies and State personnel involved in the payment of State obligations. These identification numbers may be used in the enforcement of federal and State tax laws which could result in action requiring the Grantee to file State tax returns and pay delinquent State tax liabilities, if any.

### 15. Prevailing Wage.

It is the responsibility of the Grantee or contractor to pay prevailing wage for projects that include construction work of \$25,000 or more, prevailing wage rules apply per Minn. Stat. §§ 177.41 through 177.44. All laborers and mechanics employed by grant recipients and subcontractors funded in whole or in part with these State funds shall be paid wages at a rate not less than those prevailing on projects of a character similar in the locality. Bid requests must state the project is subject to prevailing wage.

### 16. Municipal Contracting Law.

Per Minn. Stat. § 471.345, grantees that are municipalities as defined in Subd. 1 of this statute must follow the Uniform Municipal Contracting Law. Supporting documentation of the bidding process utilized to contract services must be included in the Grantee's financial records, including support documentation justifying a single/sole source bid, if applicable.

### 17. Constitutional Compliance.

It is the responsibility of the Grantee to comply with requirements of the Minnesota Constitution regarding the use of Clean Water Funds to supplement traditional sources of funding.

### 18. Signage.

It is the responsibility of the Grantee to comply with requirements for project signage as provided in Minnesota Laws 2010, Chapter 361, Article 3, Section 5(b) for Clean Water Fund projects.

### 19. Intellectual Property Rights.

The State owns all rights, title, and interest in all of the intellectual property rights, including copyrights, patents, trade secrets, trademarks, and service marks in the Works and Documents *created and paid for under this grant*. Works means all inventions, improvements, discoveries, (whether or not patentable), databases, computer programs, reports, notes, studies, photographs, negatives, designs, drawings, specifications, materials, tapes, and disks conceived, reduced to practice, created or originated by the Grantee, its employees, agents, and subcontractors, either individually or jointly with others in the performance of this grant. Work includes "Documents." Documents are the originals of any databases, computer programs, reports, notes, studies, photographs, negatives, designs, drawings, specifications, materials, tapes, disks, or other materials, whether in tangible or electronic forms, prepared by the Grantee, its employees, agents or subcontractors, in the performance of this grant. The Documents will be the exclusive property of the State and all such Documents must be immediately returned to the State by the Grantee upon completion or cancellation of this grant at the State's request. To the extent possible, those Works eligible for copyright protection under the United State Copyright Act will be deemed to be "works made for hire." The Grantee assigns all right, title, and interest it may have in the Works and the Documents to the State's ownership interest in the Works and Documents.

**IN WITNESS WHEREOF**, the parties have caused this Grant Agreement to be duly executed intending to be bound thereby.

Approved:	
Middle St. Croix River WMO	Board of Water and Soil Resources
By:(print)	Вү:
(signature)	
Title:	Title:
Date:	Date: