

Please note the meeting will be held at the Carver County Government Center on the Monday, January 7, 2019



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Lower Minnesota River Watershed District
 7:00 PM
 Monday, January 7, 2019
 Carver County Government Center
 602 East Fourth Street, Chaska, MN 55318

Agenda Item	Discussion
1. Call to order	A. Roll Call
2. Approval of agenda	
3. Citizen Forum	<p><i>Citizens may address the Board of Managers about any item not contained on the regular agenda. A maximum of 15 minutes is allowed for the Forum. If the full 15 minutes are not needed for the Forum, the Board will continue with the agenda. The Board will take no official action on items discussed at the Forum, with the exception of referral to staff or a Board Committee for a recommendation to be brought back to the Board for discussion or action at a future meeting.</i></p>
4. Consent Agenda	<p><i>All items listed under the consent agenda are considered to be routine by the Board of Managers and will be enacted by one motion and an affirmative vote of a majority of the members present. There will be no separate discussion of these items unless a Board Member or citizen request, in which event, the items will be removed from the consent agenda and considered as a separate item in its normal sequence on the agenda.</i></p> <p>A. Approve Minutes September 17, 2018, October 24, 2018 and November 19, 2018 Regular Meetings</p> <p>B. Receive and file Financial Reports - December 2018 financial reports are not available because of the early date of this month's meeting</p> <p>C. Approval of Invoices for payment</p> <ul style="list-style-type: none"> i. Patchin Messner Dodd & Brumm - work performed related to public hearing in the matter of the 9-foot channel ii. Scott County SWCD - Q3 2018 monitoring services iii. Naiad Consulting, LLC - October 2018 Administrative Service & expenses iv. Rinke Noonan - October 2018 legal services v. Time Savers Offsite Secretarial - preparation of October 2018 meeting minutes vi. Daniel Hron - January 2019 office rent vii. Young Environmental Consulting Group, LLC - November 2018 Technical Services viii. Metro Sales - payment on maintenance agreement for copier ix. Carver County Finance Department - Q4 Financial Services

	<p>D. Authorize Amendment to Administrative Service Agreement</p> <p>E. Designation of 2019 official newspaper</p> <p>F. Designation of Official Depository</p>
5. New Business/ Presentations	<p>A. Discussion with members of MAWD Board of Directors</p>
6. Old Business	<p>A. Dredge Management</p> <ul style="list-style-type: none"> i. Funding for dredge material management ii. Vernon Avenue Dredge Material Management site iii. Private Dredge Material Placement <p>B. Watershed Management Plan</p> <p>C. 2019 Legislative Action - no new information to report since last update</p> <p>D. Education & Outreach - no new information to report since last update</p> <p>E. LMRWD Projects</p> <ul style="list-style-type: none"> i. Eden Prairie Area #3 Stabilization ii. Riley Creek Cooperative project/Lower Riley Creek restoration iii. Seminary Fen ravine stabilization project iv. East Chaska Creek (Carver County Watershed Based Funding) v. Schroeder Acres Park (Scott County Watershed Based Funding) vi. Shakopee Downtown BMO Retrofit (Scott County Watershed Based Funding) vii. PLOC (Prior Lake Outlet Channel) Restoration (Scott County Watershed Based Funding) viii. Dakota County Fen Gap Analysis and Conceptual Model (Dakota County Watershed Based Funding) ix. Hennepin County Chloride Project (Hennepin County Watershed Based Funding) x. Vegetation Management Plan xi. Sustainable Lake Management Plan - Trout Lakes xii. Geomorphic Assessment of Trout Streams xiii. Spring Creek Cost Share <p>F. Project Reviews</p> <ul style="list-style-type: none"> i. City of Burnsville - Burnsville Sanitary Landfill ii. City of Carver - Local Surface Water Management Plan iii. City of Eden Prairie - Peterson Wetland Bank iv. City of Chanhassen - TH 101 Improvements v. City of Savage - 12113 Lynn Avenue vi. Cities of Richfield/Bloomington - TH 77 & 77th Street underpass vii. MNDOT - I494 Brush removal viii. MNDOT - TH 5 Signage projects ix. MPCA - MN River TSS TMDL x. MN Valley State Trail - EAW (Environmental Assessment Worksheet) xi. Hennepin County - CSAH 61/Flying Cloud Drive xii. MNDOT - I494/TH 5/TH 55 Mill & Overlay project

	<ul style="list-style-type: none"> xiii. MNDOT - I35W Bridge Replacement xiv. MNDOT - I494 from TH169 to Minnesota River xv. City of Shakopee - Amazon Fulfillment Center drainage xvi. MAC/LMRWD/MCWD boundary realignment xvii. Fort Snelling - Dominion Housing xviii. USACOE/USFWS - Bass Ponds, Marsh & Wetland <p>G. MPCA Soil Reference Values - No new information since last update</p>
7. Communications	<ul style="list-style-type: none"> A. Administrator Report B. President C. Managers D. Committees E. Legal Counsel F. Engineer
9. Adjourn	Next meeting of the LMRWD Board of Managers is Monday, February 20, 2019

Upcoming meetings/Events

- USACE River Resource Forum - January 22, 2019 & January 23, 2019, 180 E. Fifth Street E., St. Paul, MN
- Upper Mississippi River Waterway Association - Thursday, December 20, 2018, 11:30am Lilydale Pool & Yacht Club
- Metro MAWD - Tuesday, January 29, 2019, 7:00pm Capitol Region Watershed District, 595 Aldine Street, St. Paul
- [18th Annual Road Salt Symposium](#) - February 7, 2019, 8:30am to 2:45pm Plymouth Creek Center, 14800 34th Avenue North, Plymouth MN
- [MAWD Day at the Capitol](#) - Wednesday, February 20, 2019 & Thursday, February 21, 2019, Double Tree Hotel, 411 Minnesota Street, St. Paul
- Moos Family Lecture Series: Dr. David Montgomery - A New Case for Agriculture, April 16, 2019, Plymouth Creek Center, 14800 34th Avenue North, Plymouth MN, public reception 5:30pm, Lecture 7:00pm
- Ice Out/Loon In - Freshwater Annual Gala, May 4, 2019, Metropolitan Club & Ballroom

For Information Only

- WCA Notices
 - None received
- DNR Public Waters Work permits
 - None received
- DNR Water Appropriation permits
 - None received

Future Manager Agenda Items list

- Report of water quality testing of Minnesota River from MPCA
- Report on Flying Cloud Landfill
- Record retention policy
- AIS Policy
- Riverbank stabilization policy

Future TAC Agenda Items List

- LMRWD monitoring plan



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Minutes of Regular Meeting

Board of Managers

Monday September 17, 2018

Scott County Law Enforcement Center 301 South Fuller Street, Shakopee, MN 7:00 p.m.

Approved _____, 2018

1. CALL TO ORDER AND ROLL CALL

On Monday, September 17, 2018, at 7:00 PM in the Room 241 of the Scott County Law Enforcement Center, 301 South Fuller Street, Shakopee, Minnesota, Vice President Hartmann called to order the meeting of the Board of Managers of the Lower Minnesota River Watershed District (LMRWD) and asked for roll call to be taken. The following Managers were present: Manager Adam Frey, Manager David Raby and Manager Jesse Hartmann. In addition, the following were also present: Linda Loomis, Naiad Consulting, LLC, LMRWD Administrator; Della Schall Young, Young Environmental Consulting Group, LLC, Technical Consultant; John Kolb, Rinke Noonan, Legal Counsel; Clay Dodd, Patchin Messner Dodd & Brumm, consultant for the LMRWD, Eric Watruba, Burns & McDonnell, LMRWD Engineer; Jake Hamlin and Greg Oberle, CHS; Jeff Webb, Ruben Chong, Dean Jacobs, Cargill; Lisa Brickey, Mosaic; Tim Koch, Randy, Donnell, Stephen Kucala, Ceres Global; Mike Bush, Superior Minerals; Kirby Templin, City of Shakopee, Water Resources-Environmental Engineer; and Lindsey Albright, Dakota SWCD

2. APPROVAL OF THE AGENDA

Administrator Loomis requested the removal of the July 18, 2018 and August 15, 2018 Regular Meeting minutes. She requested the addition of Item 7. F. ii. Old Business - Riley Creek Cooperative Agreement.

Manager Raby made a motion to approve the agenda as amended. The motion was seconded by Manager Hartmann. The motion carried unanimously.

3. CITIZEN FORUM

There were no citizens who wished to address the board.

4. CONSENT AGENDA

Vice President Hartmann introduced the item.

A. Approve Minutes for June 13, 2018, ~~July 18, 2018 and August 15, 2018~~ Regular Meeting

B. Receive and file Financial Report

C. Presentation of Invoices for payment

- i. **Barr Engineering - No-rise modeling & Riley Creek**
- ii. **Culligan Bottled Water - bottled water for LMRWD office**
- iii. **Managers - 1st half 2018 per diem & expenses**
- iv. **Metro Sales - Payment for copier service agreement**

- v. **MAWD - reimbursement to MAWD for additional bus expense related to MAWD Summer Tour**
 - vi. **Rinke Noonan Attorneys at Law - June 2018 legal services**
 - vii. **Steinkraus Development LLC - for August & September 2018 office rent**
 - viii. **Burns & McDonnell - May & June 2018 engineering/technical services**
 - ix. **US Bank Equipment Finance - September 2018 copier rental**
 - x. **Waypoint Insurance Advisors - Directors & officers insurance**
 - xi. **Western National Insurance Company - Liability insurance**
 - xii. **Freshwater Society - payment for Lake Coring Project**
 - xiii. **Naiad Consulting, LLC - for June & July 2018 admin services & expenses**
 - xiv. **USGS - Annual payment for sediment and flow monitoring**
 - xv. **Dakota County SWCD - 2nd Quarter monitoring service**
 - xvi. **TimeSaver Off Site Secretarial Services - for preparation of August 2018 meeting minutes**
- D. Resolution 18-12 Approving the Local Surface Water Management Plan for the City of Mendota Heights**

Manager Raby made a motion to approve the consent agenda with the July 18, 2018 and August 15, 2018 meeting minutes removed. The motion was seconded by Manager Hartmann. The motion carried unanimously.

5. Public Hearing

A. The matter of the None Foot Channel Permanent Disposal Sites Acquisition and Development Basic Water Management Project

Manager Hartmann introduced the item and explained the proceedings for the hearing.

Administrator Loomis provided a brief description of how notice of the public hearing was distributed, including direct mail to owners of record of all impacted properties. Notices were mailed to address of record in the Counties' tax systems. Public notice was also placed in the Star Tribune.

Attorney Kolb provided some history and background for the proceedings. He said the district previously performed an analysis of benefits of the navigation channel and has documented \$22.5 million in total annual savings using barge transport which is made possible by the dredge project. This is a capital improvements project and is presented as such in the LMRWD Watershed Management Plan.

Attorney Kolb noted that it is important to note that the LMRWD was successful with negotiating with the Corps of Engineers to eliminate the need for additional dredge sites. The COE has agreed to place dredge material at the LMRWD site at RMP 14.2, if the LMRWD pays the cost to transport material dredge from below I-35W. Attorney Kolb said at one point this project was \$300,000 in debt and is now currently at \$200,000 in debt. He said they are now looking at how to go forward and how the project can be sustainable.

Attorney Kolb said the LMRWD was successful in obtaining State of Minnesota bond money, which is sitting in trust with the State. If the project moves forward, those funds will be drawn upon first. He detailed the options available to the LMRWD to pay for the cost of the project.

Attorney Kolb reported on the value analysis that was used to determine value related to the project and said this is not an appraisal. The LMRWD will use the consulting appraiser's report as a basis to determine benefits if it chooses to do so.

Attorney Kolb stated as part of the proceedings a copy of the project plan was submitted to the board of Department of Natural Resources and Board of Water & Soil Resources. No negative

comments have been filed regarding the project plan. Mr. Kolb detailed information contained in the notice of the hearing that was distributed to the public. He explained what was contained in the hearing notice that was sent and published in the newspaper. He outlined explained that once public comments have been taken, the Board will then deliberate, taking into consideration the engineer's report, the consulting appraiser report, comments received, agency review comments staff recommendations and any other information relevant to the proceedings. If the Board determines to order establishment of the project, the order must include findings. Because the project might be funded in part by benefitted lands assessment findings must include a determination of each benefitted properties portion of any funds to be raised by assessment. Mr. Kolb then provided possible options for the Board to take, should they determine to move forward with the project.

Mr. Kolb asked if the Managers had any questions and turned the meeting over to Della Young.

Della Shall Young introduced herself. She introduced Eric Watruba, senior environmental engineer with Burns & McDonnell, the environmental engineer for the project. Ms. Young explained the roles of Burns & McDonnell and Young Environmental Consulting Group, LLC. She explained preliminary details of the studies and work needed on the site.

Mr. Watruba explained that Burns & McDonnell looked at the cost the LMRWD can expect to incur over the next twenty year. The cost estimate included; maintenance items, capital projects and operations. Mr. Watruba commented two types of material temporarily stored on site; material from the navigation channel, which is a sandy material and private slip dredge material, which is siltier. He spoke about the time it takes for each type of material to dewater.

He said the cost analysis focused on bigger pictures items and spoke about capital improvement projects, site operations and maintenance and regulatory consideration. He first spoke about capital projects the district had asked him to look at; reconfiguration of the site, replacement and maintenance of the culvert and upgrading Vernon Avenue, leading into the dredge site. He said they looked at on-site operations and maintenance items; on-site management of the dredge material, routine maintenance of the site, any erosion issues due to heavy rain and flooding events and general upkeep of the site. He explained that it is the intent of the LMRWD to sell dredge material for beneficial re-uses, but that if no market for the material can be found it would have to be disposed of off-site at a cost to the District to ensure there is room for placement of new material when needed. Taking excess material to a local landfill was figured into the cost analysis.

He said regulatory changes were also taken into consideration. Regulations are changing all the time; floodplain & wetland regulations, threatened & endangered species and water quality.

Mr. Watruba said the total cost for reconfiguration of the site is majority of the expense and comes in at \$1.5 million. The reconfiguration of the site includes creating berms that are more permanent around the site and for containment of private dredge material and incorporates operational items.

Culvert replacement and Vernon Avenue upgrade are estimated to cost about \$103,000 and \$125,000 a piece. These two improvements benefit both the District management of material from the main channel and the private dredge material.

Mr. Watruba showed some pictures. He identified where the private dredge material is stored and the material from the main channel is stored. He stated the estimated capacity of material storage. It is estimated that about 75,000 cubic yards of material from the main channel can be stored. He identified access roads and loading and off loading points.

They looked at annual costs the District can expect to incur. Over the course of the next 10-year and 25-year period, the largest cost incurred is hauling of the material to a local landfill every 3 years, if beneficial re-uses of the material cannot be found.

He then explained other costs that were taken into consideration.

Ms. Young said the evaluation of the site has everything to do with regulations. She explained some of the regulations imposed on the District by the city of Savage, such as removing material off the site in case of a flood event. The city does not want to increase the flood stage in the city because of storage of material. Analysis of flood frequencies and elevation were determined and used in the cost analysis. The District is working with the city to determine when material would need to be removed and a permanent flood elevation to manage the site to.

She explained the implications wetlands have on the management of the site. She said the actual footprint of any wetlands needs to be identified so that any impacts to wetlands can be avoided. The cost of this type of analysis was included in the estimate of cost of site operations. She said the District also needs to determine if any wildlife is impacted by the operation of the site and if the wildlife are threatened and endangered species that call for special attention.

Ms. Young said the last and final part is looking at water quality. She noted that water quality regulations are changing regularly. She noted that the MPCA has been looking at soil reference values for pollutants that might be contained in dredge material and how the District may have to deal with such regulations.

Mr. Watruba summed up the overall evaluation. He said the total cost is about \$4.3 million over 10 years and \$11.8 million over 25 years. He noted that these numbers did not include the cost of money needed for emergency evacuation of the site in the event of a flood.

Attorney Kolb said that the analysis uses worst case numbers. He noted the District has gone out and secured state funding to address some of the costs identified in the analysis and expects to continue to seek state funding, to the extent necessary. The Board has consistently maintained that the channel benefits go beyond the confines of the LMRWD.

Attorney Kolb said that if the District were called upon to expend funds on any of the large expenses called out in the cost analysis it would likely use a variety of funding sources; district wide levy, state funding and assessment of benefitted properties. He commented the special benefits study was prepared to help the Board determine benefits. Mr. Kolb explained all the different data the appraiser used. He said this is a recreation and commercial navigation. Attorney Kolb pointed out the study area. The properties potentially benefitted were identified and listed. Mr. Kolb explained the obligations of the District and how meeting that obligation has changed since the beginning of the District.

He provided the Board with a listing of the benefitted properties and how the benefits are apportioned.

Attorney Kolb reviewed the options for the board.

Manager Hartmann called for a 5-minute recess at 8:02 p.m.

Manager Hartmann reconvened the meeting at 8:07 p.m and invited those wishing to the podium.

Jake Hamlin, Director of State Government Relations, CHS, Inc., 5500 Cenex Drive, Inver Grove Heights, respectfully asked the decision be deferred until a detailed presentation about the site cost analysis; special benefit study is made to all potential benefitting properties. He also asked

for an economic impact analysis. Mr. Hamlin asked for an economic impact analysis of the project and to explore other public and federal funding options.

President Hartmann asked staff to address Mr. Hamlin's questions. Attorney Kolb said the detailed presentation is tonight. He asked what other information the properties might be addressed. He noted that He said an informational meeting could be held with those properties that might be affected.

Attorney Kolb said the funding options are limited by agreement with the Corps of Engineers and said he will provide the documents to anyone that would like to see them. He said that agreements with other local sponsors may be different from the obligations of the LMRWD identified in the agreement with the Corps, because of the date the Minnesota River project was identified by the federal river and harbors act. He reminded the Board that additional study, like and economic impact analysis would come out of the state funding the District received. He said this hearing could be recessed to a later date with instructions from the board to set up an informational meeting. He urged other parties, like CHS, to approach the state to secure more regular funding by the state.

Rubin Chong, Plant Manager, Cargill, comment on the cost and asked if this will increase the cost to use the land for placement of private dredge material. He asked why the cost of reconfiguration is solely charged to the private use of the site. Mr. Watruba said the reason why the site was listed as a private cost is because the reconfiguration of the site is necessary for the placement of private dredge material. He explained some of the constraints of the site, such as the high voltage power lines and the need to avoid wetlands and such.

Mr. Kolb explained the berms containing the private dredge material were not constructed to any specification and that the material does not dry out much over the year it remains on the site. He noted this is only an estimate and are preliminary and based on a worst case scenario. More definite numbers will be available once the District begins design and the Board will decide what gets paid for and how the costs will be distributed. Mr. Chong noted that Cargill is almost 50% of the cost and will be highly impacted. He noted he would like to respectfully disagree with the proposed action.

Randy Donnell, Interior Facilities Manager and Tim Koch, Co-manager, Savage Riverport facility, said they are concerned about the emergency removal material in the event of floods. He said there have already been two high water events this year. He said to have to remove material in the event of a flood would be very expensive. He noted that requirement should be removed. Manager Raby said the District would like to have it removed too. Administrator Loomis said the District does not have control over that condition. Ms. Young said this is part of the flood plain ordinance and flood plain management. She explained discussions the District has had with the city and that the District is working to better define that condition.

Mr. Donnell said they are having a tough year and they don't mark up the price of grain. The price of grain is established by a world market and aren't able to readily pass this cost on. He said they pay over \$100,000 a year in dredging and removal. Mr. Koch said dredging of the private slip is necessary and increasingly expensive.

Mr. Donnell requested to do what is necessary and nothing beyond what is necessary. He asked the expense be shared since they are a member of the community and pay over \$300,000 in property taxes a year. He explained that if it becomes too expensive to maintain the channel it will become uneconomic for them to continue shipping by river. That will impact the larger community.

Dean Jacobs, Tax Advisor for Cargill, said they didn't realize this was the public hearing. He commented on the material flooding back in to the river. He questioned if the water level will go down if the material is taken out. He argued that dredging is creating capacity and it doesn't make sense to him that it impacts the flood stage. Attorney Kolb said the storage is self-mitigating. He said they will work with the legislature.

Mr. Jacobs commented on the containment walls and asked about the charge. He wanted to know why the entities placing private dredge material are being charged for construction of the berm for the containment of the material placed by the Corps of Engineers.

Mr. Watruba responded to Mr. Jacob's question. Mr. Jacobs asked the board to consider not charging private parties if it is not a benefiting cost.

Mr. Jacobs talked about the disputes with the county assessor's office over the value of the Port Cargill property. He questioned if Cargill is successful in reducing the county's valuation of the property, how does that impact future benefitted assessment?

Lastly, Mr. Jacobs said that not all of the Cargill owned parcels have operations that use the channel. He requested that those parcels not reliant on the channel be excluded from consideration. Attorney Kolb said there is the ability to change the assessments. He said it is a question for the Board as to how often the apportionment of benefits should be revisited. Attorney Kolb also noted that the use of individual parcels has been considered in the determination made by Mr. Dodd.

President Hartmann asked if there was anyone else present wishing to speak.

Attorney Kolb recommended not closing the public hearing and continue the hearing to another date, with instruction to staff to hold an informational meeting with landowners. He also added that the Board direct staff to look at addressing the flood plain issues and engineering to look at what is necessary in the project.

Manager Raby made a motion to continue the public hearing with the above statements to Monday, November 19 at the Carver County Government Center at 7 p.m. The motion was seconded by President Hartmann. The motion carried unanimously.

6. NEW BUSINESS

A. Minneapolis/St. Paul Airport boundary changes between LMRWD and Minnehaha Creek WD

Administrator Loomis said the airport is doing some work and its engineer looked at the hydrology and notified the LMRWD that the boundaries do not match. Administrator Loomis said she has spoken with the Airport Commission representative about aligning the watershed boundaries to match the hydrological boundaries.

Manager Raby asked how much effort would be involved. Attorney Kolb explained the process. Manager Hartmann asked if there is money in the budget. Administrator Loomis said there is money for boundary adjustments. The board agreed to move forward.

B. 2017 Annual Report

Administrator Loomis said the report is due 180 days at the end of the fiscal so the report is a little late. She noted there are minor edits that will be made.

Manager Raby made a motion to authorize staff to finalize the report. The motion was seconded by President Hartmann. The motion carried unanimously.

C. Election of Officers

Attorney Kolb explained the process.

Manager Raby nominated Manager Hartmann to be president. Manager Frey seconded the nomination. Manager Raby made a motion to cast a unanimous ballot electing Manager Hartman as President. Manager Frey seconded the motion. **The motion carried unanimously.**

President Hartmann nominated Manager Frey as vice president. Manager Raby seconded the nomination. President Hartmann made a motion to cast a unanimous ballot electing Manager Frey as Vice President. Manager Raby seconded the motion **The motion carried unanimously.**

President Hartmann nominated Manager Raby for the combined position of Secretary/Treasurer. Manager Frey seconded the nomination. President Hartmann made a motion to cast a unanimous ballot electing Manager Raby as Secretary/Treasurer. Manager Frey seconded the motion. **The motion carried unanimously.**

D. Support for MAWD emphasis on Chloride regulation legislation

Administrator Loomis talked about putting more emphasis on the chloride regulation and supporting limited liability for commercial salt applicators. She said a resolution was included in the meeting packet.

Manager Hartmann made a motion to Adopt Resolution 18-13. The motion was seconded by Manager Raby. The motion carried unanimously.

7. OLD BUSINESS

A. 2018 Financial Audit

Administrator Loomis talked about what the other districts pay and who they use. She said a letter of engagement from Red Path was included in the meeting packet. This is a three letter of engagement so it includes audit for 2018, 2019 and 2020.

The Board discussed which firm other watershed districts use. Administrator Loomis replied with information she had gathered from other districts.

Manager Raby made a motion to accept Red Path's proposal and authorize staff to execute an agreement. The motion was seconded by President Hartmann. The motion carried unanimously.

B. Dredge Management

Administrator Loomis didn't have anything to add other than what was in the packet. Managers agreed that they had discussed this issue under the public hearing.

i. Review Process for funding of maintenance of Navigation Channel

ii. Vernon Avenue Dredge Material Management site

iii. Private Dredge Material Placement

C. Watershed Management Plan

Administrator Loomis said BWSR Board is expected to approve the plan at its next meeting, so the LMRWD can adopt the plan at the next meeting.

D. 2019 Legislative Action

Administrator commented on asking the state to exempt the dredge placement site from state and local floodplain regulation. Brief discussion was held on this option and the modeling the LMRWD is doing to determine the impact on flood elevations caused by storage of dredge material.

E. Education and Outreach Plan

Administrator Loomis had nothing to report.

F. LMRWD Projects

i. Eden Prairie Area #3 Stabilization

No information other than what was reported in the Executive Summary.

ii. Riley Creek Cooperative Project with Riley/Purgatory/Bluff Creek WD

Administrator Loomis said she received a cooperative agreement from Riley/Purgatory/Bluff Creek Watershed District (RPBCWD). That the Board should approve if they want to participate in this project with the RPBCWD.

Manager Raby asked if there are any estimates on the sediment reduction. Administrator Loomis said she believes the reductions were probably included in the feasibility report. She added that legal counsel has reviewed the agreement and didn't have any concerns. Manager Raby commented on being partners on the plan. Ms. Young said there was a comprehensive project on Riley Creek which was the initial project and that is most likely what is being referred to.

Manager Raby asked about the 30-day review period and if that is adequate time. Ms. Young said usually 30 days is ok. It depends on the magnitude of the change.

Administrator Loomis said the Board could ask RPBCWD to come and walk the Board through the proposed project.

Manager Raby made a motion to accept the agreement. The motion was seconded by Manager Hartmann. The motion carried unanimously.

iii. Seminary Fen ravine stabilization project

Administrator Loomis said final payment of the grant has been requested.

iv. Analysis of Dakota County Groundwater Project

Administrator Loomis had nothing to add.

v. East Chaska Creek/ CSAH 61 & TH 41 Transportation Improvement Project

No information other than what was reported in the Executive Summary.

G. Project/Plan Reviews

i. Hennepin County - CSAH 61 - Flying Cloud Drive

Administrator Loomis reported the LMRWD was notified of an inspection of this project by the MPCA. She assumed the LMRWD would be invited to further discussions of this project since it is within the LMRWD. She said the District was not notified of a follow up inspection that was conducted of the project. She has contacted the City of Eden Prairie to make sure the LMRWD is notified going forward. She has been informed that some areas that have been damaged are going to be difficult to restore because they are hard to access.

Staff is recommending that the LMRWD begin inspecting the construction project, because of ongoing issues related to failure of construction BMPs.

Manager Hartmann made a motion for staff to conduct inspections of the construction site. The motion was seconded by Manager Frey. The motion carried unanimously.

ii. MNDOT - I494/TH 5/TH 55 Mill & Overlay project

No information other than what was reported in the Executive Summary.

iii. MNDOT - I35W Bridge Replacement

No information other than what was reported in the Executive Summary.

- iv. **City of Shakopee - Amazon Fulfillment Center drainage**
No information other than what was reported in the Executive Summary.
- v. **City of Eagan Comprehensive Plan & Local Water Management Plan**
No information other than what was reported in the Executive Summary.
- vi. **City of Savage - Magellan Pipeline Project**
No information other than what was reported in the Executive Summary.

H. MPCA Soil Reference Values - no change since last update
No new information since last update.

7. COMMUNICATIONS

- A. **Administrator Report:** Administrator Loomis reported that if any Managers are interested in attending the MAWD conference, they should book their rooms now. She said she is willing to make reservation, but Managers can reserve rooms on their own. She wasn't sure if the Board received the same notification from MAWD as she did.
- B. **President:** No report
- C. **Managers:** No report
- D. **Committees:** No report
- E. **Legal Counsel:** No report
- F. **Engineer:** No report

8. ADJOURN

Manager Hartmann made a motion to adjourn. Manager Raby seconded the motion. The meeting was adjourned at 9:36pm. The next meeting of the LMRWD Board of Managers will be Wednesday, October 24, 2018 and will be held at the Carver County Government Center, 600 East 4th Street, Chaska, MN.

Dave Raby, Secretary

Attest:

Linda Loomis, Administrator



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Minutes of Regular Meeting

Board of Managers

Wednesday, October 24, 2018

Carver County Government Center, 602 East 4th Street, Chaska, MN 7:00 p.m.

Approved _____, 2018

1. CALL TO ORDER AND ROLL CALL

On Wednesday, October 24, 2018, at 7:00 PM in the Board Room of the Carver County Government Center, 602 East 4th Street, Chaska, Minnesota, President Hartmann called to order the meeting of the Board of Managers of the Lower Minnesota River Watershed District (LMRWD) and asked for roll call to be taken. The following Managers were present: Manager Adam Frey, and President Jesse Hartmann. In addition, the following were also present: Linda Loomis, Naiad Consulting, LLC, LMRWD Administrator; Della Schall Young, Young Environmental Consulting Group, LLC, Technical Consultant; John Kolb, Rinke Noonan, Legal Counsel; Dr. Carrie Jennings, Freshwater Society; Lisa Frenette, Frenette Legislative Advisors; and Lindsey Albright, Dakota SWCD

2. APPROVAL OF THE AGENDA

Administrator Loomis requested the removal of the September 17, 2018 regular meeting minutes.

President Hartmann made a motion to approve the agenda as amended. The motion was seconded by Manager Frey. The motion carried unanimously.

3. CITIZEN FORUM

There were no citizens who wished to address the board.

4. CONSENT AGENDA

Vice President Hartmann introduced the item.

A. Approve Minutes for July 18, 2018, August 15, 2018 & ~~September 17, 2018~~ Regular Meeting

B. Receive and file Financial Report

C. Presentation of Invoices for payment

- i. Scott County SWCD - Q3 monitoring services
- ii. Bruce Bergo - 2018 Cost Share Program
- iii. US Bank Equipment Finance - October 2018 copier rental
- iv. Rinke Noonan - July 2018 legal expenses
- v. Star Tribune - Publication of August 26, 2018 public hearing notice
- vi. Carver County Finance Department - Q3 accounting services

D. Metro-area Watershed Based Funding Grant Agreement

E. Lower Minnesota River Dredge Management Grant Agreement

F. Approval of replacement copier

G. Master Water Steward

H. Chimney Pines HOA 2018 Cost Share report

I. Bergo 2018 Cost Share report

President Hartmann made a motion to approve the consent agenda with the September minutes removed. The motion was seconded by Manager Frey. The motion carried unanimously.

5. NEW BUSINESS

A. Presentation of *Sedimentation Accumulation in the Floodplain of the Lower Minnesota River Watershed* by Dr. Carrie Jennings

Administrator Loomis introduced Dr. Carrie Jennings from the Freshwater Society.

Dr. Jennings said this presentation is similar to what she presented at the Water Resource Conference held last week in St. Paul.

Dr. Jennings said the region they are interested in is between Jordan and Fort Snelling. She explained the geological history of the Minnesota River Valley, after the Glacial River Warren receded and left the tributaries high dry. She said the formation of this river valley set it up to accumulate sediment.

She noted that as the flows have increased over the past couple decades, has the amount of sediment accumulating increased. She said it certainly looks like it has. She told of her observations with an archeological survey and how that made it seem like the valley is aggrading.

Dr. Jennings walked the Board through the report that was included in the meeting packet. She talked about how they study dated the sediment using plant pollen, which is less expensive than carbon dating would have cost. She said Rice Lake, in Shakopee, and Coleman Lake, in Bloomington, were chosen for the sediment study. Sediments were compared to nearby upland lakes, Round Lake, Lotus and Mitchell. The upland lakes are not subjected to the same sediment inundation as Rice and Coleman, but they should be exposed to the same pollens.

She spoke about the Lac Core lab at the University of Minnesota. She explained how the sediment cores were evaluated and what was looked for in the cores. Half of each core taken will be archived at the University. She said there are lots of questions, like why are the lakes still there, if they have been aggrading over such a long period of time. She said they tried to correlate events to changes in the sediment, such as floods and fires, to better date the sediments. She explained the pollen profiles and what the changes in pollen levels and types of pollen indicate.

Ragweed pollen is indicative of European settlement and Oak and Elm pollen are recent type of pollen, as these trees were planted local residents. She pointed out other events that correlate to sediment. She noted that sediment indicates more frequent flooding. She said what the increase in sedimentation implies for levies in Chaska (about 50 years based on current rates of sedimentation)

She said that on could compare LIDAR with cross section of the river to determine rate of aggradation. She noted some other work and studies that have been done, that might be used to determine the rate of sedimentation. She said we need to work on adaptive management strategies for road crossing and trail placement.

Dr. Jennings said the most updated version of the report is on the Google site.

President Hartmann asked if the Minnesota River Valley is filling in at the same rate as Lake Pepin. Dr. Jennings responded that it is clear that the Valley is 50% higher than it was before European settlement, but it currently is not as high as it was up until the 1990s, if you rely on the data in this report. If you look at the total sediment accumulation, it explains more flooding events. She said that there are still some confusing parts of this record. It is not clear why more

sediment is accumulating, because of more floods and water staying longer after flood events. You would assume that would cause more sediment to drop out of the water column.

B. 2019 Cost Share Program

Administrator Loomis said she used last year's program parameters and changed the dates. She noted in checking around with other watershed districts they haven't posted their 2019 programs. Nine Mile Creek is increasing their Cost Share Program up to \$5,000 and will fund up to 75% match. Riley/Purgatory/Bluff Creek Watershed District has put their 2019 program on hold, while they evaluate the program criteria and better match the program to the goals of the District. Minnehaha Creek Watershed District has placed its Cost Share Program on hold.

Administrator Loomis recommended staying with what they have.

President Hartmann made a motion to approve the 2019 Cost Share Program guidelines. The motion was seconded by Manager Frey. The motion carried unanimously.

6. OLD BUSINESS

A. Dredge Management

i. Review Process for funding of maintenance of Navigation Channel

Administrator Loomis said she doesn't have any more to add other than what was reported in the Executive Summary. She noted that Manager Frey attended the information meeting with the River Terminal Operators

President Hartmann asked for a summary of the meeting. Attorney Kolb said the information meeting was well attended. He said most of those present wanted to know why the LMRWD was proposing this. He reported of the information that was shared with those in attendance.

Della Young, technical consultant for the District, said that another important thing that came out of the meeting was the need for a united front when approaching the state for funding of dredge management.

ii. Vernon Avenue Dredge Material Management site

No information other than what was reported in the Executive Summary.

iii. Private Dredge Material Placement

No information other than what was reported in the Executive Summary.

B. Watershed Management Plan

Administrator Loomis said Plan has been approved by BWSR and is ready for the Board to adopt. Legal counsel prepared a resolution to be adopted.

Attorney Kolb explained the resolution. He noted the resolution implements the capital improvement plan and authorizes staff to adopt rules. He noted that rules would apply to unincorporated areas of the District and MNDOT projects.

President Hartmann made a motion to approve Resolution 18-14. The motion was seconded by Manager Frey. The motion carried unanimously.

C. 2019 Legislative Action

Administrator Loomis introduced Lisa Frenette. She said she is looking forward to helping the board accomplish the goals.

Administrator Loomis said if Managers have specific goals for the upcoming session they should let staff know. Ms. Frenette asked about the level of funding. Ms. Frenette noted there is interest in resurrecting a bill previously introduced by Representative Morrie Lanning.

Attorney Kolb noted that staff will be preparing a list of priorities for the 2019 legislative sessions.

D. Education and Outreach Plan

There was no new information to report since the last update.

E. LMRWD Projects

i. Eden Prairie Area #3 Stabilization

No information other than what was reported in the Executive Summary.

ii. Riley Creek Cooperative Project with Riley/Purgatory/Bluff Creek WD

No information other than what was reported in the Executive Summary.

iii. Seminary Fen ravine stabilization project

No information other than what was reported in the Executive Summary.

iv. East Chaska Creek (Carver County Watershed Based Funding)

Administrator Loomis said the work plans for projects to be funded by the Watershed Based Funding, were provided in the meeting packet. All work plans need to be authorized for the watershed-based funding.

Administrator Loomis noted a timeline was handed out at the meeting for all projects.

v. Schroeder Acres Park (Scott County Watershed Based Funding)

The work plan for this project was included in the meeting packet and should be authorized by the Board

vi. Shakopee Downtown BMO Retrofit (Scott County Watershed Based Funding)

The work plan for this project was included in the meeting packet and should be authorized by the Board

vii. PLOC (Prior Lake Outlet Channel) Restoration (Scott County Watershed Based Funding)

The work plan for this project was included in the meeting packet and should be authorized by the Board

viii. Dakota County Fen Gap Analysis and Conceptual Model (Dakota County Watershed Based Funding)

The work plan for this project was included in the meeting packet and should be authorized by the Board

ix. Hennepin County Chloride Project (Hennepin County Watershed Based Funding)

The work plan for this project was included in the meeting packet and should be authorized by the Board

x. Vegetation Management Plan

This project is in the LMRWD Watershed Management Plan's capital improvement program. A work plan was included in the meeting packet and should be authorized by the Board.

xi. Sustainable Lake Management Plan - Trout Lakes

This project is in the LMRWD Watershed Management Plan's capital improvement program. A work plan was included in the meeting packet and should be authorized by the Board.

xii. Geomorphic Assessment of Trout Streams

This project is in the LMRWD Watershed Management Plan's capital improvement program. A work plan was included in the meeting packet and should be authorized by the Board.

President Hartmann made a motion to authorize all work plans. The motion was seconded by Manager Frey. The motion carried unanimously.

F. Project/Plan Reviews

i. MN Valley State Trail - EAW (Environmental Assessment Worksheet)

No information other than what was reported in the Executive Summary.

ii. Hennepin County - CSAH 61 - Flying Cloud Drive

Administrator Loomis said the site was inspected and reported that the contractor underestimated the amount of erosion control would be needed on the project. Staff is recommending doing periodic inspections biweekly, after major rain events and after the ground is frozen and button up for the season, begin again after work commences.

President Hartmann made a motion to authorize staff to inspect the project as recommended by staff. The motion was seconded by Manager Frey. The motion carried unanimously.

iii. MNDOT - I494/TH 5/TH 55 Mill & Overlay project

No information other than what was reported in the Executive Summary.

iv. MNDOT - I35W Bridge Replacement

No information other than what was reported in the Executive Summary.

v. MNDOT - I494 from TH169 to Minnesota River

Administrator Loomis said the District was notified about a project for improvements on I494 from 169 to the MN River. The goal is to increase the capacity on 494. The project is schedule to begin in 2019 with completion in expected in 2021.

She noted managing stormwater from the project will be a challenge

vi. City of Shakopee - Amazon Fulfillment Center drainage

No information other than what was reported in the Executive Summary.

vii. City of Eagan - Stormwater Management Plan, Water Quality & Wetland Management and Comprehensive Plan

Administrator Loomis said staff reviewed the local surface water plans and comprehensive plans. She noted that the cities have been provided with the LMRWD comments and staff is recommending approval of the Local Surface Water Management Plans for the cities of Eagan, Eden Prairie and Lilydale. Resolutions approving the Plans have been prepared and can be adopted in one motion.

President Hartmann made a motion to approve Resolution 18-15. The motion was seconded by Manager Frey. The motion carried unanimously.

viii. City of Eden Prairie - Aspire Eden Prairie 2040 Draft Plan

President Hartmann made a motion to approve Resolution 18-16. The motion was seconded by Manager Frey. The motion carried unanimously.

ix. City of Lilydale - 2040 Draft Comprehensive Plan

President Hartmann made a motion to approve Resolution 18-17. The motion was seconded by Manager Frey. The motion carried unanimously.

x. MAC/LMRWD/MCWD boundary realignment

No information other than what was reported in the Executive Summary.

xi. Fort Snelling - Dominion Housing

No information other than what was reported in the Executive Summary.

- xii. **USACOE/USFWS - Bass Ponds, Marsh & Wetland**
No information other than what was reported in the Executive Summary.

- G. **MPCA Soil Reference Values - no change since last update**
No new information since last update.

7. COMMUNICATIONS

- A. **Administrator Report:** Administrator Loomis reported on MAWD's response to the request from the Heron Lake Watershed District regarding statements made by speakers at the Minnesota River Boat Tour.
- B. **President:** No report
- C. **Managers:** No report
- D. **Committees:** No report
- E. **Legal Counsel:** No report
- F. **Engineer:** No report

8. ADJOURN

Manager Hartmann made a motion to adjourn. Manager Frey seconded the motion. The motion carried unanimously. The meeting was adjourned at 8:22pm. The next meeting of the LMRWD Board of Managers will be Monday, November 19, 2018 and will be held at the Carver County Government Center, 600 East 4th Street, Chaska, MN.

Dave Raby, Secretary

Attest:

Linda Loomis, Administrator



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Minutes of Regular Meeting

Board of Managers

Monday, November 19, 2018

Carver County Government Center, 602 East 4th Street, Chaska, MN 7:00 p.m.

Approved _____, 2018

1. CALL TO ORDER AND ROLL CALL

On Monday, November 19, 2018, at 7:00 PM in the Board Room of the Carver County Government Center, 602 East 4th Street, Chaska, Minnesota, President Hartmann called to order the meeting of the Board of Managers of the Lower Minnesota River Watershed District (LMRWD) and asked for roll call to be taken. The following Managers were present: Managers Adam Frey, David Raby and President Jesse Hartmann. In addition, the following were also present: Linda Loomis, Naiad Consulting, LLC, LMRWD Administrator; Della Schall Young, Young Environmental Consulting Group, LLC, Technical Consultant; John Kolb, Rinke Noonan, Legal Counsel; Lindsey Albright, Dakota SWCD. Randy Donnell, Savage Riverport; Jake Hamlin, CHS, Inc.; Lee Nelson, Upper River Services; Dean Jacobs and Becca Martin, Cargill; Lisa Brickey Mosaic; Matt Friedrich and Mike Bush, Superior Minerals; and Taylor Luke, LS Marine.

2. APPROVAL OF THE AGENDA

Administrator Loomis requested the removal of the September 17, 2018 and the October 24, 2018 regular meeting minutes.

Manager Raby made a motion to approve the agenda as amended. The motion was seconded by President Hartmann. The motion carried unanimously.

3. CITIZEN FORUM

There were no citizens who wished to address the board on non-agenda items.

4. CONSENT AGENDA

President Hartmann introduced the item.

A. ~~Approve Minutes for September 17, 2018 and October 24, 2018 Regular Meeting~~

B. Receive and file Financial Report

C. Presentation of Invoices for payment

- i. Burns & McDonnell - July & August 2018 Engineering services
- ii. Star Tribune - Publication of 2019 Budget public hearing notice
- iii. State Department of Administration - publication of Request for proposals for engineering and legal services
- iv. US Bank Equipment Finance - November 2018 copier rental
- v. Young Environmental Consulting Group, LLC - August 2018 technical & engineering services
- vi. Coalition for a Clean Minnesota River - sponsorship of 11th Minnesota River Congress
- vii. Daniel Hron - November 2018 office rent

- viii. **Metro Sales - payment copier maintenance service agreement**
 - ix. **Rinke Noonan - September 2018 legal expenses**
 - x. **Star Tribune - Publication of 2nd notice for 9-foot channel public hearing**
 - xi. **Naiad Consulting, LLC - August 2018 administrative services & expenses**
 - xii. **Time Saver Off Site Secretarial - preparation of August meeting minutes**
 - xiii. **HDR Engineering, Inc. - website maintenance**
 - xiv. **Young Environmental Consulting Group, LLC - September 2018 technical & engineering services**
- D. Dakota County Landscaping for Clean Water Grants**
- E. 2019 Agreement with Time Saver Off-site Secretarial**

Manager Raby made a motion to approve the consent agenda with the September and October meeting minutes removed. The motion was seconded by President Hartmann. The motion carried unanimously.

5. Public Hearing

A. Continuation from the September meeting

President Hartmann gave a brief overview and explained possible action to be taken by the Board. He then asked if anyone was present that wished to address the Board.

Dean Jacobs, Tax Advisor for Cargill, handed out some materials he prepared. Mr. Jacobs addressed the board back in September. He noted that Cargill is comprised of an east and west facility. The east facility has multiple businesses and some of those do not have any benefit or association with using barges or the river for transportation. Mr. Jacobs provided his analysis of which parcels he believes benefit and those that do not. He went through the list of parcels and explained how Cargill determines expenses for different business units housed at Cargill East. He said he included Mosaic in the analysis, because Cargill has a building on the Mosaic site. He stated they are requesting that \$6.25 million in buildings and excess land be removed from consideration for benefit.

President Hartmann asked for a clarification of the uses of some of the building Mr. Jacobs had labeled in the handouts he provided to the Board. Mr. Jacobs answered President Hartmann's questions.

Jake Hamlin, Director of Government Relations, CHS, Inc., thanked the board for the opportunity to comment and for the opportunity to work with the District over the course of this process. He also thanked the Board for including the reference to the resolution. He feels there are other opportunities to fund management of dredge material. He asked that the current process be abandoned to allow for more time to work with the city and others to find alternates sources of funding. Manager Raby asked how much time Mr. Hamlin thinks is needed. Mr. Hamlin said it depends on what level the city or county want to participate in but he thought 12-18 months.

Randy Donnell, District Manager of Riverland Ag, said there has been a lot of talk about a recession and commented on prices for agricultural products. He said an assessment of this level will cause hardship on the businesses operating along the channel, because they do not control the price of grain. He doesn't understand why the changes to the site are needed as the site has been used for years. He wanted to know what has changed. He questioned if this is necessary and if there are other alternatives available. He said if this project is absolutely necessary, he wants the board to think about the \$100,000 that is spent every year dredging private terminals. Material dredged from the private terminals comes from upstream and none of the businesses that may be asked to pay are responsible for the sediment that must be removed from the channel and terminals. He said Riverland operates on a very tight margin and

P & L. They do not handle salt or fertilizer, only grain. Mr. Donnell said they pay \$30,000 a month in property taxes and talked about his ability to recoup expenses if an assessment were to be made. He said if they reduce what they pay the farmer, farmers will look for less expensive alternative; eventually, leading to business going away. He compared the channel to a freeway system that should be kept open to keep commerce in this area. He noted the Channel has widespread benefits. He said the true beneficiaries are the people upstream that have drain tiled and farm without consideration of the downstream impacts. He reiterated that the Board evaluate whether this project is really necessary, and if so, execute it with the least amount of expense and then spread it over the widest tax base as much as possible.

Lisa Brickey, manager of the Mosaic warehouse in Savage, said the whole process feels like giving a blank check because they don't know how much exactly or exactly who is going to do it or when. Ms. Brickey noted that MNDOT is planning an overpass at Dakota/Yosemite Avenues & TH 13 in 2022 that is going to cost about \$22 to \$25 million. She said the Mayor of Savage told her that people in southern Minnesota were responsible for getting that project going because they wanted better access to the ports. She said maybe they would be willing to pay to keep the ports open. She thought that maybe there would be other money available.

Lee Nelson, Upper River Services, said they service the benefitting property owners. They move the barges to and from Savage. He said he supports Mr. Hamlin's suggestion for more time. He is concerned with the report prepared by Mr. Dodd about who benefits. He provided some history of the District and asked why the cities in the area would have petitioned to form the District if there was no benefit to the communities. He listed many others that he believes benefit from the Channel. He said some of the properties identified as benefitting do not use the river at all, yet they are in the report. He said he wanted more time to look at ways that all the beneficiaries can help pay for the project.

Mike Bush, Superior Mineral Companies, said they are a small family owned company. He talked about the company and provided some background about why they are worried about this assessment. If the board passes the assessment the company will have to pass that increase on to the customers. This would raise the price of shingles in the area or cause manufacturers to look for other source. Superior Minerals recently purchased additional land in the area and this capital expenditure will take them years, possibly decades to pay off. Mr. Bush asked the board to remember all the good the companies have done.

Rebecca Martin, Cargill, said she wanted echo the comments of Mr. Hamlin and Mr. Nelson. She asked that the decision be postponed to allow them more time to look for other funding sources.

Seeing and hearing no one else wishing to speak, President Hartmann closed the public hearing.

Attorney Kolb wanted to clarify a few things for the board. The Board is not deciding tonight to assess anyone; all they are doing is turning on a legal authority. So when it comes time to make decisions on how to fund modifications of or improvements to the dredge material handling site or even maintenance, the Board has this additional tool at its disposal in addition to other authorities it has to raise revenues to do the work. He said the question was raised about the necessity of this project. He said the question is even simpler than that - does the District incur expenses in the operation of the site? The answer is yes. He then asked if the District has an obligation to maintain the site. The answer is yes. Staff recommended improvements to the site for various reasons.

He said the reasons for the staff recommendations are twofold. One is to increase the efficiency of management of the material; to configure the site in such a way as to allow material to

dewater faster so it can be removed from the site. The second reason is the site is at risk right now for the following reasons. The containment berms were not originally constructed to any engineering specification, there are certain requirements under the Conditional Use Permit from the City of Savage related to how the District has to manage and maintain the site, and there are stormwater management and compliance issues that the District can only get its arms around by reconfiguring the site. He continued, could the improvements be put off? Possibly yes, but putting off improvements doesn't change the fact that the district incurs certain expenses every year on the site just to maintain it, just to manage it.

He noted again that if the Board were to take an action, it would only turn on the authority to be able to make an assessment if the Board chose to do so. He said the District justified the use of state money to fund improvements on the site because the sediment filling in the channel and terminals is coming from outside the District and is therefore beyond the control of the District. He pointed out that the District added managing dredge material to its capital improvement plan, which allows the District to levy ad valorem tax across the entire district for some of those costs. He said the District could allocate expenses between the different sources of revenue rather than use one source to pay for it all. Attorney Kolb stated tonight is an acknowledgment and adoption of a benefits rule for these properties that would serve as the basis for allocation of those assessments if they were to be made. He also pointed out that before any assessment would be made there would be a hearing. He explained that there is time to explore alternative sources of funding before assessments would be made regardless of making a decision tonight. He said everyone that spoke this evening should partner up with the LMRWD at the State to request funding of managing dredge material by the State.

The big issue before the Board tonight is a policy issue; do they want to trigger this authority and have it as a tool or do they not. If they do then the Board would move toward adopting an order that would confirm a benefits rule. If they don't and the Board wants to keep things as they are with ad valorem tax and whatever money the District can secure from the State and work with those present to try to secure State funding, the Board could choose that as well.

Lastly, if the board determines they want to move forward and add this tool then they need to talk about the actual benefits determinations and assessments. If this is the direction, Mr. Kolb said he would like some clarification from Mr. Jacobs about the materials he provided. The concern Mr. Kolb has is the assessment done by Mr. Dodd did not go to the level of detail Mr. Jacobs provided tonight. Mr. Kolb said the dollar amount in the LMRWD documents are not the actual assessment, but only the value determined for individual parcels. He noted that if the Board chooses not to decide tonight they can continue this and provide direction to staff.

Manager Raby noted they are not making any decisions establishing any assessments at this point in time. He said the Board has always indicated that it would look at other sources of funding. He noted the Board should have every tool available to it when funding a project. He said he would like to go ahead and establish the benefits analysis approach to use in the event they need it.

Manager Frey said he agrees. They are not agreeing to anything other than the option.

President Hartmann said he too agreed. He noted the District has to do the site maintenance. He noted that we are all here for the same reasons and should use all tools available. He welcomes everyone's help to secure other sources of funding. He agrees with a lot of what was said tonight and they (the LMRWD) need help.

Manager Raby said there is additional time whether the Board authorizes this tool or not.

Manager Frey said others could help with some of the regulation imposed upon the District.

Lee Nelson asked the board to think about the message they are sending to the terminal operators. Is there anything that precludes the Board from making this decision in the future? He said that everyone talks about partnering, but then you don't want to partner with me until you have a larger hammer. He said to have this held over their heads is a rough way to get started. President Hartmann said that is not how he views this. He noted that if the LMRWD did not have the site it would be difficult for everyone to maintain the channel.

Manager Raby said that what the Board is being asked to do is to continue to allow all of the constituents of the LMRWD to fund the cost of managing dredge material and that they also are not responsible for material getting to the river. He thinks the District needs to have options to raise revenue and he views this as just one more options available to the District.

Attorney Kolb said noted that Mr. Nelson did give an accurate history of the founding of the District. Mr. Kolb noted that it is the obligation of the District, as local sponsor, to find sites for dredge material to be placed and that over the years it has become next to impossible to find sites to place dredge material and the District is now limited to this single site. He noted how the communities did benefit from the economic activity created by the channel. Taxes generated by the business activity went back into the communities.

Mr. Kolb said it is clear from the record that predecessors to this Board found there were specifically two types of benefits created by the channel; general benefits to the District that justified district-wide ad valorem taxes and then special and unique benefits to certain properties that were able to take advantage of the navigation channel. What it didn't do was to say that this property benefits in this way or that another parcel benefitted in other ways. It is true there is an economic engine generated by the navigation channel and it is important for the Board to keep that in mind as it proceeds. A residential property owner will pay more as a proportion of overall value in taxes to the District than commercial/industrial properties. If the Board is inclined to move forward, Mr. Kolb handed out findings for the Board to adopt. He did note there were some corrections needed if the Board wanted to adopt the resolution tonight.

Randy Donnell questioned when they look at other funding, if this vote, to open the door to assessing benefitting properties, would impact how the State would view any request for funds. Attorney Kolb said he said the State knows what means are available to the District and would advise that the District be very transparent when speaking to the State. He thinks this opens the door to let the state know why they should be doing something different. He said he would hope that everyone would be willing to tell the State the same story they have told the Board this evening; how the benefits of channel extend beyond the District, how an assessment will impact the business activity and how sediment coming from outside the District impacts them.

Manager Raby said he thinks the Board needs to move forward.

President Hartmann asked what the Board needs to do to wait until the next meeting to take action. Attorney Kolb said they can continue the hearing to a date and time certain without having to provide additional notice.

President Hartmann made a motion to recess the public hearing and continue to Wednesday, December 19th meeting at this location at 7 p.m. The motion was seconded by Manager Frey. The motion carried unanimously.

6. NEW BUSINESS

A. MAWD Annual meeting

Administrator Loomis said the MAWD Annual meeting is next week. The Board should appoint two delegates if any of the Board is planning to attend. No members indicated they will be

attending. Manager Hartmann asked if Board members could participate remotely. Administrator Loomis said MAWD does not have provisions for remote attendance.

Administrator Loomis explained the letter Board members were given from the Heron Lake Watershed District to the MAWD Board taking issue with statements made by speakers on the Minnesota River Boat Tour. She mentioned that she had spoken with a member of the MAWD Board about this and the issue the Board has with the MAWD dues structure. The MAWD Board member said she would be happy to talk to the Board at the January meeting.

B. Set dates for 2019 meetings

Manager Raby said he is leaving 1/9. The January meeting will be 1/7. The rest of the dates did not have any conflicts.

President Hartmann made a motion to set the 2019 meeting dates discussed above. The motion was seconded by Manager Raby. The motion carried unanimously.

C. 2018 Cost Share Application - Carver County

Administrator Loomis said she received a request from Carver County for LMRWD participation in a cost share project. The project has already started because the County did not realize the project was located in the LMRWD. The amount requested was \$2,400 and Carver County is paying for half so the district would pay \$1,200. Manager Raby noted they have the money in the budget. He commented on the sign.

Manager Raby made a motion pay the \$1,200 for the Carver County cost share. The motion was seconded by President Hartmann. The motion carried unanimously.

7. OLD BUSINESS

A. Dredge Management

i. Review Process for funding of maintenance of Navigation Channel

Administrator Loomis said there is no additional information to report other than what was in the meeting packet. Attorney Kolb noted a draft order was handed out regarding the assessment of benefitted properties and if the Board has any comments they should let staff know so that the comments can be incorporated into the document in time to be included in next month's meeting packet.

ii. Vernon Avenue Dredge Material Management site

No additional information other than what was reported in the meeting packet.

iii. Private Dredge Material Placement

President Hartmann asked about the disposal of private dredge material. Administrator Loomis noted that Cargill has found someone to take the private dredge material off the LMRWD site. Material will now be taken off site in smaller amounts, so the traffic will not be impacted as much it is when site is emptied in total. Material will be taken by a customer of Cargill's. It is expected this option will be less costly to the terminal operators.

B. Watershed Management Plan

Administrator Loomis stated the resolution adopting and implementing the approved Plan was adopted at the October meeting. She said notification has been sent to all parties required to be notified.

C. 2019 Legislative Action

Administrator Loomis said proposed legislative positions were provided in the meeting packet. Manager Raby thought it was a good list. Administrator Loomis noted funding dredge

management will be to first priority. She said some of these items were placed here, in case it comes up at the legislature. The LMRWD can lend its support without coming back to the Board for approval.

Manager Raby made a motion to authorize staff use the list in working with the legislature. The motion was seconded by President Hartmann. The motion carried unanimously.

D. Education and Outreach Plan

No new information since last update

E. LMRWD Projects

i. Eden Prairie Area #3 Stabilization

No information other than what was reported in the Executive Summary.

ii. Riley Creek Cooperative Project with Riley/Purgatory/Bluff Creek WD

No information other than what was reported in the Executive Summary.

iii. Seminary Fen ravine stabilization project

No information other than what was reported in the Executive Summary.

iv. East Chaska Creek (Carver County Watershed Based Funding)

No information other than what was reported in the Executive Summary.

v. Schroeder Acres Park (Scott County Watershed Based Funding)

No information other than what was reported in the Executive Summary.

vi. Shakopee Downtown BMO Retrofit (Scott County Watershed Based Funding)

No information other than what was reported in the Executive Summary.

vii. PLOC (Prior Lake Outlet Channel) Restoration (Scott County Watershed Based Funding)

No information other than what was reported in the Executive Summary.

viii. Dakota County Fen Gap Analysis and Conceptual Model (Dakota County Watershed Based Funding)

No information other than what was reported in the Executive Summary.

ix. Hennepin County Chloride Project (Hennepin County Watershed Based Funding)

No information other than what was reported in the Executive Summary.

x. Vegetation Management Plan

No information other than what was reported in the Executive Summary.

xi. Sustainable Lake Management Plan - Trout Lakes

No information other than what was reported in the Executive Summary.

xii. Geomorphic Assessment of Trout Streams

No information other than what was reported in the Executive Summary.

F. Project/Plan Reviews

i. Carver County 2040 Comprehensive Plan review

Administrator Loomis said this resolution has been revised since it was distributed in the meeting packet. She noted she received a phone call from Paul Nelson at Scott County who noted the LMRWD does not need to approve the County Comprehensive Plan, just the surface water management sections of the plan. She noted there are resolutions for both Carver County and Scott County and managers can adopt both with one resolution.

ii. Scott County 2040 Comprehensive Plan review

See comments above for Item 7.F.i.

President Hartmann made a motion to adopt resolution 18-19 for the Carver County and resolution 18-18 for Scott County. The motion was seconded by Manager Raby. The motion carried unanimously.

- iii. **City of Chanhassen - TH 101 Improvements**
No information other than what was reported in the Executive Summary.
 - iv. **City of Savage - 12113 Lynn Avenue**
No information other than what was reported in the Executive Summary.
 - v. **City of Richfield/Bloomington - TH 77 & 77th Street underpass**
No information other than what was reported in the Executive Summary.
 - vi. **MPCA - MN River TSS TMDL**
No information other than what was reported in the Executive Summary.
 - vii. **MN Valley State Trail - EAW (Environmental Assessment Worksheet)**
No information other than what was reported in the Executive Summary.
 - viii. **Hennepin County - CSAH 61 - Flying Cloud Drive**
Administrator Loomis commented on conditions found by inspection of the construction project. Manager Raby asked if staff has had any feedback from others that received the inspection report. Administrator Loomis said USFWS is concerned and is waiting for the project to be completed before they determine what restoration should be made.

The City of Eden Prairie is also concerned and has said they would like to attend other inspections. There was discussion about the erosion issues and what can be done. The contractor is looking for direction and everyone is reluctant to give them specific direction. Attorney Kolb said the response to the contractor should be for them to come into compliance with the NPDES permit and to hire a consultant to tell them how to do that.

Manager Raby asked about a scenic overlook the city has now constructed in the slope on the south side of CSAH 61 near Charlson Road. Staff said they were not aware of this project. Administrator Loomis said it was not part of the County's project. Administrator Loomis said she would check with the city.
 - ix. **MNDOT - I494/TH 5/TH 55 Mill & Overlay project**
No information other than what was reported in the Executive Summary.
 - x. **MNDOT - I35W Bridge Replacement**
No information other than what was reported in the Executive Summary.
 - xi. **MNDOT - I494 from TH169 to Minnesota River**
No information other than what was reported in the Executive Summary.
 - xii. **City of Shakopee - Amazon Fulfillment Center drainage**
No information other than what was reported in the Executive Summary.
 - xiii. **MAC/LMRWD/MCWD boundary realignment**
No information other than what was reported in the Executive Summary.
 - xiv. **Fort Snelling - Dominion Housing**
No information other than what was reported in the Executive Summary.
 - xv. **USACOE/USFWS - Bass Ponds, Marsh & Wetland**
No information other than what was reported in the Executive Summary.
- G. MPCA Soil Reference Values - no change since last update**

No new information since last update.

7. COMMUNICATIONS

- A. Administrator Report:** Administrator Loomis said the report was posted online. She walked through the report; there was notice of a public meeting for improvements of the trail head at the Cedar Avenue Boat Launch; the final report from the Metro Children's Water festival was provided. She reported on the MN River Congress November 8th. The Annual Report from the Dakota County Landscaping for Clean Water was provided. Staff has been exploring options for data sharing of LMRWD documents. Manager Hartmann said he has noted issues with accessing Sharepoint with Google Chrome. She reported on a meeting with Metropolitan Council Environmental Services. She invited Managers to attend the River Resource Forum.
- B. President:** No report
- C. Managers:** Manager Raby asked about the expansion of C.H. Robinson and asked if that is within the LMRWD or in the Riley/Purgatory/Bluff Creek Watershed District. Administrator Loomis said she thinks it is in the LMRWD and will check with the city of Eden Prairie about the status of that project.
- D. Committees:** No report
- E. Legal Counsel:** No report
- F. Engineer:** No report

8. ADJOURN

President Hartmann made a motion to adjourn. Manager Raby seconded the motion. The meeting was adjourned at 9:12pm. The next meeting of the LMRWD Board of Managers will be 7:00, Wednesday, December 19, 2018 and will be held at the Carver County Government Center, 602 East 4th Street, Chaska, MN.

Dave Raby, Secretary

Attest:

Linda Loomis, Administrator



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Minutes of Regular Meeting

Board of Managers

Wednesday, December 19, 2018

Carver County Government Center, 602 East 4th Street, Chaska, MN 7:00 p.m.

Approved _____, 2018

1. CALL TO ORDER AND ROLL CALL

On Wednesday, December 19, 2018, at 7:02 PM in the Board Room of the Carver County Government Center, 602 East 4th Street, Chaska, Minnesota, President Hartmann called to order the meeting of the Board of Managers of the Lower Minnesota River Watershed District (LMRWD) and asked for roll call to be taken. The following Managers were present: Managers Adam Frey, David Raby and President Jesse Hartmann. In addition, the following were also present: Linda Loomis, Naiad Consulting, LLC, LMRWD Administrator; Della Schall Young, Young Environmental Consulting Group, LLC, Technical Consultant; Lindsey Albright, Dakota SWCD. Randy Donnell, Savage Riverport; Jake Hamlin and Greg Oberle, CHS, Inc.; Lee Nelson, Upper River Services; Lisa Brickey, Mosaic Crop Nutrition; Paul Nelson, Scott County WMO; Dean Jacobs, Cargill; John Carroll, Ceres Global; Greg Genz, UMWA (Upper Mississippi Waterway Association) and Taylor Luke, LS Marine.

2. APPROVAL OF THE AGENDA

Administrator Loomis requested the removal of the September 17, 2018, October 24, 2018 and November 19, 2018 regular meeting minutes.

Manager Raby made a motion to approve the agenda as amended. The motion was seconded by President Hartmann. The motion carried unanimously.

3. CITIZEN FORUM

There were no citizens who wished to address the board on non-agenda items.

4. CONSENT AGENDA

President Hartmann introduced the item.

~~A. Approve Minutes September 17, 2018, October 24, 2018 and November 19, 2018 Regular Meetings~~

B. Receive and file Financial Report

C. Presentation of Invoices for payment

- i. **Daniel Hron - November & December 2018 office rent**
- ii. **Burns & McDonnell - September 2018 Engineering services**
- iii. **Chimney Pines Home Owners Association - 2018 Cost Share Grant Program**
- iv. **US Bank Equipment Finance - December 2018 copier rental**
- v. **Naiad Consulting, LLC - September 2018 administrative services & expenses**
- vi. **Time Saver Off Site Secretarial - preparation of September 2018 meeting minutes**
- vii. **US Geological Survey - Stream Gauge and monitoring**

- viii. **Dakota County Soil & Water Conservation District - 3rd Quarter Monitoring & Technical Assistance/Cost Share Services**
- ix. **Young Environmental Consulting Group, LLC - October 2018 technical & engineering services**
- D. **Receive and File correspondence**
 - i. **September 24, 2018 letter from CHS, Inc.**
 - ii. **November 14, 2018 letter from CHS, Inc.**
- E. **Resolution 18-20 - Transfer of funds to 9-foot Channel**
- F. **Adopt 2019 Budget and certify tax levy payable 2019**

Manager Raby made a motion to approve the consent agenda with the September, October and November meeting minutes removed. The motion was seconded by President Hartmann. The motion carried unanimously.

5. PUBLIC HEARING

A. The matter of the Nine Foot Channel Permanent Disposal Sites Acquisition and Development Basic Water Management Project

President Hartmann reopened the hearing for additional public comment.

Jake Hamlin, State Director of Government Affairs, CHS, Inc., it is obvious that the District has wrestled with the issue of funding the management and disposal of dredge material since its inception. He noted that in 2013 the district and a former administrator went to the legislature asking for significant funding. At that time the question was posed that if adequate funding could not be secured to manage the dredge disposal site, then the District would consider how best to obtain financial resources or how best could it manage the technical issues to maintain the channel. The District deserves huge credit for receiving a significant legislative appropriation in 2017. He said the terminal operators have met with the City of Savage, in response to Manager Raby's comment at the end of the last Board meeting. Administrator Loomis and Counselor Kolb also attended. He expects this group to continue to meet to identify funding and address technical issues as well. Mr. Hamlin talked about the meetings with Savage and the goals they hope to accomplish through these meetings. He respectfully requested that this item be tabled for about 180 days to allow this work group time to identify alternative funding sources and the ability to address technical issues as well.

Manager Raby said he was under the impression that there had actually been two meetings and that LMRWD was only aware of and invited to attend one of those. Mr. Hamlin said they have had two meetings and the first meeting was to bring the issue to the attention of the city. Manager Raby asked if they had come up with any ideas. Mr. Hamlin responded that they have identified some sources of revenue such as the Port Development Assistance Program through the department of transportation, partnering with the city and others, or perhaps establishing a joint powers organization with the St. Paul Port Authority. He said they could also look at establishing a port authority.

Mr. Lee Nelson, Upper River Services, he noted Manager Raby has asked them to go out and see what they could do to help the District. In a month they (the work group) have had two meetings. The city needed time to go back to look at what options they have to help. The District has been working at this for a long, long time. In a month, they have made some progress, but they are not there yet and he would like more time, until the end of the legislative session. He thinks if this resolution is passed it is effectively saying that the benefitted parties are only the ones identified in the report the District commissioned. Mr. Nelson contends that the beneficiaries of this system, just as much as those properties identified, are the farmer 50 miles away who moves his product to the international market via the Minnesota River. It's the

people in Fergus Falls who get fertilizer and salt for their roads. It is the State that is the beneficiary. He thinks it is mistaken and wrong to say that only those identified in the report are the beneficiaries. He says this is the point they are trying to get across.

Mr. Nelson says they have been asked if they will go with the District to the State to appeal for funding for this issue. He says they will but only if we all go with the same mission. But to go in fear that someone will say that, "you have this authority, so hit up those 10 or 12 properties and leave the rest us alone", will only hurt our cause, in his opinion. He asked that the motion be tabled for 180 days or until the June meeting. Let's see what we can do working together.

Randy Donnell, Riverland Ag, requested the District not vote for this or table it. He thinks it opens a bad door. He says if the District votes for this, it makes it too easy for other parties to say use this tool and leave us alone. He says if the District does determine to assess then the benefitted properties will battle over beneficial members. He questioned the report prepared for the District by Clay Dodd. He feels some of the properties are actually injured parties not benefitted parties, because they are removing silt that comes from other people's properties upstream. He feels being assessed would hurt them twice. He feels there is widespread benefit. He asked the Board to vote no on the motion or table it to give them ample time to collectively seek other sources of funding.

Lisa Brickey, Manager of Mosaic Crop Nutrition, said she has gotten to know everyone much better and says they have had the opportunity to become a team to work on this together and asked the board to wait until after the legislative session to pass this. She worries that if this motion is passed it will remove the incentive for the terminal operators to work together. She requested the Board wait until after the legislative session.

Seeing and hearing no one else wishing to speak, President Hartmann closed the public hearing.

Manager Raby said he heard from the speakers that they do not trust the Board and they are being critical of what the Board is doing. He says that he heard everyone wants to be a partner with the District, but heard threats that if this passes that that other will not be partners and work with the District. He questioned how we can be partners.

He says the Board has clearly made the point that this is just adding one more funding option for the District. He believes this is important, because, as everyone knows, the funding historically has come from the taxpayers in the four counties within the District. Those taxpayers include the benefitted properties and their companies, but it also includes every resident of these counties. He doesn't disagree that there are a whole lot of people that benefit from this channel, but it will be hard to convince a lot of the District's taxpayers that they are personally benefitting.

Manager Raby says the Board has clearly made the point that this is one more option for the District. The Board has clearly made the point that the District is not assessing anything at this time. The Resolution has even been modified to make sure it is clear that if there is an assessment it will be made in conjunction with the District continuing to look for other funding throughout the State, as well as continuing to assess ratepayers with ad valorem taxes. He personally doesn't feel the Board should delay this more. He noted that if it is delayed, the District will incur additional costs. He said if it is delayed the Board will have to hold another hearing with official notice, which costs the District. It is possible the study would have to be updated, which would cost more money.

Manager Raby said he is in favor of moving forward with this and doesn't understand why the work group can't continue its efforts to find funds. The District will continue its efforts to find funds regardless of whether the Board approves this or not.

President Hartmann said if this resolution is passed it means the District has an additional option at its disposal. Does that really change what we want to go after as a partnership? He doesn't think it does. He said we all agree that funding should come from alternative sources before any assessment. He thinks certain threats were made and they are what they on both sides and the Board wants to be able to work together. Passage of this resolution shouldn't change what our goals are together.

Manager Frey agrees this is a tool and not an assessment. He stated nothing's happening at this point and he personally doesn't think the benefitted properties should have to pay extra fees for dredging than they have already. He would love to see things take place upstream, but the LMRWD can only do so much. He thinks everyone needs to be a team and it will everyone working together to reach the goal of having the State help financially. He thinks the District needs this tool.

Manager Raby made a motion to approve Resolution 18-21. The motion was seconded by President Hartmann. The motion carried unanimously.

6. NEW BUSINESS

A. Administrative Services

Administrator Loomis said a request for an increase in the compensation for Administrative Services was in the packet. She noted the Amendment to the Administrative Services Agreement included in the packet did not have signatures, but the signed copy was in the District's files in the office. If the Board approves the increase an amendment will be drafted and included on the agenda for the January meeting.

President Hartmann asked how this will impact the budget. Administrator Loomis said there are sufficient funds for an increase in the 2019 budget.

President Hartmann made a motion to authorize the rate increase and authorize staff to draft an amendment to the administrative services agreement. The motion was seconded by Manager Frey. The motion carried unanimously.

7. OLD BUSINESS

A. Dredge Management

i. Review Process for funding of maintenance of Navigation Channel

Administrator Loomis said there is no additional information to report other than what was discussed during the public hearing.

ii. Vernon Avenue Dredge Material Management site

Administrator Loomis said they are working on the flood elevation modeling. Della Young said they are working on the concept model for the site configuration and the hydrology and hydraulics model. She was informed the District should receive a draft report in the January/February time frame. The District will need the report before it begins the process to amend to the Conditional Use Permit.

President Hartmann asked Mr. Taylor Luke if he could update the Board with any activity on the site. Mr. Luke reported that there is not a lot going on right now. A contractor is waiting for a project to start and they will purchase about 30,000 yards of material at the price of \$2.00 per cubic yard. He expects it will likely begin in the spring

iii. Private Dredge Material Placement

No information to report other than what was included in the Executive Summary.

B. Watershed Management Plan

Administrator Loomis said staff is working on the rules.

C. 2019 Legislative Action

Administrator Loomis said Lisa Frenette has been working to arrange meetings with committee chairs and will approach legislators to carry legislation.

D. Education and Outreach Plan

No new information since last update

E. LMRWD Projects

i. Eden Prairie Area #3 Stabilization

No information to report other than what was included in the Executive Summary.

ii. Riley Creek Cooperative Project with Riley/Purgatory/Bluff Creek WD

No information to report other than what was included in the Executive Summary.

iii. Seminary Fen ravine stabilization project

No information to report other than what was included in the Executive Summary.

iv. East Chaska Creek (Carver County Watershed Based Funding)

President Hartmann asked about this project. Staff reported that the Board was provided with an update to the feasibility report. Administrator Loomis said she didn't think the Board needed to take any action on this item. Ms. Young said she wanted the Board to be aware that the update to the feasibility study increased the estimated cost of this project. She said the Board needs to look at it and authorize staff to proceed with the design. Administrator Loomis thought the District should meet with the city before any action.

v. Schroeder Acres Park (Scott County Watershed Based Funding)

No information to report other than what was included in the Executive Summary.

vi. Shakopee Downtown BMP Retrofit (Scott County Watershed Based Funding)

No information to report other than what was included in the Executive Summary.

vii. PLOC (Prior Lake Outlet Channel) Restoration (Scott County Watershed Based Funding)

No information to report other than what was included in the Executive Summary.

viii. Dakota County Fen Gap Analysis and Conceptual Model (Dakota County Watershed Based Funding)

No information to report other than what was included in the Executive Summary.

ix. Hennepin County Chloride Project (Hennepin County Watershed Based Funding)

No information to report other than what was included in the Executive Summary.

x. Vegetation Management Plan

No information to report other than what was included in the Executive Summary.

xi. Sustainable Lake Management Plan - Trout Lakes

No information to report other than what was included in the Executive Summary.

xii. Geomorphic Assessment of Trout Streams

The Board is being asked to approve the Bio-products and Bio-systems Engineering Department (BBE) from the University of Minnesota as a subcontractor to Young Environmental Consulting Group, LLC.

Manager Raby made a motion to approve Young Environmental Consulting Group, LLC to retain BBE as a subcontractor for the Geomorphic Assessment of Trout Streams. The motion was seconded by President Hartmann. The motion carried unanimously.

xiii. Spring Creek Cost Share

Administrator Loomis explained this project is the result of working with a homeowner in the City of Carver that has been seeing significant erosion of her property. She updated the board with the history of the project and actions taken so far. A proposal prepared by the Carver SWCD was included in the packet to stabilize the stream banks of Spring Creek.

This item was to make Managers aware of this project and that this will come before the Board, once the City has decided to go ahead.

F. Project/Plan Reviews

i. City of Eden Prairie - Peterson Wetland Bank

No information to report other than what was included in the Executive Summary.

ii. City of Eden Prairie - Comprehensive Plan Amendments

No information to report other than what was included in the Executive Summary.

iii. City of Chanhassen - TH 101 Improvements

No information to report other than what was included in the Executive Summary.

iv. City of Savage - 12113 Lynn Avenue

No information to report other than what was included in the Executive Summary.

v. Cities of Richfield/Bloomington - TH 77 & 77th Street underpass

Administrator Loomis explained that MNDOT has requested LMRWD approval of this project. She noted that this project will direct stormwater to the I494 stormwater conveyance, which is under capacity. Manager Raby confirmed that Ms. Young did review the project and if she was satisfied with the responses from WSB. She said that she was okay with the responses from the project engineer. The site is constrained and there are not many options. She noted that the LMRWD did not see this project until the 95% design was complete and it would have been helpful to see the design before it was this far along.

President Hartmann asked if the project meets the LMRWD standards. Ms. Young replied that it did.

President Hartmann made a motion to approve TH 77 & 77th Street improvement and underpass project. The motion was seconded by Manager Raby. The motion carried unanimously.

vi. MNDOT - I494 Brush removal

Administrator Loomis wanted to update the Managers on this project. She reported on comments the LMRWD provided to MNDOT about this project. She wanted to let the Board know the MNDOT is planning to add the LMRWD comments to the request for bids on this project and MNDOT will let us review the proposal that accept.

Manager Hartmann asked about the TH 169 & TH 41 project. Staff updated the Board on information they have received so far. Administrator Loomis asked Mr. Paul Nelson, if he was aware of any update to this project. Mr. Nelson said he had nothing to add. Ms. Young clarified that LMRWD staff reviewed the project in April and recommended approval at that time.

vii. MNDOT - TH 5 Signage projects

No information to report other than what was included in the Executive Summary.

viii. MPCA - MN River TSS TMDL

No information to report other than what was included in the Executive Summary.

ix. MN Valley State Trail - EAW (Environmental Assessment Worksheet)

No information to report other than what was included in the Executive Summary.

x. Hennepin County - CSAH 61 - Flying Cloud Drive

No information to report other than what was included in the Executive Summary.

xi. MNDOT - I494/TH 5/TH 55 Mill & Overlay project

No information to report other than what was included in the Executive Summary.

xii. MNDOT - I35W Bridge Replacement

No information to report other than what was included in the Executive Summary.

xiii. MNDOT - I494 from TH169 to Minnesota River

No information to report other than what was included in the Executive Summary.

xiv. City of Shakopee - Amazon Fulfillment Center drainage

No information to report other than what was included in the Executive Summary.

xv. MAC/LMRWD/MCWD boundary realignment

No information to report other than what was included in the Executive Summary.

xvi. Fort Snelling - Dominion Housing

No information to report other than what was included in the Executive Summary.

xvii. USACOE/USFWS - Bass Ponds, Marsh & Wetland

No information to report other than what was included in the Executive Summary.

G. MPCA Soil Reference Values - no change since last update

No new information since last update.

7. COMMUNICATIONS

A. Administrator Report: Administrator Loomis noted the report was on-line. She reported that the Administrator report included a link to a show that was televised on tpt that might be of interest to the Board. She reported that Steve Woods announced his planned retirement from Freshwater. She has been working with other watershed districts to determine new parameters on how to distribute future allocations under the Metro-area watershed based funding. The financial audit is scheduled to begin March 25. She was notified that it was announced that the Orange Line received full federal funding. She noted this project is scheduled to have an tunnel under I494 and managing stormwater and groundwater for this project should be challenging to manage, as current stormwater conveyance along I494 is already under capacity. She noted the River Resource Forum was re-scheduled due to the funeral of President George H. W. Bush and the Forum is now scheduled for January 22nd and 23rd. If Managers are interested in attending she can send them the agenda when it is available.

B. President: No report

C. Managers: Manager Raby commented on items he had asked about at the last meeting.

Administrator Loomis said had spoken to her contact at the city, who did not have any information on either the overlook or C.H. Robinson. She was told the overlook was done by the Eden Prairie Parks Department and she would check with them. She said the C.H. Robinson project went through Eden Prairie's Planning Department. Eden Prairie was

planning to follow up on that project too; however, Administrator Loomis has not heard anything to date.

- D. **Committees:** No report
- E. **Legal Counsel:** No report
- F. **Engineer:** No report

8. ADJOURN

President Hartmann made a motion to adjourn. Manager Raby seconded the motion. The meeting was adjourned at 7:53pm. The next meeting of the LMRWD Board of Managers will be 7:00, Monday, January 7, 2019 and will be held at the Carver County Government Center, 602 East 4th Street, Chaska, MN.

Dave Raby, Secretary

Attest:

Linda Loomis, Administrator

DRAFT



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting

Monday, January 7, 2019

Agenda Item

Item 4. D. - Authorize Amendment to Administrative Service Agreement

Prepared By

Linda Loomis, Administrator

Summary

At the December 19, 2018 Board meeting the managers approved an increase in the compensation to Naiad Consulting LLC. The increase approved was \$75/hour from \$65/hour. An amendment to the Administrator agreement has been prepared and is attached. The amendment also address the increase in monthly hours allowed that was approved by the Board in July 2015 (board minutes attached)

Attachments

Administrator Agreement with amendments
July 30, 2015 Board minutes

Recommended Action

Authorize execution of Amendment #2 to Administrator Agreement

AMENDMENT #2 TO
ADMINISTRATOR AGREEMENT

THIS AMENDMENT is made as of this 7th day of January, 2019 by and between the Lower Minnesota River Watershed District, a Minnesota Watershed District established in accordance with the Minnesota Watershed Act ("LMRWD") and Naiad Consulting, LLC, a Minnesota limited liability company (the "Contractor")

RECITALS

WHEREAS, LMRWD and Contractor entered into that certain Administrator Agreement dated November 25, 2013, amended October 21, 2015 and attached as Exhibit 1 ("Agreement"); and

WHEREAS, LMRWD and Contractor wish to continue the Agreement with the amendments specified below:

NOW, THEREFORE, the parties agree as follows:

1. Section 2, Compensation of the agreement shall be replaced with the following:

"COMPENSATION: Contractor will be paid for Services at the rate of \$75 per hour. Contractor will be reimbursed for actual, reasonable and necessary out-of-pocket expenses including postage, photocopies, audiotapes, and printing. Mileage and time will be reimbursed for travel with the Minneapolis/ St. Paul seven-county metropolitan area. Travel outside the seven-county metropolitan area including mileage (State of Minnesota rate), meals and overnight accommodations must have the prior approval of the Board or its designee. The Board may specify vendors to be used by Contractor for reimbursable expenses, which vendors may include existing LMRWD consultants, member cities or other entities.

Contractor's billable hours will not exceed 150 hours per month, without the prior written approval of the Board or its authorized officers."

2. In all other respects, the provisions set forth in the Agreement, as amended, shall remain unchanged.

WHEREUPON, the undersigned hereunder set their hands to this Amendment as of the day first above written.

NAIAD CONSULTING, LLC

By: _____

Its: Owner/Principal

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

By: _____

Its: President

**AMENDMENT TO
ADMINISTRATOR AGREEMENT**

THIS AMENDMENT is made as of this 21st day of October, 2015, by and between the Lower Minnesota River Watershed District, a Minnesota Watershed District established in accordance with the Minnesota Watershed Act ("LMRWD") and Naiad Consulting, LLC, a Minnesota limited liability company (the "Contractor").

RECITALS

WHEREAS, LMRWD and Contractor entered into that certain Administrator Agreement dated November 25, 2013, and attached as **Exhibit 1** ("Agreement"); and

WHEREAS, LMRWD and Contractor wish to continue the Agreement with the amendments specified below:

NOW, THEREFORE, the parties agree as follows:

1. Section 11, Insurance, of the Agreement shall be replaced with the following:

"INSURANCE: Contractor shall, at all times during the Agreement and at its sole cost and expense, carry and maintain Commercial General Liability insurance covering claims for bodily injury, death, personal injury or property damage occurring or arising out of the performance of this Agreement, including coverage for independent contractor's protection (required if any work will be subcontracted), premises-operations, and contractual liability with respect to the liability assumed by Contractor hereunder. The limits of insurance shall not be less than:

Each Occurrence	\$ 1,000,000
General Aggregate Limit	\$ 1,000,000
Broad Form Property Damage	\$ 1,000,000

LMRWD shall be listed as an additional insured on each insurance policy required hereunder. Each insurance policy shall provide that it will not be canceled or amended except after thirty (30) days advance written notice to the additional insured parties. Contractor shall provide evidence of such insurance policies (certificates of insurance) to LMRWD upon execution of this Agreement and when requested by LMRWD in the future.

2. Section 14, Notices, of the Agreement shall be replaced with the following:

"NOTICES: Any notice or demand, authorized or required under this Agreement shall be in writing and shall be sent by certified mail to the other party as follows:

To the Contractor:

Naiad Consulting, LLC
c/o Linda Loomis
6677 Olson Highway
Golden Valley, MN 55427

To the LMRWD:

President
Lower Minnesota River Watershed District
112 East Fifth Street, Suite 102
Chaska, MN 55318

With a copy to:

The current President of the LMRWD *Yron ne*
Shirk currently is the President and
his address is:

*11000 Territorial Dr
Burnsville, MN 55337*

And to:

The current attorney for the LMRWD
John C. Kolb currently is the attorney
and his address is:

John C. Kolb
Rinke Noonan
P.O. Box 1497
St. Cloud, MN 56302-1497

3. In all other respects, the provisions set forth in the Agreement shall remain unchanged.

WHEREUPON, the undersigned hereunder set their hands to this Amendment as of the day first above written.

NAIAD CONSULTING, LLC

By *Linda R. Loomis*
Its *owner/principal*

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

By *[Signature]*
Its: *President*

ADMINISTRATOR AGREEMENT

THIS AGREEMENT is made as of this 25th day of November, 2013, by and between the Lower Minnesota River Watershed District, a Minnesota Watershed District established in accordance with the Minnesota Watershed Act ("LMRWD") and, Naiad Consulting, LLC, a Minnesota limited liability company (the "Contractor").

1. SCOPE OF SERVICES: Contractor will perform the following services as prioritized and assigned by the LMRWD Board of Managers ("Board") under this Agreement, together with such other administrative services as may be assigned from time to time:

- Facilitate the implementation of the updated LMRWD's Watershed Management Plan that sets strategic direction, goals, policies and work plans for the next 10 years.
- Establish processes to increase the organization's efficiency and to reduce duplication of effort.
- Serve as the primary point of contact for LMRWD's business and coordinate activities among consultants.
- Provide coordination with representatives of City, County, State and Federal agencies and other stakeholder groups.
- Coordinate consultants' projects and activities; review invoices and recommend payment.
- Identify opportunities to secure grant funding and develop partnerships to accomplish the LMRWD's Watershed Management Plan.
- Track implementation of watershed-funded annual water quality projects and activities to ensure that established objectives, project budgets, and schedules are met.
- Develop an operation and capital budget on an annual basis for consideration by the Board.
- Develop an annual work plan and reporting system in consultation with the Board.
- Develop agendas for meetings; attend the monthly Board meetings, special TAC meetings and others as necessary.
- Maintain a list of items that need to be completed by the Consultant, Managers and other consultants and the expected completion date for each item.
- Prepare a monthly summary of work completed and time expended by work task and budget item.
- Perform other duties or activities as may be directed by the Board.

(hereinafter "Services").

For the remainder of 2013 the LMRWD sets aside \$8,500.00 for time and expenses related to the Contractor's position. Contractor will prepare and maintain a work plan and schedule of priorities, in consultation with the Board or its authorized

representatives, to facilitate determining and achieving the LMRWD's highest priority goals within its budget.

2. COMPENSATION: Contractor will be paid for the Services at the rate of \$ 65⁰⁰ per hour. Contractor will be reimbursed for actual, reasonable and necessary out-of-pocket expenses including postage, photocopies, audiotapes, and printing. Mileage and time will be reimbursed for travel within the Minneapolis/St. Paul seven-county metropolitan area. Travel outside of the seven-county metropolitan area including mileage (State of Minnesota rate), meals and overnight accommodations must have the prior approval of the Board or its designee. The Board may specify vendors to be used by Contractor for reimbursable expenses, which vendors may include existing LMRWD consultants, member cities, or other entities

Contractor's billable hours will not exceed 125 hours per month, without, the prior written approval of the Board or its authorized officers.

3. PAYMENT: Contractor may not incur reimbursable expenses prior to the date of this Agreement without permission from the Board. The Contractor will submit monthly invoices for services providing detailed time records of services provided and time spent and receipts for reimbursable expenses.

Invoices and records, together with supporting information, shall be submitted in a form acceptable to the LMRWD. The LMRWD will pay invoices within 45 days of receipt thereof. Invoices received by the first Wednesday of the month will ordinarily be authorized for payment at that month's regular Board meeting.

4. TERM AND TERMINATION: This Agreement shall continue in effect indefinitely unless terminated in accordance with this Agreement. Notwithstanding any language in this Agreement to the contrary, this Agreement may be terminated by either party at any time, and for any reason, on 30 days' written notice. Within 90 days of the date of this Agreement and annually thereafter, the LMRWD will review this Agreement. Contractor reserves the right to renegotiate the Agreement at the time of the review.
5. SUBSTITUTION AND ASSIGNMENT: Services provided by Contractor will generally be performed by Linda Loomis, who is an employee of Contractor. Upon approval by the LMRWD, the Contractor may substitute other persons to perform the services set forth in this Agreement. No assignment of this Agreement shall be permitted without a prior written amendment signed by the LMRWD and the Contractor.
6. AMENDMENTS: No amendments to this Agreement may be made except in writing signed by both parties.
7. INDEPENDENT CONTRACTOR: The Contractor (including the Contractor's employees, if any) is not an employee of the LMRWD. Contractor (and any person working for or employed by Contractor) will act as independent contractor and acquire no rights to tenure, workers' compensation benefits, unemployment compensation

benefits, medical and hospital benefits, sick and vacation leave, severance pay, pension benefits or other rights or benefits offered to employees of the LMRWD. Contractor (and any person working for or employed by Contractor) shall not be considered an employee of the LMRWD for any purpose including, but not limited to income tax withholding; workers' compensation; unemployment compensation; FICA taxes; liability for torts; and eligibility for benefits.

Contractor will not be provided with a place of business and will retain control over the manner and means of the services provided by Contractor as an independent contractor. Contractor will provide, at Contractor's expense, necessary office space, transportation, computer capability, an internet email address and incidental office supplies needed to provide the Services.

This Agreement is non-exclusive. Contractor may take other employment or contracts that do not interfere with Contractor's duties hereunder.

8. **DATA PRACTICES AND RECORDS:** All records, information, materials and other work product, in written, electronic, or any other form, developed in connection with providing services under this Agreement shall be the exclusive property of the LMRWD. All such records shall be maintained with the records of the LMRWD and in accordance with the instructions of the Board. When operating under standard business practices, the Contractor will not be held liable for the loss of LMRWD's records which may be held by Contractor outside of the LMRWD's offices. The Contractor will comply with the Minnesota Government Data Practices Act and all other applicable state and federal laws relating to data privacy or confidentiality. If Contractor receives a request for data pursuant to the Data Practices Act, Minnesota Statutes Chapter 13 (DPA), that may encompass data (as that term is defined in the DPA) Contractor possesses or has created as a result of this Agreement, it will inform the LMRWD immediately and transmit a copy of the request to the Board. If the request is addressed to the LMRWD, Contractor will not provide any information or documents, but will direct the inquiry to the Board. If the request is addressed to Contractor, Contractor will notify and consult with the Board and its legal counsel before replying. Nothing in the preceding sentence supersedes Contractor's obligations under this Agreement with respect to protection of LMRWD's data, property rights in data or confidentiality. Nothing in this section constitutes a determination that Contractor is performing a governmental function within the meaning of Minnesota Statutes Section 13.05, subdivision 11, or otherwise expands the applicability of the DPA beyond its scope under governing law.
9. **COMPLIANCE WITH LAWS:** Contractor shall comply with all applicable federal, state and local laws, regulations or ordinances in performance of Contractor's duties hereunder, such laws including but not limited to those relating to non-discrimination in hiring or labor practices.
10. **AUDIT:** The Contractor agrees that the LMRWD, the State Auditor, or any of their duly authorized representatives, at any time during normal business hours and as often as they may reasonably deem necessary shall have access to and the right to examine, audit, excerpt,

Bruce D. Malkerson
Malkerson Gunn Martin LLP
220 South Sixth Street, Suite 1900
Minneapolis, MN 55402

WHEREUPON, the undersigned hereunder set their hands to this Agreement as of the day first above written.

NAIAD CONSULTING, LLC

By: Linda Loomis
Its: President

LOWER MINNESOTA RIVER WATERSHED
DISTRICT

By: Kent Francis
Its: President



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting

Monday, January 7, 2019

Agenda Item

Item 4. E. - Designation of Official Newspaper

Prepared By

Linda Loomis, Administrator

Summary

In accordance with MN Statutes, the LMRWD must designate a newspaper of general circulation in each county, as the general newspaper in which all hearing notices, advertising for bids, etc. are required to be published.

In 2016, 2017 and 2018, the LMRWD used the Star Tribune as its official newspaper. Staff would recommend this designation again for 2019.

Attachments

None

Recommended Action

Motion to designate the Minneapolis Star Tribune as the 2019 official newspaper



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting

Monday, January 7, 2019

Agenda Item

Item 4. F. - Designation of Official Depository

Prepared By

Linda Loomis, Administrator

Summary

According to MN Statute § 118A.02, the governing body of each government entity shall designate, as a depository of its funds, one or more financial institutions. The LMRWD has contracted with Carver County to provide financial services and therefore LMRWD funds are co-mingled with the County's funds. The LMRWD does not maintain bank accounts of its own.

Carver County is also governed by Minnesota statutes and has adopted an investment policy. LMRWD funds, held by the County, are governed by the policy, with the provision that there is enough liquidity to pay claims of the LMRWD as necessary.

A resolution designating a depository for funds is attached which includes the Independent Contractor/Professional Service Agreement with Carver County as Exhibit A. The Independent Contractor/Professional Service Agreement runs through December 31, 2019. The County's Investment Policy is attached as Exhibit B of the resolution.

Attachments

Resolution 19-01 - RESOLUTION DESIGNATING DEPOSITORY FOR LMRWD FUNDS

Recommended Action

Motion to adopt resolution 19-01

Manager _____ introduced the following resolution and moved its adoption:

LOWER MINNESOTA RIVER WATERSHED DISTRICT

RESOLUTION 19-01

RESOLUTION DESIGNATING DEPOSITORY FOR LMRWD FUNDS

WHEREAS, Minnesota Statutes set procedures and require the Board of Managers of the Lower Minnesota River Watershed District (LMRWD) to designate a depository for LMRWD funds; and

WHEREAS, Minnesota Statutes, Section 103D.335 subd. 7 provides that the managers may cooperate or contract with any state or subdivision of a state or federal agency, private corporation, political subdivision, or cooperative association; and

WHEREAS, the LMRWD has entered into an Independent Contractor/Professional Service Agreement (Exhibit A) with Carver County Financial Services Department, Minnesota (the "County"), to provide accounting and fund management services; and

WHEREAS, LMRWD funds are in custody of the County and are managed according to Minnesota Statute and the County's Investment Policy (Exhibit B).

NOW, THEREFORE, BE IT RESOLVED, by the Board of Managers of the Lower Minnesota River Watershed District that in lieu of designating a depository institution, the Board shall, consistent with the Independent Contractor/Professional Service Agreement, authorize the County to deposit and manage the funds of the LMRWD as provided by the Laws of the State of Minnesota, including the furnishing of collateral for funds on deposit;

BE IT FURTHER RESOLVED by the Board of Managers of the LMRWD that the County shall be authorized to make investments of LMRWD funds and shall be authorized to deposit the principal of said investments as necessary and beneficial to the Lower Minnesota River Watershed District.

Adopted by the Board of Managers of the Lower Minnesota River Watershed District this 7th day of January, 2019.

Jesse Hartmann, President

ATTEST:

David Raby, Secretary/Treasurer

The motion for the adoption of the foregoing resolution was seconded by Manager _____ and upon a vote being taken thereon, the following voted in favor thereof: Hartmann, Raby and Frey; and the following voted against the same: None. Whereupon said resolution was declared passed and adopted, this 7th day of January, 2019, signed by the President and his signature attested by the Secretary/Treasurer.

**LOWER MINNESOTA RIVER WATERSHED DISTRICT
INDEPENDENT CONTRACTOR/PROFESSIONAL SERVICE AGREEMENT**

This Agreement is entered into by and between the Lower Minnesota River Watershed District, 112 E. 5th Street, #102, (hereafter "District") and Carver County, Financial Services Department, 600 East 4th Street, Chaska, Minnesota 55318, (hereafter "County").

RECITALS

WHEREAS, the District, wishes to purchase the services of County for Accounting Services; and

WHEREAS, there are funds available for the purchase of these services;

NOW THEREFORE, in consideration of the mutual undertakings and agreements hereinafter set forth, the District, and the County agree as follows:

1. TERM AND COST OF THE AGREEMENT

The County agrees to furnish services during the period commencing January 1, 2018 and terminating December 31, 2019.

The cost of this Agreement shall not exceed \$4,840.80 in 2018 and \$5,006.40 in 2019.

2. SERVICES TO BE PROVIDED

Services shall be provided in accordance with the criteria set forth:

Accounting Services that will include invoice processing, disbursements, receipts, payroll (if needed), cash management, monthly reporting, and document imaging for claims, receipts, and journal entries.

3. PAYMENT FOR SERVICES

The District shall pay the County on a time and expense basis for the services to be provided herein. The District shall pay the County for each hour, or part thereof, that a County employee works performing services to be provided herein at \$40.34 in 2017 and \$41.72 in 2018, which represents a blended rate for County Financial Services Staff based on budgeted salary projects. The County will bill the District on a quarterly basis for its services. Payments for the services shall be made directly to the County. In the event of termination, the County shall be entitled to payment, determined on a pro rata basis, for services. The total number of hours billed to the District will not exceed 120 hours in a year. Total annual cost for Accounting Services as described above, will not exceed \$4,840.80 in 2018 and \$5,006.40 in 2019.

4. INDEPENDENT CONTRACTOR

- A. Nothing contained in this Agreement is intended or should be construed as creating the relationship of co-partners or joint ventures with the District. No tenure or any rights including worker's compensation, unemployment insurance, medical care, sick leave, vacation leave, severance pay, PERA, or other benefits available to District employees, including indemnification for third party personal injury/property damage claims, shall accrue to the County or employees of the County performing services under this Agreement.
- B. County acknowledges and agrees that no withholding or deduction for State or Federal income taxes, FICA, FUTA, or other, will be made from the payments due County and it is County's sole obligation to comply with all federal and state tax laws.
- C. County shall at all times be free to exercise initiative, judgment and discretion as to how to best perform or provide services identified in this Agreement.
- D. County is responsible for hiring sufficient workers to perform the services required by this Agreement and withholding taxes and paying all other employment tax obligation on their behalf.

5. INDEMNIFICATION AND INSURANCE

Each party shall be liable for its own acts to the extent provided by law and hereby agrees to indemnify, hold harmless and defend the other, its officers and employees against any and all liability, loss, costs, damages, expenses, claims or actions, including attorney's fees which the other, its officers and employees may hereafter sustain, incur or be required to pay, arising out of or by reason of any act or omission of the party, its agents, servants or employees, in the execution or performance or failure to adequately perform its obligations pursuant to this Agreement.

It is understood and agreed that the District's liability shall be limited by the provisions of Minn.Stat.Chap.466 and/or other applicable law.

6. DATA PRIVACY/DATA OWNERSHIP

- A. Minnesota Government Data Practices Act (Minn.Stat.Chap.13 and related statutes).
All data collected, created, received, maintained, or disseminated, in any form, for any purposes by the activities of Parties because of this Agreement is governed by this Act, as amended, the Minn.Rules implementing such Act, as amended, as well as Federal Regulations on data privacy. The people responsible for release of all data under this Agreement shall be the people identified in provision 9.
- B. Health Insurance Portability and Accountability Act (HIPAA – 45 C.F.R. §§160,162,164)
If under this Agreement the exchange of Protected Health Information in any form is anticipated the Parties shall comply with all regulatory obligations including

signing any required agreements (e.g., Business Associate Agreement). Such Agreements shall be attached to and incorporated into this Agreement.

C. Release.

No data may be released to a third party without the express consent of both parties representative as indicated below – this includes any media relations.

7. RECORDS: AVAILABILITY AND RETENTION

Pursuant to Minn. Stat. §16C.05, subd. 5, the Parties agree that the each party, as well as the State Auditor, or any of their duly authorized representatives at any time during normal business hours and as often as they may reasonably deem necessary, shall have access to and the right to examine, audit, excerpt, and transcribe any books, documents, papers, records, et., which are pertinent to the accounting practices and procedures of the Parties and involve transactions relating to this Agreement. Parties agrees to maintain these records for a period of six years from the date of termination of this Agreement.

8. MERGER AND MODIFICATION

A. It is understood and agreed that the entire Agreement between the parties is contained herein and that this Agreement supersedes all oral agreements and negotiations between the parties relating to the subject matter. All items referred to in this Agreement are presumed to be incorporated or attached and are deemed to be part of this Agreement. Where the incorporated terms differ with the terms of this Agreement, the terms of this Agreement shall control

B. Any material alteration, modification, or variation shall be reduced to writing as an amendment and signed by the parties.

9. DEFAULT AND CANCELLATION

A. If the either party fails to perform any of the provisions of this Agreement or so fails to administer the work as to endanger the performance of the Agreement, this shall constitute default. Unless the default is excused by the other non-defaulting party, the non-defaulting party may, upon written notice to the defaulting party's representative listed herein, cancel this Agreement in its entirety as indicated in (B.) below.

B. This Agreement may be cancelled with or without cause by either party upon thirty (30) days written notice.

C. Representatives for each of the parties to this Agreement are as listed below:

District

Linda Loomis,
LMRWD Administrator
112 E. 5th Street, #102
Chaska, MN 55318
(763) 545-4659
naiadconsulting@gmail.com

County/Division

David Frischmon,
Property & Financial Services Director
600 East 4th Street
Chaska, MN 55318
(952) 361-1506
dfrischmon@co.carver.mn.us

10. SUBCONTRACTING AND ASSIGNMENT

- A. Neither party shall not enter into any subcontract for the performance of any services contemplated under this Agreement without the prior written approval of the other party and subject to such conditions and provisions as the District may deem necessary. The party that engages the subcontractor shall be responsible for the performance of all Subcontractors.
- B. No party may assign or transfer any rights or obligations under this Agreement without the prior consent of the other Parties and a fully executed Assignment Agreement, executed and approved by the same parties who executed and approved this Agreement, or their successors.

11. NONDISCRIMINATION

During the performance of this Agreement, the Parties agree to the following: No person shall, on the grounds of race, color, religion, age, sex, disability, marital status, public assistance status, criminal record, creed or national origin be excluded from full employment rights in, participation in, be denied the benefits of or be otherwise subjected to discrimination under any and all applicable Federal and State laws against discrimination.

12. HEALTH AND SAFETY

The Parties shall be solely responsible for the health and safety of their own employees and subcontractor's employees in connection with the services performed in accordance with this Agreement. The Parties shall ensure that all employees, including those of all subcontractors, have received training required to properly and safely perform services outlined in this Agreement. Such training is to include, but not be limited to, all applicable sections of the State and Federal Occupation, Safety and Health Administration (OSHA) laws, Superfund Amendments and Reauthorization Act (SARA), Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), Uniform fire Code and/or any other applicable health and safety regulations. Upon the request of the District, the County shall provide copies of any licenses and/or training

records for County and/or County's employees or subcontractor's employees who perform services pursuant to this Agreement.

13. NONWAIVER, SEVERABILITY & APPLICABLE LAWS

- A. Nonwaiver.
Nothing in this Agreement shall constitute a waiver by the District of any statute of limitations or exceptions on liability. If the District fails to enforce any provision of this Agreement, that failure does not waive the provision or its right to enforce it.
- B. Severability.
If any part of this Agreement is rendered void, invalid or unenforceable, by a court of competent jurisdiction, such rendering shall not affect the remainder of this Agreement unless it shall substantially impair the value of the entire Agreement with respect to either party. The parties agree to substitute for the invalid provision a valid provision that most closely approximates the intent of the invalid provision.
- C. Applicable Laws.
The Laws of the State of Minnesota shall apply to this Agreement.

14. SECTION HEADINGS

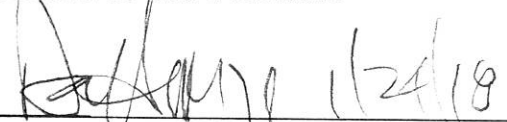
The section headings contained in this Agreement are for reference purposes only and shall not affect the meaning or interpretation of this Agreement.

15. THIRD PARTIES

This Agreement does not create any rights, claims or benefits inuring to any person that is not a party hereto nor create or establish any third party beneficiary.

The proper District official(s) having signed this Agreement, and the Carver County Administrator having signed this Agreement with the delegation authority approved by the District Board of Commissioners, the parties hereto agree to be bound by the provisions herein and attached.

COUNTY OF CARVER
STATE OF MINNESOTA



County Administrator/Date



District Administrator/Date



Carver County – Financial Policy Manual

Investment Policy

SECTION:	Revenue	EFFECTIVE:	3/3/08
AUTHORITY:	Res. 17-08	REVISED:	4/15/14

Purpose

To provide clear guidelines as it pertains to investments in order to maximize return while minimizing risk.

Policy

Carver County is responsible for receiving and disbursing public funds for many programs and taxing districts within the County's jurisdiction. While the funds are in the custody of the County, pending disbursement, it is the Investment Manager's responsibility to invest the monies as prescribed by Minnesota Statutes, Chapters 118, 471 and 475, which are included in this policy by reference.

Investment Program Objectives

Four objectives are taken into consideration for a sound investment program. It is the policy of Carver County when investing public monies to follow these objectives in the order of importance as listed:

1. **Legality** - The County is limited by law as to the type of investments that can be made. The following investment instruments are authorized: All general obligations of the United States Government; indirect government obligations such as Federal Agency notes and bonds excluding mortgage-backed securities that are defined as high risk; certificates of deposit backed by collateral; repurchase agreements; reverse repurchase agreements; bankers acceptance; commercial paper; and Guaranteed Investment Contracts (GICs).
2. **Safety** - Many banks and investment firms are dealers in these authorized investments. It is the policy of Carver County to do business only with those firms that are willing to meet the requirements set forth by state law and the County for the County's protection in regard to safekeeping, delivery and receipt. It is a statutory requirement that all certificates of deposit are to be backed by collateral at 110% of market value. The County reserves the right to require substitute collateral if any collateral subsequently fails to meet the requirements set.
3. **Liquidity** - The cash position of Carver County and its various programs has peaks and valleys during the year which require that a portion of the investment portfolio emphasize

liquidity. It is a policy of the County to consider liquidity as a priority while still recognizing the need to maximize yield.

4. Yield - After the above considerations have been met, it is the practice of the County to maximize its yield while assuring that the maturity dates coincide with expenditure needs.

The Investment Manager has established the following guidelines needed to carry out this policy.

Guidelines

The County's investment duties require that decisions are made daily concerning the investment of millions of dollars. The investment function operates under state law which establishes restrictions and requirements. Carver County has adopted an Investment Policy which provides more specific program directives.

Authorization & Record Retention

1. All depositories and investment firms that the County deals with will be approved by the County Investment Manager prior to any transactions. It is further the responsibility of the County Investment Manager to designate depositories as authorized in Minnesota Statute 118A.02, Sub. 1 and by County Board Resolutions.
2. The County Investment Manager will maintain a listing of all institutions designated as depositories.
3. The Investment Manager shall refrain from personal business activity that could conflict with the proper execution and management of the investment program and shall disclose any material interests in financial institutions with which he conducts business. The Investment Manager shall refrain from undertaking personal investment transactions with the same individual with whom business is conducted on behalf of Carver County.
4. Before engaging in investment transactions with any broker/dealer, the supervising officer at the securities broker/dealer shall submit a certification. The document will state that the officer has reviewed the investment policies and objectives, as well as applicable state law, and agrees to disclose potential conflicts of interest or risk to public funds that might arise out of business transactions between the County and the broker/dealer. All financial institutions shall agree to undertake reasonable efforts to preclude imprudent transactions involving the County's funds.

Managing Interest Rate Risk

The Investment Manager shall minimize the County’s exposure to interest rate risk by:

1. Investing in both shorter-term and longer-term investments.
2. Timing cash flows from maturities so that a portion of the portfolio is maturing or coming close to maturity evenly over time as necessary to provide the cash flow and liquidity needed for operations.
3. Monitoring, on a monthly basis, the expected mark-to-market adjustment if interest rates increase by 100-200 Basis Points. When these reports (commonly referred to as “Shock Reports”) show a 5% (\$2.0 million on a \$40 million portfolio) negative mark-to-market adjustment for the current calendar year with an increase of 100 Basis Points, the Investment Manger shall take reasonable and prudent actions to reduce the County’s exposure to an increase in interest rates.

Investments

The Investment Manager shall maintain a system of internal controls for investments. The internal controls shall be reviewed by the State Auditor’s Office. The controls shall be designed to avoid losses of county funds arising from fraud, employee error, and misrepresentations by third parties, unanticipated changes in financial markets, or imprudent actions by employees and officers of the county. Investments shall be made with judgment and care, under circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in the management of their own affairs, considering the probable safety of their capital as well as the probable revenue to be derived. The financial assets of the county may be invested in those securities or other investments permitted pursuant to M.S. 118A. These include:

Investment Securities	Total Portfolio Exposure	Exposure per Issuer	Additional Restrictions
1. Direct Obligations of U.S.	100%	Unlimited	No more that 25% in Zero Coupon Investments
2. Obligation Issued or Guaranteed by an Agency of the U.S.	100%	Unlimited	None
3. Agency Mortgage Backed Securities including Collateralized Mortgage Obligations	75%	10% in any one Mortgage Pool or CMO	No more than 50% in Mortgage pools or sequential CMO’s
4. Share of Regulated Investment Companies invested in 1 & 2 above	100%	100%	None

5. Repurchase or Reverse Repurchase Agreements	20%	10%	90 days maturity or less
6. General Obligations of any State of the US which is a general obligation of any state or local government with taxing powers	50%	5%	"A" or better by at least one major rating agency
7. Any security which is a revenue obligation of any state or local government with taxing powers	50%	5%	"AA" or better by a National Bond Rating Service
8. Bankers Acceptance	25%	5%	Pursuant to State Statute
9. GIC's	10%	5%	A+ rated by AM Best
10. Commercial Paper	50%	\$5 million for any one issuer	270 Days or less, highest rating by two rating agencies.

Investment maturities shall be selected to accommodate forecasted requirements, meet anticipated capital obligations, and optimized investment objectives. Individual securities shall be limited to a maximum maturity/average life of fifteen years. The total portfolio shall be limited to a maximum average maturity/average life of ten years.

Portfolio investments shall not exceed 50% of the County's investment portfolio with any one institution, to avoid concentration of assets.

Safekeeping and Collateralization

All investment securities purchased by the county shall be held in accordance with Minnesota statute 118A. All bank deposits will be insured or collateralized in accordance with Minnesota Statutes, Chapter 118.

Other

The county Investment Manager shall prepare a quarterly investment report of portfolio

investments and performance (incorporating as appropriate, investment activity, investment allocation, and rates of return).



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting

Monday, January 7, 2019

Agenda Item

Item 5. A. - Discussion with members of MAWD Board of Directors

Prepared By

Linda Loomis, Administrator

Summary

Mary Texer, and Ruth Schaefer of the MAWD Board of Directors and Emily Javens, MAWD's Executive Director will be at the meeting to address LMRWD Board of Manager's concerns with membership in MAWD.

Attachments

No attachments

Recommended Action

No action recommended



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting

Monday, January 7, 2019

Agenda Item

Item 6. A. - Dredge Management

Prepared By

Linda Loomis, Administrator

Summary

i. Funding for dredge material management

There have been no actions since the Board approved Resolution 18-21 at the December Board meeting.

ii. Vernon Avenue Dredge Material Management site

Staff has received the preliminary wetland report and the Threatened and Endangered Species Report. The city has requested the District to address a wetland area in the middle of the site. This area is a depression left after removal of material by Rachel Contracting that has filled in with water. Staff will work with the site manager and others taking material from the site to make sure this doesn't happen again.

An eagle nesting site was noted that will be further investigated. The presence of eagle's nesting should not impact operation of the site; it will just limit timing activities to avoid nesting season.

Legal Counsel has prepared a new agreement between the LMRWD and LS Marine. It is included in this packet for your review. Staff would like to wait until LS Marine has had an opportunity to review the agreement before the LMRWD Board approves it, so staff is asking that no action be taken at this meeting, but wait until the February meeting. If Managers have any comments or concerns they can be directed to the Administrator.

iii. Private Dredge Material Placement

The LMRWD has received a Certificate of Insurance from Ries Farms, listing the LMRWD as an additional insured. Ries Farms has been contracted by the River Terminal Operators to remove the private dredge material.

Attachments

2019 Property Management Agreement

Recommended Action

No action recommended

Property Management Agreement

This Agreement is made effective as of the ____ day of _____, 2019, and supersedes the original agreement of October 9, 2014, by and between Lower Minnesota River Watershed District ("LMRWD"), a public body organized under Minnesota Statutes Chapters 103B and 103D (hereinafter "Owner"), and LS Marine, Inc., an independent contractor (hereinafter "Manager").

The parties hereto agree as follows:

1. DESCRIPTION OF THE PROPERTY

This Agreement is made with respect to the following Property: LMRWD (MN-14.2 RMP) Placement Site - which is shown on the attached **Exhibit A** ("Property").

2. RESPONSIBILITIES OF THE MANAGER

Beginning on the date set forth in paragraph 6, the Manager will provide to Owner the following services (collectively, the "Services"):

A. Site Management Manual

Manager has developed, and Owner has approved, a manual (hereinafter "Management Manual") for the management of the Property to be used as a guideline for overall Property management with respect to the intake of dredge material (hereinafter "material or materials"), management of onsite material, development and management of overall Property plan and sale/export of material from the Property. The Management Manual is attached as **Exhibit B**. After consultation with the Manager, the Owner in its sole discretion may amend the Management Manual from time to time. Any such amendments shall thereafter be part of the Management Manual.

B. Compliance with Permits

Manager will ensure compliance with all applicable permit conditions and laws as they relate to the Property and material that is imported to or exported from the Property. In addition, Manager will coordinate with Owner to ensure that all compliance reporting is tracked and completed.

C. Testing Protocols

As defined in applicable permits and as to be defined in the Management Manual, Manager will ensure all imported and exported materials comply with Minnesota Pollution Control Agency guidelines for analytical and gradational testing of material. Manager will keep files of all testing reports for proper reporting and provide copies of

reports to Owner. Manager will only allow placement of material on the Property that meets Level 1 criteria as established by the Minnesota Pollution Control Agency's *'Managing Dredge Materials -- in the State of Minnesota'* dated April 2014.

- D. **Inventory of Materials**
Manager will track inventory of all material imported, stockpiles and exported from the Property on a project-by-project basis and report inventory quantities to the Owner on a quarterly basis or as requested.
- E. **US Army Corps of Engineers Placement**
Manager will coordinate with the US Army Corps of Engineers (hereinafter "COE") as to all material imported to the Property by the COE and will direct the COE as to where to place and stockpile the material on the Property. All material imported to the Property by the COE will be handled in accordance with the Management Manual.
- F. **Third Party Placement**
Manager will coordinate with third party users (hereinafter "Private Users") who may be allowed by Owner to place material on the Property and will direct the Private Users as to where to place and stockpile the material on the Property, so as not to comingle Private Users' material with COE material. Manager will also coordinate with Private Users as to their use of the Property and timely removal of their placed material from the Property. All material imported and exported to the Property by Private Users will be handled in accordance with the Management Manual.
- G. **Existing Owner Contracts and Obligations**
Manager will work with Owner on existing offers and contracts the Owner has in place with regards to the Property and the removal and sale of material from the Property. Manager will manage the setup and use of the Property and exporting of the material under the existing offers and contracts to ensure the material is able to be efficiently exported while adhering to the conditions of the Management Manual.
- H. **Marketing**
In accordance with the Management Manual, Manager will actively advertise and market onsite material (except for material placed by Private Users) for sale and develop the sale price of the material based onsite and market conditions. All sales will be made to parties other than the Manager or persons (entities) related to the Manager.

Payment for all sales shall be by check made payable to the Owner. Manager shall allow all qualified buyers (as defined in the Management Manual) to purchase material.

3. PAYMENT

The Manager will be paid the lesser of \$12,500.00 or 50% of the gross profit in each Pay Period generated and collected by Owner from the sales of material (except for material placed by Private Users) from the Property for payment of the Manager's Services under this Agreement. Gross profit will be defined as revenues collected in each Pay Period less costs incurred in that Pay Period for sales and use taxes, development, maintenance and onsite operation of the Property, including but not limited to:

- A. Construction and maintenance of berms, ponds, roads, loading points from the river, onsite and offsite access roads; and
- B. Other activities and improvements needed to comply with applicable laws and permits.

Pay Period(s) will run from August 1 to July 31, annually during the term of this contract. A financial report shall be provided by Manager to Owner within thirty (30) days after the end of each Pay Period and payment shall be due to Manager within 30 days of receipt and approval of the financial report by Owner.

4. RELATIONSHIP OF PARTIES

It is understood by the parties that Manager is an independent contractor with respect to the relationship between the parties.

5. WARRANTY

Manager shall provide its Services and meet its obligations under this Agreement in a timely and workmanlike manner, using knowledge and recommendations for performing the Services which meet generally acceptable standards as established by Owner, US Army Corps of Engineers, Minnesota Pollution Control Agency and the City of Savage. Manager will provide a standard of care equal to, or superior to, industry standard care on similar projects.

6. TERM

This Agreement shall commence on the Effective Date and will terminate on July 31, 2022. However, the Agreement may be terminated at any time by either party with cause provided at least 60 days prior written notice is delivered in writing by the terminating party to the other party.

7. INDEMNIFICATION/INSURANCE

Manager agrees to indemnify and hold Owner harmless from all claims, losses, expenses and fees, including attorney fees, costs, and judgments that may be asserted against Owner that result from the action or omissions of Manager and/or Manager's employees, agents or representatives. Manager shall comply with the terms related to insurance as shown on the attached **Exhibit C**.

8. DEFAULT

The occurrence of any of the following shall constitute a default under this Agreement:

- A. The failure to make required payment when due.
- B. The insolvency or bankruptcy of either party.
- C. The subjection of any of either party's property to any levy, seizure, general assignment for the benefit of creditors, application or sale for or by any creditor or government agency.
- D. The failure to make available or deliver the Services in a time and manner provided for in this Agreement.

9. REMEDIES

In addition to any and all other rights a party may have available according to law, if a party defaults by failing to substantially perform any provision, term or condition of this Agreement (including without limitation the failure to make a monetary payment when due), the other party may terminate the Agreement by providing written notice to the defaulting party. This notice shall describe with sufficient detail the nature of the default. The party receiving such notice shall have 15 days from the effective date of such notice to cure the default(s). Unless waived by a party providing notice, the failure to cure the default(s) within such time period shall result in the automatic termination of this Agreement.

10. FORCE MAJEURE

If performance of this Agreement or any obligation under this Agreement is prevented, restricted, or interfered with by causes beyond either party's reasonable control ("Force Majeure"), and if the party unable to carry out its obligations gives the other party prompt written notice of such event, then the obligations of the party invoking this provision shall be suspended to the extent necessary by such event. The term Force Majeure shall include, without limitation, acts of God, fire, explosion, vandalism, storm, flood or other similar occurrence, orders or acts of military or civil authority, or by national emergencies, insurrections, riots, or wars, or strikes, lock-outs, work stoppages, or other labor disputes, or supplier failures. The excused party shall use reasonable efforts under the circumstances to avoid or remove such

causes or non-party shall use reasonable efforts under the circumstances to avoid or remove such causes of non-performance and shall proceed to perform with reasonable dispatch whenever such causes are removed or ceased. An act or omission shall be deemed within the reasonable control of a party if committed, omitted, or caused by such party, or its employees, officers, agents, or affiliates.

11. ARBITRATION

Any controversies or disputes arising out of or relating to this Agreement shall be resolved by binding arbitration in accordance with the then-current Commercial Arbitration Rules of the American Arbitration Association. The parties shall select a mutually acceptable arbitrator knowledgeable about issues relating to the subject matter of this Agreement. In the event the parties are unable to agree to such a selection, each party will select an arbitrator and the two arbitrators shall in turn select a third arbitrator, all three of whom shall preside jointly over the matter. All documents, materials, and information in the possession of each party that are in any way relevant to the dispute shall be made available to the other party for review or copying no later than 30 days after the notice of arbitration is served. The arbitrator(s) shall not have the authority to modify any provision of this Agreement or to award punitive damages. The arbitrator(s) shall have the power to issue mandatory orders and restraining orders in connection with the arbitration. The decision rendered by the arbitrator(s) shall be final and binding on the parties, and judgment may be entered in conformity with the decision in any court having jurisdiction. The agreement to arbitration shall be specifically enforceable under the prevailing arbitration law. During the continuance of any arbitration proceeding, the parties shall continue to perform their respective obligations under this Agreement.

12. NOTICE

Any notice or communication required or permitted under this Agreement shall be sufficiently given if delivered in person or by certified mail, to the address set forth below or to such other address as one party may have furnished to the other in writing.

Lower Minnesota River Watershed District
112 East 5th Street, Suite 102
Chaska, Minnesota 55318
Attn: Administrator
naiadconsulting@gmail.com

With a copy to: Legal counsel of the Lower Minnesota River
Watershed District:
John C. Kolb
Rinke Noonan
P.O. Box 1497
St. Cloud, MN 56302-1497

LS Marine, Inc.
3625 Talmage Circle, Suite 202
St. Paul, MN 55110
Attn: Taylor Luke

13. ENTIRE AGREEMENT

This Agreement, including Exhibits, contains the entire agreement between the parties, and there are no other promises or conditions in any other agreement whether oral or written concerning the subject matter of this Agreement. This Agreement supersedes any prior written or oral agreements between the parties.

14. AMENDMENT

This Agreement may only be modified or amended in writing and executed by all parties.

15. SEVERABILITY

If any provision of this Agreement will be held to be invalid or unenforceable for any reason, the remaining provisions will continue to be valid and enforceable. If a court finds that any provision of this Agreement is invalid or unenforceable, but that by limiting such provision it would become valid and enforceable, then such provision will be deemed to be written, construed, and enforced as so limited.

16. WAIVER OF CONTRACTUAL RIGHT

The failure of either party to enforce any provision of this Agreement shall not be construed as a waiver or limitation of that party's right to subsequently enforce and compel strict compliance with every provision of this Agreement.

17. GOVERNING LAW

This Agreement shall be construed in accordance with the laws of the State of Minnesota.

18. SURVIVAL OF ORIGINAL AGREEMENT

The original agreement of October 9, 2014, expired by its own terms July 31, 2017. However, both Owner and Manager have continued in good faith under

the terms of the original agreement as if it had been renewed. Owner and Manager agree to honor the terms of the original agreement as if it had been extended through the date of this Agreement.

19. SIGNATORIES

This Agreement shall be effective of as of the date first written above.

**Lower Minnesota River
Watershed District**

LS Marine, Inc.

By: _____

By: _____

TITLE: _____

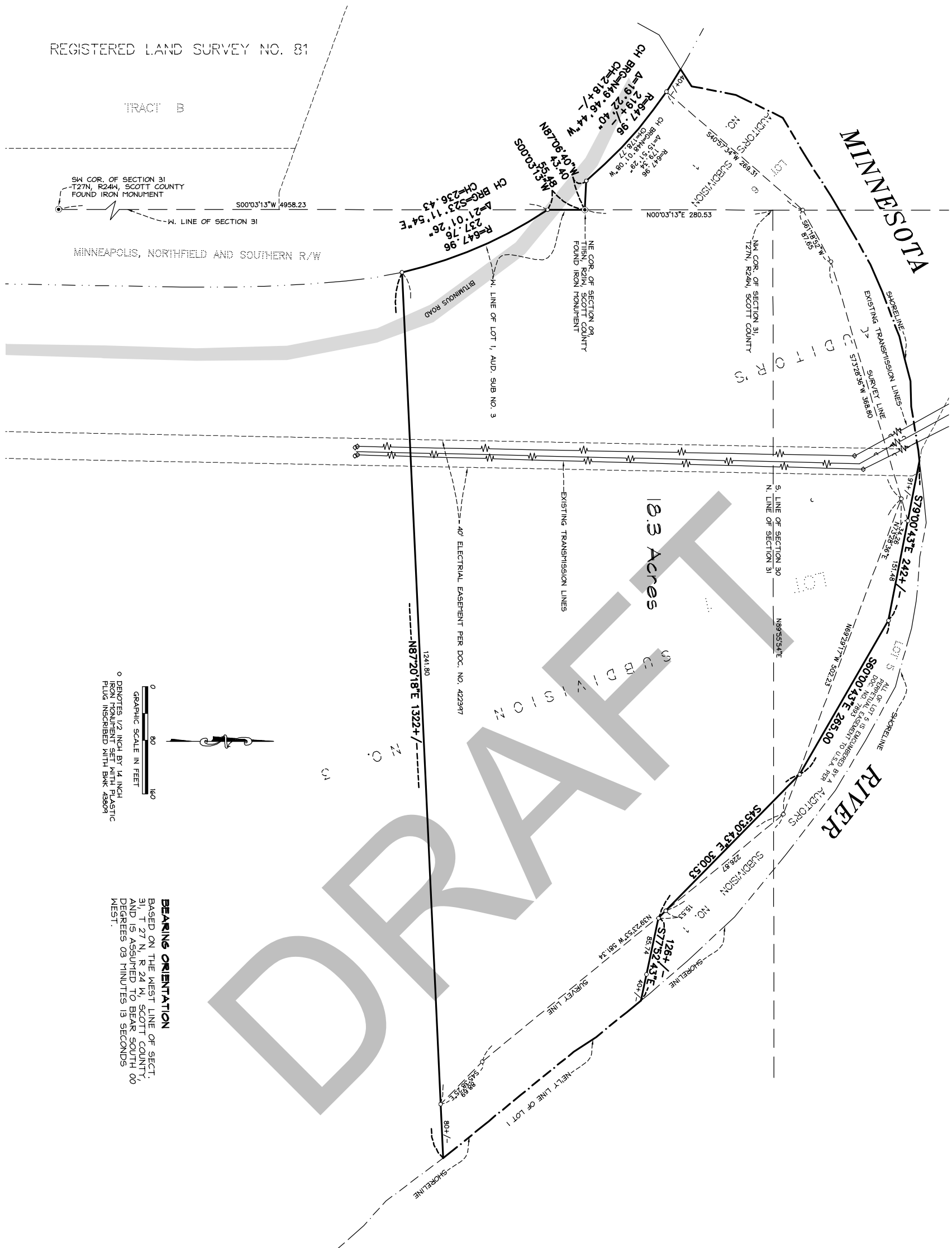
TITLE: _____

DRAFT

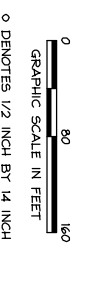
EXHIBIT A
PLACEMENT SITE

DRAFT

CERTIFICATE OF SURVEY



REGISTERED LAND SURVEY NO. 81



BEARING ORIENTATION
 BASED ON THE WEST LINE OF SECT.
 31, T 27 N, R 24 W, SCOTT COUNTY,
 AND IS ASSUMED TO BEAR SOUTH 00
 DEGREES 03 MINUTES 13 SECONDS
 WEST.

SUGGESTED LAND DESCRIPTION
 Lot 6, AUDITOR'S SUBDIVISION NO. 1, SAVAGE, MINNESOTA, a duly recorded plat, Scott County, Minnesota and that part of Lot 1, AUDITOR'S SUBDIVISION NO. 3, SAVAGE, MINNESOTA, a duly recorded plat, Scott County, Minnesota lying northerly of the following described line and its westerly extension: Commencing at the northeast corner of section 21, West Scott County, Minnesota, thence South 00 degrees 03 minutes 13 seconds West, assumed bearing, along the westerly line of said Lot 1 a distance of 55.48 feet; thence southeasterly 237.76 feet along the westerly line of said Lot 1 and along a non-tangential curve concave to the southwest having a radius of 647.96 feet and a central angle of 21 degrees 01 minutes 26 seconds, the chord of said curve is 236.43 feet in length and bears South 23 degrees 11 minutes 54 seconds East to the point of beginning of the line to be described; thence North 87 degrees 20 minutes 18 seconds East 1322 feet more or less to the shoreline of the Minnesota River, said shoreline also being the northeasterly line of said Lot 1, and said line terminating thereat.

CERTIFICATION
 TO: Cargill, Inc., Lower Minnesota River Watershed District and Commercial Partners Title LLC

I hereby certify that this is a true and correct representation of a survey of the boundaries of the land above described and of the location of all buildings, if any, thereon, and all visible encroachments, if any, from or on said land. And that all recorded easements if any, listed in Schedule B, Section 2 of the Commitment for Title Insurance No. 283083 First Supplemental dated January 31, 2006, located on this survey, and that I was shown on this survey, and that I was shown on Licensed Land Surveyor under the laws of the State of Minnesota.

Timothy D. Larson
 Timothy D. Larson,
 Professional Land Surveyor
 Minnesota License Number 43809
 05 May, 2006

CLIENT
LOWER MN WATERSHED DISTRICT

DATE:	REVISIONS
FEB 2006	
DRAWN BY: LARSON	
CHECKED BY: STROEING	
SURVEY BY: REINECCIUS	

Bonestroo Engineers - Architects
Williamson Surveyors
Kotsmith

3721 23RD STREET SOUTH
 ST. CLOUD, MN 56301
 TEL 320.251.4553 FAX 251.6252
 WEB SITE www.bonestroo.com

Bonestroo
Rosene
Anderlik &
Associates

CLIENT

EXHIBIT B
MANAGEMENT PLAN

DRAFT

Cargill East River (MN – 14.2 RMP) Dredge Material Site Management Plan

Lower Minnesota River Watershed District

January 2013

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Appendix A: Chemical Analyses Data for the Minnesota River

Appendix B: 2009 and 2011 Dredge Soil Stockpile Sampling – Savage Stockpile Facility

Appendix C: 2012 Dredge Soil Stockpile Sampling – Savage Stockpile Facility

1.0 BACKGROUND

In the 1950's, the United States (U.S) Congress ordered the U.S. Army Corps of Engineering ("Corps") to deepen the Minnesota River channel from four to nine feet from the confluence with the Mississippi River to river mile (R.M.) 14.7 in Savage, Minnesota so that barges could transport grain and other materials out of and transport goods into Minnesota. The congressional order required the Corps to partner with a local regulatory entity to serve as the local sponsor.

Pursuant to statutory authority, five counties (Hennepin, Ramsey, Dakota, Scott and Carver) petitioned for the establishment of the Lower Minnesota River Watershed District ("District"). On March 23, 1960, the Minnesota Water Resources Board, now the Board of Water and Soil Resources ("BWSR"), established the District. Since the 1960's, the District has been and continues to be the State's local sponsor to work with the Corps to maintain the 9-ft channel. In 2007, the Corps developed a Dredge Material Management Plan (DMMP) for the Minnesota River above the Interstate 35W Bridge (Corps, 2007), to address concerns which surfaced in 1988. Concerns ranged from capacity at dredge material placement sites to complaints by industrial users about the condition of the channel. The DMMP identified 11 potential placement sites, with the following only six sites emerging as practical and cost effective locations requiring detailed evaluation: Cargill West Field Site (MN-14.8-RMP); Cargill East River (MN-14.2-RMP); Cargill East (MN-13.5-RMP); Below Cargill (MN-12.4-RMP); Kraemer (MN-12.1-RMP); and NSP (MN-10.1-RMP). After alternative formulation and detailed analysis and evaluation of sites individually and in combination with others, the Cargill East River (MN-14.2 RMP) site and the Kraemer (MN-12.1-RMP) site were the Corps' recommended alternative. In 2007, the District acquired the Cargill East River (MN-14.2 RMP) site. Because of an ownership change which resulted in higher fees for use of the Kraemer (MN-12.1-RMP) site, the Cargill East River (MN-14.2 RMP) site has been exclusively used for dredge material placement.

1.1 Purpose and Need Statement

The Districts' Third Generation Watershed Management Plan documents funding and management concerns associated with their role as local sponsor. The purpose of this dredge material site management plan is to review options for managing the Cargill East River (MN-14.2 RMP) site and deposited material and to review the financial liability of the local sponsor role on the District.

1.2 Economic Evaluation

The Minnesota River is a significant branch of the inland navigation system. Several of the world's largest grain marketing companies operate terminals on the River. These terminals serve as important nodes in the flow of grain from the Upper Midwest to domestic and foreign markets. In addition to grain, other miscellaneous commodities move through Minnesota River terminals and docks. The Corps' DMMP Table 1-1 lists the terminals located on the Minnesota River (Corps, 2007). In addition to the terminals listed below, six fleeting areas exist on the River to serve the terminals with a total capacity of 90 barges.

Table 1-1 Terminals on the Minnesota River		
Name	River Mile	Purpose
Cargill Co.	14.7 (R)	Ship grain; receive salt, fertilizer
Harvest States Coop	14.6 (R)	Ship grain
Bunge Corp.	14.5 (R)	Ship grain
Richards / Shiely Dock	14.4 (R)	Receive asphalt (Richards), sand, gravel, limestone (Shiely)
Port Cargill		
Molasses Dock	13.3 (R)	Receive molasses
Fertilizer Dock	13.1 (R)	Receive dry fertilizer, salt, limestone, etc.
General Dock	13.0 (R)	Receive general cargo (metal products and lumber)
Elevator C Dock	12.9 (R)	Ship grain
U.S. Salt	11.1 (R)	Receipt and transfer of salt, coal, stone, etc.
Northern States Power	8.6 (R)	Coal unloading dock (no longer used)
Source: Port Series No. 69, Port of Minneapolis - St. Paul, MN and Ports on Upper Mississippi River (Miles 300 to 860 AOR), Revised 1994, NDC 94-P-6, U.S. Army Corps of Engineers		

Since 2007, the traffic level on the River has averaged over 2 million tons. The primary commodities moved on the River are farm products (wheat, corn, soybeans, oats and barley) bound for Gulf of Mexico ports. These account for approximately 64 percent of total traffic on the River. Other commodities include dry fertilizer, salt, sand and gravel, metal products, and other miscellaneous commodities. Table 1 presents Minnesota River traffic data for recent years.

Table 1: Minnesota River Freight Traffic – 2007 to 2010 (Tons x 1,000)

Commodity	2007	2008	2009	2010	Average	Percent Total
Food and Farm Products						
Grain (Wheat, corn, oats)	1,084	1,258	216	1,532	1,023	48.1%
Soybeans	308	516	273	223	330	15.5%
Other	23	5	2	3	8	0.4%
Fertilizers	42	32	86	150	78	3.6%
Crude Materials	626	711	781	628	687	32.3%
Total Tons (times 1,000)	2,083	2,522	1,358	2,536	2,125	100.00%
Source: Waterborne Commerce Statistics						

Grain terminals on the Minnesota River serve as the access point to foreign markets for producers in Minnesota and the Dakotas. Producers rely on this route as an important option in marketing their grain. This route is often the least cost alternative compared to other marketing outlets: the Pacific Northwest, the Great Lakes through Duluth, the Gulf via rail, or domestic markets. Therefore, maintaining navigability of the Minnesota River is crucial in allowing producers to get the best price for their grain. Without this option, grain will move along other, more costly routes. The higher costs would be passed on to the producer in the form of lower prices offered by the grain companies.

The analysis presented here uses data obtained for the current Upper Mississippi River - Illinois Waterway (UMR-IWW) Navigation Study. Transportation costs were estimated for a sample of commodity movements using the UMR-IWW navigation system and for alternate routings and destinations that would bypass the system. Among the many movements evaluated were grain shipments from the Minnesota River to various destinations for domestic use and export. Transportation costs were estimated for moving grain from the producer to market using the water-based route through the Minnesota River terminals and using alternate routings. Rate savings range from \$1.40 to \$20 per ton, averaging \$12 per ton. Other commodities have savings ranging from \$2 to \$13 per ton, with an average of \$9 per ton.

By applying the savings of \$12 per ton to approximately 1.023 million tons of grain annually from Minnesota River terminals, the resultant benefits would be about \$12.3 million annually. For the other commodities, moving an average of 1.103 million tons at a savings of \$9 per ton results in transportation cost savings benefits of \$9.9 million. Total annual savings for traffic moving on the Minnesota River are estimated at \$22.2 million.

2.0 EXISTING CARGILL EAST RIVER –MN14.2 RMP SITE CONDITIONS

2.1 Site Layout and Storage Capacity

The existing Cargill East River (MN 14.2 RMP) site is located along the shoreline just downstream from the Port Richards slip (see Figure 1). The total area of the available site excluding the wooded perimeter buffer is approximately 11 acres, and the usable storage area within the site considering the use of sufficiently sized perimeter dikes is approximately 7 to 8 acres. The District has indicated that the dredging work completed to date for placement onto the site has been mechanically excavated sediment that was offloaded from barges at the north river access point and then physically spread within the site for drying, limited distribution and stockpiling (see Figure 2).

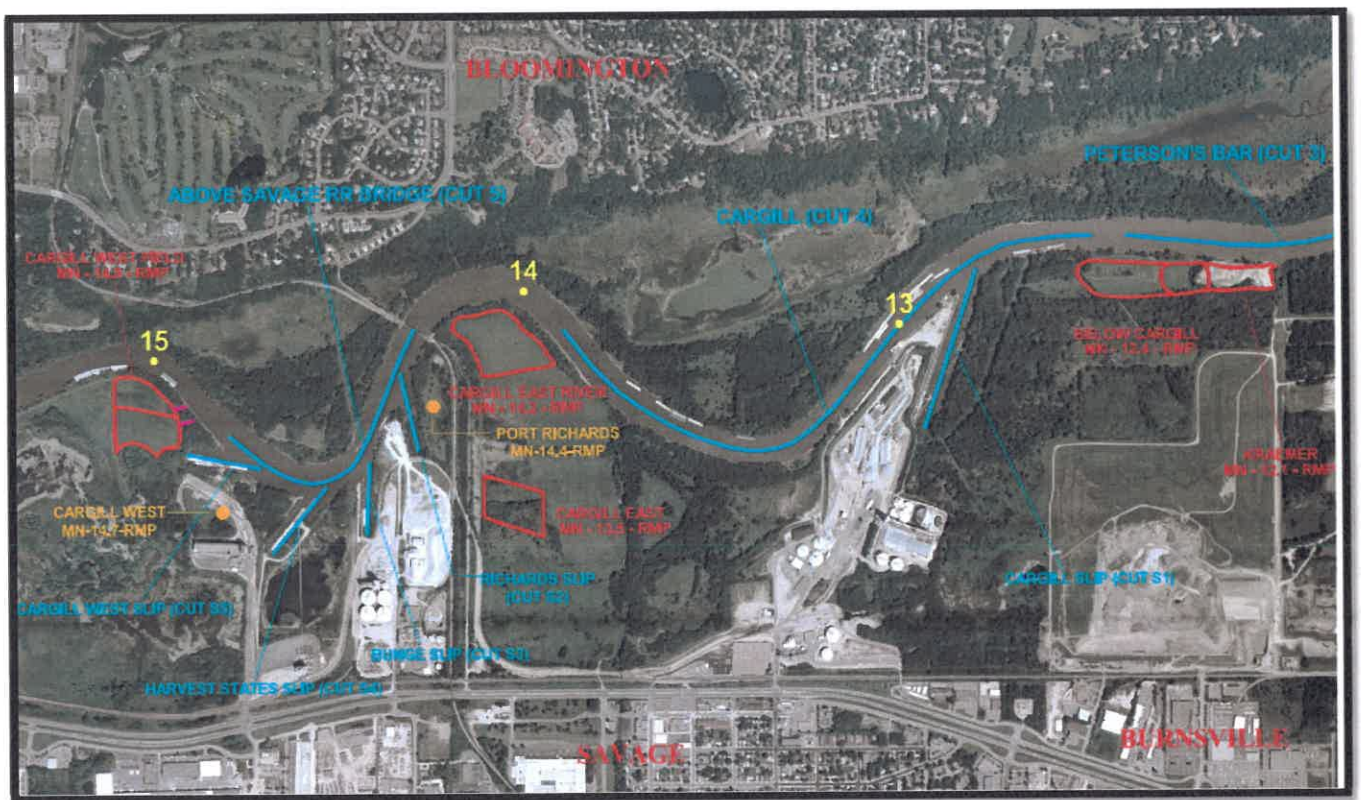


Figure 1: Cargill East River (MN-14.2 RMP) Site Location Map (*Corps, 2007*)

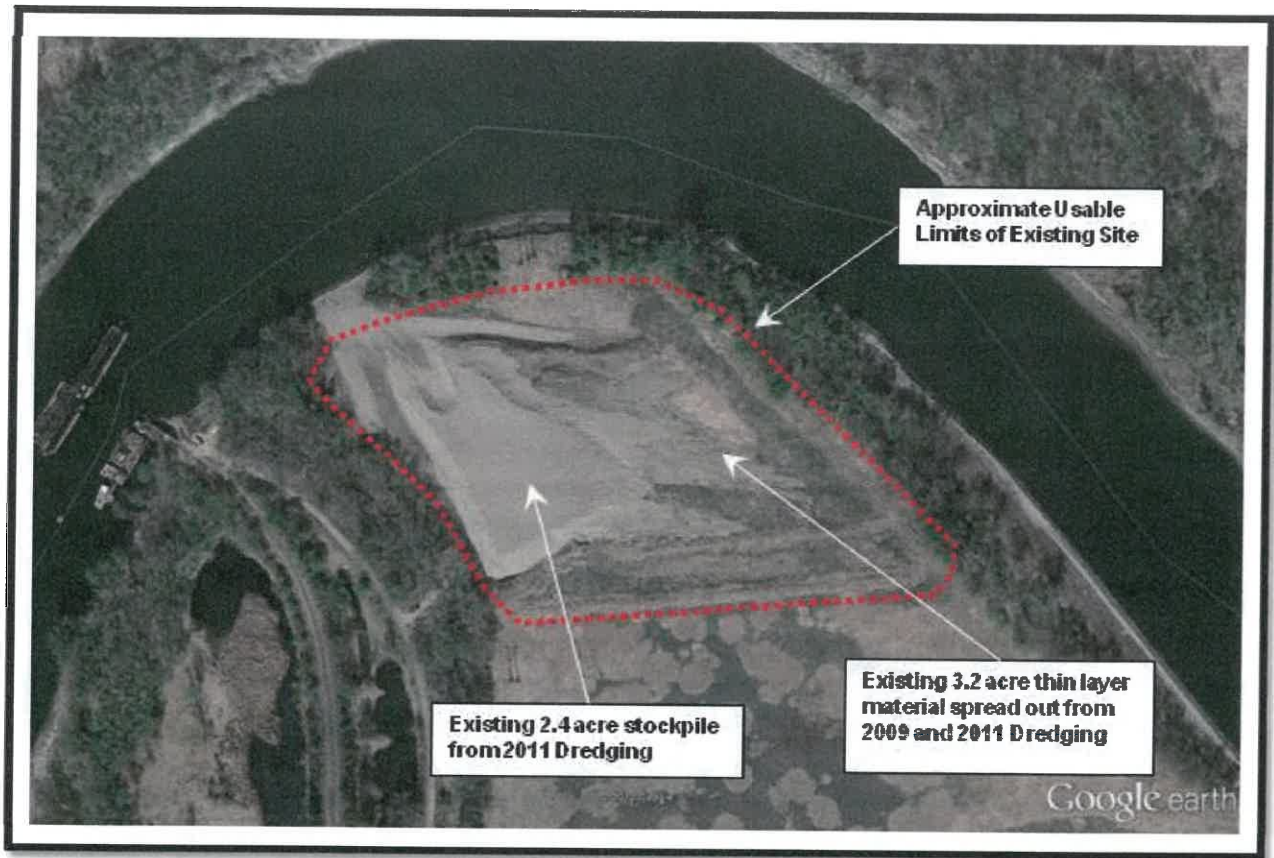


Figure 2: Cargill East River (MN-14.2 RMP) Existing Site Map

According to the DMMP, two areas would be required for placement of dredge material at the Cargill East River (MN-14.2 RMP) site if finer grained material from the private barge slips were to be stored on this site in addition to the material dredged from the main channel of the river. For the main channel material, an area of 7 acres would be required to accommodate a job of 35,500 cubic yards with material stockpiled to a depth of 15 feet. For the barge slip material, an area of 4 acres would be required to accommodate a job of 20,000 cubic yards with material placed to a depth of 10 feet. It was stated in the DMMP that there was enough area at the Cargill East River (MN-14.2 RMP) site to have an 11 acre site with a division to separate the sand from the fine placement areas. Other than material required for a containment dike, no permanent on-site storage is planned.

However, based on the Corps' assumption of a 7 acre area accommodating a 15 ft. high sand stockpile and a 4 acre area to accommodate a 10 ft. high stockpile of silty material (if private barge slips were to be included), then the 11 acre site would be able to store a maximum of 233,933 cubic yards. However, this assumption may be over estimating site capacity since it assumes a total stockpile area of 11 acres with no outside embankment slope for stability, erosion control and site access. If a safe outside embankment slope of 3:1 (3 ft. horizontal and 1 ft. vertical) is used, then the maximum site storage capacity according to the above Corps scenario would be approximately 193,600 cubic yards assuming dredged material is used to construct the perimeter dikes.

2.2 Summary of Existing Access Points

The primary access points to the site presently include the river access at the north end of the site and the access road off Vernon Ave. located at the southwest corner of the site. The river site is primarily used to offload mechanically dredged material from barges to be placed onto the site. The Vernon Ave. access road currently allows limited land based site access, but could be extended and further developed to allow for site management and material loading.

2.3 Estimated Channel Dredging Volumes and Frequencies

In order to estimate sediment storage requirements for the Cargill East River (MN-14.2 RMP) site, historical and navigational dredging estimates were used. Based on historical dredging data presented in the DMMP (Corps, 2007) and currently available data, estimated Corps dredging volumes projected to be placed onto the Cargill East River (Mn 14.2 RMP) site are summarized below. However, projecting future dredging requirements is difficult because of the many variables and unknowns that influence channel maintenance. Actual future dredging quantities may be significantly different from the projections, which could either lengthen or shorten the life expectancy and maintenance required for the site. To arrive at the projected quantities, comparisons were made between the projections used during the Great River Environmental Action Team (GREAT) Study and historic dredging data collected between 1976 and 1998. Adjustments were made to the average quantities per year using estimates based on historic records and experiences during recent years (See the DMMP Tables 3-1 and 3-2). Based on the adjusted dredging quantities shown, approximately 21,800 cubic yards per year on average are estimated to be removed in total from Dredge Cuts #3 (Peterson's Bar), #4 (Cargill) and #5 (Savage Bridge) through 2025.

Table 3-1 Projected Dredging Quantities for Minnesota River Study : 1999-2025						
Cut #	Cut Name	Location	Avg./Job	Frequency	Number of Events	27-Year Projection
1	Mouth of the MN River	0.0-1.1	18,000	11%	3	54,000
2	4-Mile Cut-off	3.4-4.4	9,000	11%	3	27,000
3	Peterson's Bar	11.3-12.4	27,000	55%	15	405,000
4	Cargill	12.5-13.6	7,200	11%	3	21,600
5	Savage Br.	14.3-14.7	20,250	31%	8	162,000
S1	Cargill East Slip	12.7	14,400	55%	15	216,000
S2	Richards Asphalt Slip	14.4	0	0%	0	0
S3	Bunge Slip	14.5	4,500	44%	12	54,000
S4	Harvest States Slip	14.6	5,800	53%	14	81,200
S5	Cargill West Slip	14.7	11,300	43%	12	135,600
Total 27-Year Projection =						1,156,400

Table 3-2 Evaluation of Corps Dredging Quantities				
MPFWG (Most Probable Future with GREAT) Projections from GREAT				
Cut #	Cut Name	40-Year Projection	Avg/Yr 2001-2025	27 Yr. DMMP Qty.
1	Mouth of the MN River	117,500	2,900	78,300
2	4-Mile Cut-off	80,000	2,000	54,000
3	Peterson's Bar	387,500	9,500	256,500
4	Cargill	35,500	800	21,600
5	Savage Br.	101,500	2,500	67,500
Total Projections		722,000	17,700	477,900
Adjusted Projections				
Cut #	Cut Name	Actual Avg 76-98	Adjusted Avg/Yr	27 Yr. DMMP Qty.
1	Mouth of the MN River	1,409	2,000	54,000
2	4-Mile Cut-off	191	1,000	27,000
3	Peterson's Bar	10,381	15,000	405,000
4	Cargill	665	800	21,600
5	Savage Br.	6,901	6,000	162,000
Total Projections		19,547	24,800	669,600

2.4 Quantity and Distribution of Dredged Sediment Onsite

According to the navigational dredging records for the Lower Minnesota River provided by the Corps, approximately 109,485 cubic yards of dredged material has been placed onto the Cargill East River (MN-14.2 RMP) site from 2008 through 2011 (USACE 2012). More specifically, in 2008 there were approximately 16,803 cubic yard, 29,627 cubic yard in 2009, 15,886 cubic yard in 2010 and 47,169 cubic yard in 2011. Therefore, the annual average for 2008 through 2011 of 27,371 cubic yards is higher than the estimated long term (27 year period) annual dredging volume of 21,800 cubic yards for Dredge Cuts 3, 4, and 5.

It is important to note that these dredging quantities originated from Dredge Cuts 3, 4 and 5 instead of only originating from Dredge Cut 5 as was indicated in the Corps DMMP. Also, the estimated dredging volume stated above has likely decreased in volume on-site as a result of dewatering and consolidation over time. In order to determine the actual dredged material quantity currently on-site, a topographic survey would have to be completed.

2.5 Sediment Quality

The Corps has historically obtained representative sediment core samples for specific Minnesota River locations to complete physical and chemical analysis prior to dredging. In 1999, updated sediment core samples were obtained that included seven (7) sample locations between River Mile 11.0 and 14.6. The analyses included physical characteristics such as grain size, total organic carbon, total solids, total volatile solids and percent moisture. The chemical analyses included PCBs, pesticides and heavy metals. (See Appendix A)

Based on this historical data, sediment characteristics vary from location to location and from year to year. In general, the sediment from the main channel dredging on the Minnesota River can be characterized as predominantly sand, containing an average of 1% to 4% silt and clays, depending on the dredge cut. This is based on analysis of sediment samples from historic dredging locations. Recent samples have been obtained in 2009 and 2012 from the dredged material presently deposited on the Cargill East River (MN-14.2 RMP) site. The sediment analysis work completed in 2009 by Braun Intertec included one sample analysis composited from six separate stockpile locations for metals, nutrients, PCBs and total organic carbon (See Appendix B). The purpose of the 2009 chemical analysis was to evaluate whether the stockpiled dredged material may require special management and disposal. The 2012 analysis also completed by Braun Intertec, included a total of four samples, two of which were from the 2009 dredged material and two from the 2011 dredged material (See

Appendix C). Each of the four samples was analyzed for grain size distribution and organic content.

The results of the composite sample indicated that no values exceeded the Minnesota Pollution Control Agency (MPCA) Dredged Material Level 1 Soil Reference Values (SRV). However, it should be noted that the testing was not completed in accordance with MPCA dredged material sampling guidance which typically requires in-situ sampling prior to dredging. (See Table 2 for Sampling Results) The 2012 sampling analysis results for grain size indicated that samples 1 and 2, which represented the 2011 dredging work, consisted of poorly graded sand with silt and included 3.8% to 6.1% fine grained particles passing through the #200 Sieve. Samples 3 and 4, which represented the 2009 dredging work, consisted of silty sand and included 18% passing through the #200 Sieve, which indicates a greater fine grained or silt sized component. (See Appendix C for Sieve analysis results)

Table 2: 1999 Minnesota River Sediment Sampling Results

Sample Identifier Record # River Mile	MN-1 78497 0.1	MN-13 Mouth of Minnesota	MN-3 78485 3.8	MN-4 4-Mile Cutoff	MN-5 78500 4.4	MIN-6 78501 11.0	MIN-7 78502 11.5	MIN-8 78503 12.0	MIN-9 78504 12.3	MIN-10 78505 12.36-12.9	MIN-11 78506 13.5	MIN-12 78507 14.7	Comments	MOE LEL	Great Lakes Moderate	Great Lakes Heavy	Mississippi River - above Lake Pegun	Wisc Draft
Location	Mouth of Minnesota	Mouth of Minnesota	4-Mile Cutoff (slip drain)	4-Mile Cutoff	4-Mile Cutoff (above 484)	Blw Peterson's Bar	Blw Peterson's Bar	Peterson's Bar	Peterson's Bar	Cargill Slip	Above Savage RR Bridge	Above Savage RR Bridge	1999 Maximum					
Year	1970	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999						
Metals																		
As (arsenic)	mg/kg	1.30	1.51	5.84	3.53	1.19	1.43	1.16	1.89	1.89	1.81	1.30	5.64	6	3	8	11	
Cd (cadmium)	mg/kg	0.10	0.12	0.09	0.30	0.17	0.03	0.03	0.03	0.03	0.03	0.03	0.89	0.6	6	6	1.4	
Cr (chromium)	mg/kg	4.05	3.88	9.5	9.17	5.60	3.67	3.30	2.90	3.81	3.82	3.75	9.5	26	25	75	20	107
Cu (copper)	mg/kg	2.2	1.87	10.4	7.37	3.97	2.17	1.67	2.24	2.11	2.04	1.72	10.4	16	25	50	17	103
Hg (mercury)	mg/kg	<0.0048	<0.0048	0.0109	0.0085	<0.0048	<0.0048	<0.0048	<0.0048	0.0052	0.0059	0.0055	0.0198	0.2	1	1	0.49	0.1
Mn (manganese)	mg/kg	784	217	188	426	357	2.35	154	2.35	2.42	931	113	899	400	300	550	731	
Ni (nickel)	mg/kg	9.15	6.84	24.8	18.4	12.3	7.42	6.12	7.92	6.27	6.14	6.14	24.8	16	20	50	18	109
Pb (lead)	mg/kg	6.6	6.2	15.1	17.9	6.4	4.7	4.7	6.3	6.3	6.3	6.3	15.1	31	40	80	25	50
Zn (zinc)	mg/kg	12.0	9.33	10.4	30.1	18.3	9.26	8.12	11.1	12.3	12.3	8.47	46.5	120	99	250	81	100
Other																		
Cyanide, Total	mg/kg	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.1	0.1	0.25	<2	19
Ammonia (total)	mg/l	0.39	0.44	0.41	0.47	0.33	0.41	0.21	0.3	0.25	0.26	0.25	0.55					
Physioid																		
Total Organic Carb	%	0.02	0.03	0.02	0.50	0.19	0.02	0.01	0.02	0.03	0.03	0.04	0.72				2.9	
Moisture	%	0.2	0.3	0.1	1.3	0.2	0.1	0.2	0.2	0.2	0.2	0.2	2.2					
Total Solids	%	99.6	99.9	97.8	98.7	99.3	99.6	99.4	99.4	99.4	99.6	99.6	99.7					
Volatile Solids	%	0.43	0.4	0.33	2.31	0.95	0.26	0.40	0.23	0.35	0.35	0.41	2.92	8	5	8		
Grain Size Analysis																		
3 FT																		
1 1/2																		
3/4																		
3/8																		
3																		
4																		
10																		
16																		
20																		
30																		
40																		
50																		
60																		
70																		
80																		
100																		
140																		
200																		

2.6 Regulatory Requirements

All proposed placement operations including the discharge of an effluent into navigable waters or adjacent wetlands are required by Section 404(b) of the Clean Water Act to undergo a detailed impact analysis. If an evaluation finds that a site complies with guidelines, the site may be used. Section 404(t) of the Act requires that the Corps comply with State regulatory requirements when placing material below the ordinary high water level or discharging an effluent. The Minnesota Department of Natural Resources (MnDNR) has a long-term permit and Memorandum of Understanding (MOU) with the Corps that provides details on complying with Section 404(t) for the placement of dredged material. The use of selected sites on the Minnesota River has been approved by the MnDNR (Cargill East, Kraemer, NSP, and Hwy. 77 Bridge).

The Corps also has a long-term agreement with the MPCA for water quality certification when material or effluent is discharged below the ordinary high water level. Since the Corps controls the type of equipment used for a particular dredging job and controls the effluent when hydraulic dredging is required, the Corps is responsible for acquiring water quality certification from the MPCA for the placement site areas.

As required by the City of Savage's zoning ordinance, the District was granted a conditional use permit to manage the Cargill East River (MN-14.2 RMP) site located in a floodway district for the expressed purpose of managing dredge material. New sites that may be identified will require coordination with the MnDNR, MPCA and the City of Savage.

3.0 POTENTIAL EXISTING SITE IMPROVEMENTS

Optimizing the existing Cargill East River (MN-14.2 RMP) site is essential since there is currently an unconfirmed quantity of consolidated material on site and the overall usable size of the site is limited. It was reported that the 2009 dredged material, which contain a higher percentage of fine grained silts (approx. 18% passing through the #200 sieve), was difficult to manage during the offloading and spreading process due to higher water contents and slower dewatering rates. The existing site configuration is clearly more receptive to accepting primarily sand as observed from the 2011 dredged material (See Figure 2). The existing berms that have been constructed on site have been estimated to be approximately four (4) feet in height and are only functional for containing mechanically placed sediment. Preliminary analysis of the visible dredged material currently on-site indicates that a sandy stockpile that is approximately 10 ft. in height occupies approximately 2.4 acres; and thinner layers of dredged material that have been physically distributed using dozers and conventional excavating equipment occupy an additional 3.2 acres. Available Corps dredging records indicate that approximately 109,485 cubic yards of dredged material was placed on the Cargill East River (MN-14.2 RMP) site in four separate work efforts (2008, 2009, 2010 and 2011). Although the overall percentage of sand content was generally high, it is highly probable that some level of consolidation and volume reduction has occurred.

Accurate estimates of on-site material can be determined by completing a topographic survey of the site and evaluating compared pre-dredge topography, which was fairly level and generally ranged from elevation 701 to 702. In order to fully utilize the available space and to maximize site storage capacity on the site, several options should be considered. The current site usage has been restricted to accepting mechanically excavated sediment which typically would contain 10 to 15 percent, dredged material solids and 85 to 90 percent water because of limitations related to the perimeter dikes and the inability of the site to retain hydraulically dredged slurry. A properly designed confined dewatering facility would allow the sediment to settle out within one or more dewatering cells and would allow regulatory compliant effluent water to be discharged back to the River. Since the existing dikes are reported to be approximately four ft. high and not configured as enclosed cells with water control outlet structures, hydraulic dredging is not currently a feasible dredging method for this site.

As described above, mechanically dredged material off-loaded from barges must be physically distributed throughout the site in order to utilize available storage space. This placement and distribution method requires double handling and therefore is not as efficient and cost effective as hydraulic dredging methods would be if a suitably designed confined dewatering facility with multiple cells were constructed. Hydraulically dredged slurry could be routed into selective cells or compartments depending on the total volume and the estimated silt percentage of the targeted navigational dredging area. Additionally, mechanically dredged sediment could also be placed within a designated cell if designed appropriately.

It is recommended that the DMMP includes the evaluation of various dike configurations to optimize site storage capacity, efficient distribution and containment, and efficiency of access for eventual site storage management and beneficial use applications. A preliminary conceptual site configuration layout is included for reference purposes. Since material used for dike construction can be considered permanent site material, the utilization of existing dredged material currently on-site should be evaluated for use in constructing perimeter and interior dikes in an effort to optimize the management of existing dredged material. The original site assessment completed by the Corps estimated site usage based on constructing dikes that would be capable of storing dredged material up to a 10 or 15 ft. height above existing grade. However, it should be noted that depending on the total height of any perimeter dike configuration, that the horizontal footprint occupied by the dike may limit or reduce the available space for dredged material storage. For example, a 15 ft. high perimeter dike with a 3:1 slope (3 ft. horizontal to 1 ft. vertical) and a 10 ft. top width would occupy a bottom site footprint width of 100 ft. Therefore, various dike height and cell configurations should be evaluated. Once the containment dikes are constructed, newly placed dredged material would be then considered temporary site material and subject to management guidelines.

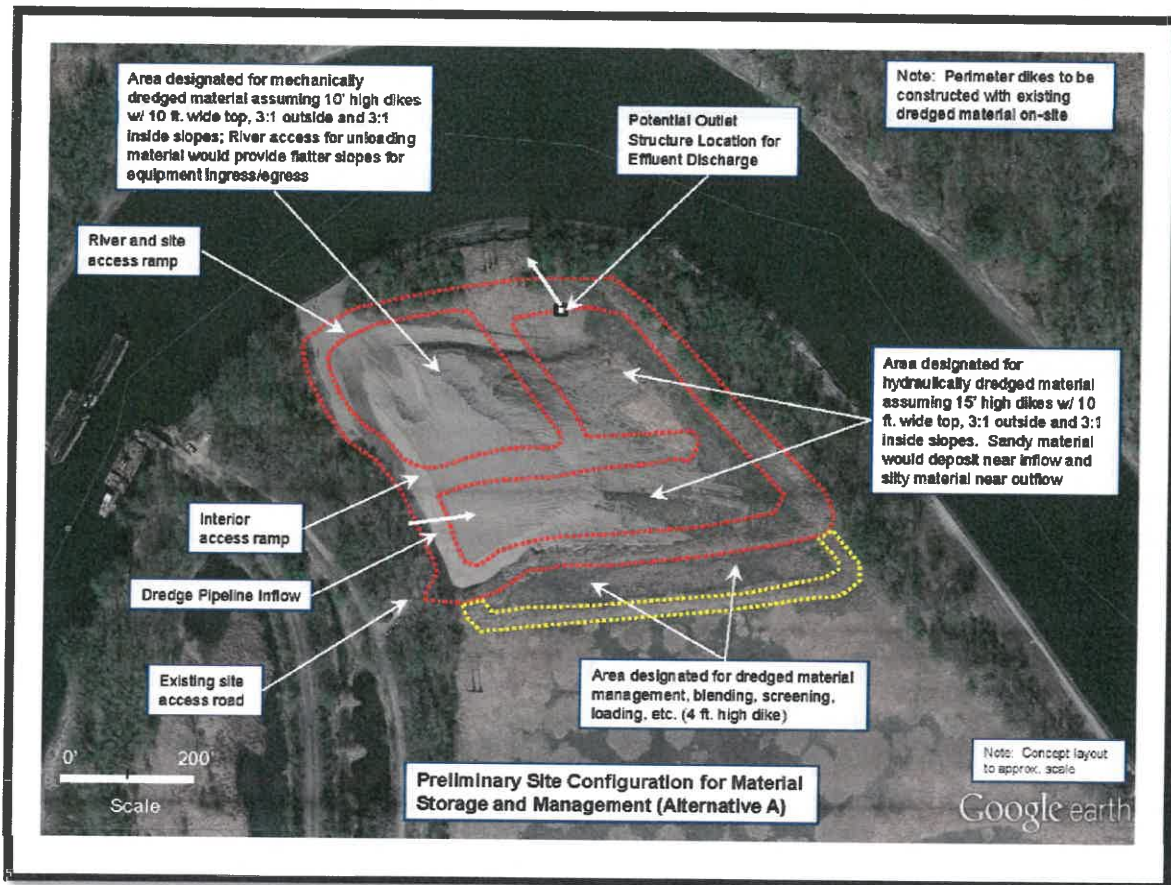


Figure 3: Cargill East River (MN-14.2 RMP) Preliminary Site Configuration for Material Storage and Management

3.1 Material Management Plan

A Material Management Plan should be developed as a guide for short and long term site management for dredged materials currently on-site and for all future dredged materials planned for placement and storage at the existing Cargill East River (MN 14.2 RMP) site. The existing Draft “*Operational Manual for Material Management at LMRWD’s Dredge Disposal Site*” (Draft Plan) developed by the District should be revised as necessary (LMRWD 2012). The Draft Plan begins to address major site concerns and anticipated site requirements for the management of dredge materials placed on the site by Corps dredging activities on the Lower Minnesota River and to market excess materials for sale to interested parties.

The Draft Plan should evaluate physical and environmental alternatives to enhance and optimize the ability to store, dewater and access dredged material in a manner that allows optimum material management and off-site deployment. Verification of materials placed on the site will be performed by the site manager at the completion of each project. Quarterly reports on inventory will track: 1. Materials placed (by type), 2. Materials removed (by type), and 3. Total materials on-site. These reports will be maintained and provided to District personnel by the site manager on a quarterly basis.

The District will coordinate with the Corps regarding future acceptance of dredged material with regard to dredging schedule, anticipated volume of material and the physical and environmental characteristics of the targeted material. The method of dredging and subsequent material placement will also be determined prior to dredging to allow for strategic site placement and to facilitate subsequent material management.

On-site material management should include, at a minimum, periodic gradation and sediment quality tests and inventory management to measure and validate all material brought in by barge counts and material pile surveys. Materials removed from the site over land will be authenticated by truck counts with standard cubic yard capacities applied to individual trucks.

Marketing efforts undertaken will primarily consist of maintaining on-going contact with material brokers/contractors and other outside sources to be determined. Pricing for materials will be established in accordance with current market price. Upon sale of material, management will ticket and invoice the transaction. Paper receipts for all sales will be totaled and copies submitted to the District quarterly. Site operating costs will be totaled and reported quarterly to the District.

4.0 MATERIAL USE

The District, as the local sponsor, has a continuing role in providing new placement sites or insuring that the placement sites selected in the Corps' 2007 DMMP have capacity when required for dredged material placement. The District should act as a site manager, or acquire agreements with local contractors to become placement site managers with the responsibility for insuring that capacity exists at each placement site. Material placed into sites should be removed as soon as practicable. Material with higher concentrations of fines will require a longer period to dewater and may need to be mixed with coarser sand to provide a more useable product. The Corps will assist the District in actively promoting the beneficial use of dredged material.

The following sections discuss material use options for the site. The options include: no action or maintaining the status quo with the Cargill East River (MN-14.2 RMP) site; identifying and managing beneficial uses of the dredge material; and lastly, hauling the material off-site for disposal.

4.1 No Action

The No Action option represents the option of allowing the current site to reach its capacity and acquiring no additional placement sites. Under this scenario, the site will gradually reach a point where no additional dredged material can feasibly be offloaded from barges and stockpiled in a safe manner due to the limited size of the site and the absence of sufficient impounding dikes to allow for hydraulically dredged material to be received. In its current state, the site has approximately 7 to 8 acres of space that can realistically accommodate and store mechanically dredged material assuming a maximum stockpile height of 15 feet. As described previously in Section 3.0, there is an existing 2.4 acre stockpile on-site that is reported to be approximately 10 feet in height, plus a 3.2 acre area of a 2 to 3 feet thick area of material that has been physically distributed throughout the site. These dredged material deposits that area visible on aerial site images would require a site topographic survey to conform actual on-site volumes. The Corps has indicated that approximately 109,485 cubic yards of dredged material (measured in-situ) was placed on this site from 2008 through 2011, which has likely reduced in volume over time as a result of dewatering and consolidation. However, based on visible sediment observed via aerial photo reconnaissance as describe above, the approximate material volume on-site in the range of 60,000 cubic yards, which means a significant amount of previously placed material has become re-vegetated and is difficult to delineate and estimate without completing a detailed topographic survey of the site.

If we assume that a 7 acre area can be stockpiled to a maximum 15 ft. height throughout the site by physically hauling, dozing and distributing material, then the site potentially can store approximately 170,000 cubic yards of mechanically dredged material before reaching its maximum storage limit.

For conservative estimating purposes, if we assume that there are 80,000 to 100,000 cubic yards of consolidated dredged material currently on-site and the remaining potential storage capacity of the site assuming a 15 ft. maximum stockpile height and no further improvements or actions, approximately 70,000 to 90,000 cubic yards of additional mechanically dredged material could potentially be stored before having to take action to remove some of the material to create storage capacity. Based on the information presented above, it would take 3.2 to 4.1 years for the site to reach capacity.

4.2 Beneficial Uses

Beneficial reuse involves using dredged sediments as a resource material in a productive way. While the term “beneficial” indicates some benefit is gained by a particular use, the term has come to generally mean any reuse of dredged material. Beneficial uses of dredged material can minimize, or eliminate, the need for traditional disposal of dredged material. As part of overall sediment management, regulatory agencies generally support the productive reuse of dredged material.

The potential uses for dredged material depend on the type of dredged material, location of dredging, how it is dredged and the overall suitability of the material for use. Legislation and local conditions must also be considered. Three broad categories of use are often distinguished: engineering uses, agricultural/product uses and environmental uses. In each of these cases, criteria must be established that ensure that sufficient testing is completed to adequately evaluate the suitability of the dredged materials, that the potential use site is located within reasonable proximity to where the dredging activity is planned and that a thorough physical and chemical evaluation is completed of the dredge materials.

How will beneficial reuse alternatives be assessed?

Beneficial use projects involve coordination between the dredged material generator, regulators of dredged material placement, and other interested parties including federal, state and local natural resource management agencies, public interest groups, and local residents.

The decision process for identifying the most appropriate match for dredge material reuse involves analysis of the sediment to determine compatibility with needs in the area. It is necessary to determine the following items during the decision process:

- Contaminant Status of Materials
- Site Selection
- Technical Feasibility
- Environmental Acceptability
- Market Demand and Cost/Benefit
- Legal Constraints

Limited dredged material characterization was conducted to establish contaminant status of the dredged material and determine whether a particular dredged material may be suitable for a proposed reuse. As previously noted, sediment core samples were obtained from different areas of the Cargill East River (MN-14.2 RMP) site and analyzed for various contaminants, as well as for particle size, total organic carbon, and total nutrients.

The 2009 Sediment Analysis Report (Braun) indicates that the on-site dredged material samples that were analyzed did not contain elevated or harmful levels of contaminants or metals and did not exceed MPCA Level 1 Soil Reference Values (SRV). Therefore, removing and reusing the sediment will not likely require special conditions or restrictions beyond those typically imposed on dredging projects. The Report also indicates that the targeted dredged material consists of varying percentages of sand and silt. Historic uses of these materials in the region include the following:

Sand: Fine grained sand is generally easy to compact, affected little by moisture, and not subject to frost action. Minnesota Department of Transportation (MnDOT) quality standards refer to this fine grain sand as Mason Sand. It is typically used in children’s sand boxes and sand volleyball courts. Mason Sand is also used as an additive to the cement used to make mortar for laying bricks, filling gaps in pavement and also as a base under delicate materials such as liners.

Silt: Silt of this grain size is typically used in ponds, for water control and containment and for berm strengthening. Silt is inherently unstable, particularly when moisture is increased, with a tendency to become quick (soft) when saturated. It is relatively impervious, difficult to compact, highly susceptible to frost heave, easily erodible and subject to piping and boiling.

Clay: The permeability of clay is very low; it is subject frost heave, expansion and shrinkage with changes in moisture. However, clay has good nutrient holding capability and is considered to be a valuable additive to topsoil in the correct proportion. However, very little clay is typically contained in the dredged material obtained from the Lower Minnesota River.

Retail prices for these materials vary depending on quality and availability. Table 3 below indicates average retail prices for these products within the Minneapolis area:

Table 3: Average Retail Prices

Top Soil	\$20-25 CY (Screened) \$10-15 unscreened
Fill Material	\$8-10 CY
Sand (used to grade or mix with topsoil)	\$34 per ton*
*The number of cubic yards in a ton of sand generally varies from 1.3 to 1.6 tons per cubic yard depending on density and water content of material.	

In addition, combinations of the above materials have been found to have beneficial applications for agricultural and landscaping purposes, particularly when small percentages of sand, clay and even leaf compost are blended with primarily silt sized soil.

What are the beneficial reuse options for the Lower Minnesota River sediment?

The technical feasibility of connecting a dredging project to a beneficial reuse project requires overall project coordination, timing and physical location of activities. It is important to consider proximity of dredged material source to the ultimate reuse site, associated handling and trucking of material, and available access to the Cargill East River (MN-14.2 RMP) site. It is also necessary to ensure that the amount and type of dredged material is compatible with the specific reuse project requirements. The suitability of a particular dredged material type for a specific use will depend largely on the intended use of the land after the dredge material is placed on it. Table 4 below identifies the potential beneficial reuse option associated with the type of sediment present in the Lower Minnesota River.

Table 4: Dredge Material Sediment type

Beneficial Use Options	Consolidated (Stiff) Clay	Silt	Sand (fine and coarse)
Engineered Uses			
Land creation	x	x	x
Land improvement	x	x	x
Capping	x		
Replacement Fill			x
Agriculture & Product Use			
Agriculture/Topsoil		x	
Construction materials	x	x	x
Road construction and maintenance			x
Environmental Enhancements			
Habitats Enhancement	x	x	x
Fisheries Improvement	x	x	x
Wetland Restoration	x	x	?
Source: U.S. EPA and USACE, Beneficial Use Planning Manual 2007			

4.2.1 Engineered Use

Land Creation and Improvement: Land created within a project area would be limited to uses compatible with fine-grained materials present at the Cargill East River (MN-14.2 RMP) site. These materials are more suitable for recreational uses, such as parks and trails.

Dredged material may also be used to improve the quality of soil or where improvements are necessary to the slope and/or elevation of the land. Proven methods have been developed for land improvement by filling with the fine material, such as silts and clays, produced by dredging. Land improved using fine material is generally of lower strength than land improved using coarse-grained material. Potential applications include recreation areas, playing fields, golf course, parks, light residential development or light commercial storage areas.

County Planning Department (various locations). Identify potential for new parks planned within and smaller maintenance projects within recreational areas that will continue to occur. If dredged sediment is used for a recreation project it may be difficult to coordinate the timing of each individual project with the availability of the dredged sediment.

Parks and Recreation Department (various locations). Confirm whether any new or existing parks may likely have improvement projects occurring within the next two to 10 years that may require fill material.

Capping: Dredged material can be applied as a means of isolating the contaminated sediment from the surrounding environment. Upland capping of abandoned quarries is the most suitable use within the project area. Confirm any existing Brownfield projects within the Minneapolis area that may utilize dredged material for capping purposes.

Replacement Fill: Dredged material may be used as a replacement fill when the physical qualities of dredged sediment are superior to soils in the surrounding area. Peat and clayish soils can be removed from fill material and replaced by sand or other granular dredged material to improve physical properties needed to meet building requirements (USACE, 2006).

Minneapolis-St. Paul International Airport Runway Expansion. Confirm whether any nearby airports are in the process of planning an extension of existing runway facilities. This application could be potentially utilize significant quantities of dredged material for the construction runway expansion and safety zones at the end of runways.

Local Solid Waste Authorities. Local Solid Waste Authorities may be potential recipients of dredged material.

4.2.2 Agriculture/Product Uses

As an alternative to permanent placement in sediment basins, sediment could be used to increase yields on eroded or low-yielding soils. Dredged material may be used for land improvement when the quality of existing land is not adequate for a planned use or where the elevation of the land is too low to prevent occasional flooding. Additional options include land grading or filling of gullies and farmed depressions, and construction of terraces, pond embankments, or other on-farm uses of clean fill.

Topsoil: Dredged material is commonly composed of silt, sand, clay and organic matter, all important components of topsoil. Dewatering and conditioning of dredged material can result in a product that can be used in topsoil creation or structural enhancement. For horticultural use, sediment may be mixed with other materials to produce a manufactured topsoil superior to any of its individual components. Dredged material from rivers and reservoirs consists primarily of eroded topsoils and organic matter that may be used on land of poor agricultural quality to improve the soil structure. In some cases, the mixed soil product has been suitable for sale or free distribution to the public. The advantages of such an operation are that environmental benefits are obtained at both ends; topsoil does not have to be taken from new subdivisions, scattered construction sites or farmland; the Cargill East River (MN-14.2 RMP) site can provide large quantities of soil with consistent quality, with limited need for trucking material to arrive at most placement sites.

Local Soil and Water Conservation District (various locations). SWCD manages erosion and sediment control programs, agricultural programs, stormwater programs, as well as conservation and education programs. The local Soil and Water Conservation District coordinates conservation efforts within the county. Currently SWCDs do not have a large project involving berm construction that could use the dredged material. The organization indicated that local farms could potentially be users of dredged material as supplementary topsoil on farmlands. However, because the sediment would not be available for approximately three to four years, it is not feasible to identify topsoil needs for individual farms and commit to the material. In addition, it is unlikely to get one landowner to take all of the sediment available which could cause logistical complications caused by the need to coordinate with multiple end users.

Construction Materials: Some dredged material can be used as construction material. In many cases, dredged material consists of a mixture of sand and clay fractions, which may require some type of separation and moisture control process.

Local Construction Companies (various locations). Depending on the sediment type and processing requirements, dredged material may be used as concrete aggregates (sand and gravel); backfill material or in the production mortar (sand); raw material for brick manufacturing (clay with less than 30 percent sand); ceramics, such as tile (clay) pellets for insulation or lightweight backfill or aggregate (USACE, 2006). Many construction companies make use of excavated material on their project site and do not have storage capacity to take substantial amounts of the dredged material. Therefore, it is necessary to coordinate the availability of dredged material with local construction projects.

Road Construction and Maintenance:

Minnesota Department of Transportation (various locations): MnDOT local road projects may be a potential recipient of dredged material to use during road construction projects. MnDOT road construction projects typically make use of excavated materials on site. If it is determined that excess fill is needed, it would be difficult to estimate the required amount until the time of construction activity. In addition, the scale of these projects would not be large enough to take on all of the dredged sediment, resulting in a need to coordinate the availability of dredged material and transporting material to numerous MnDOT projects within the region.

4.2.3 Environmental

Dredged material can be used to enhance or create various wildlife habitats. Native vegetation established in these areas then provides food and cover for wildlife. Nesting meadows and habitat for large and small mammals and songbirds can be developed on upland or floodplain (seasonally flooded) dredged material placement sites. Strategic placement of dredged material can replenish eroding natural wetland shorelines or nourish subsiding wetlands by serving as an erosion barrier or providing shoreline stabilization (Great Lakes Commission 2001).

Dredged material sediment can be used to stabilize eroding natural wetland shorelines or nourish subsiding wetlands. Dewatered dredged material can also be used to construct erosion barriers and other structures that aid in restoring a degraded or impacted wetland (USACE 2006).

Habitat Enhancement (various locations, distance varies): Properties located along the Minnesota River can be good candidates for habitat enhancement projects. This habitat could be created on property located within close proximity to the dredge placement site to minimize the need for loading and hauling away material. Property owners would work in coordination with the District in order to implement these projects.

The Natural Resources Conservation Service (NRCS) (various locations) often conducts land rehabilitation and resource conservation projects. Coordination with the NRCS may identify potential projects that could be partners for a beneficial reuse project.

4.2.4 Cost/Benefit

Although difficult to quantify, intangible benefits should always be taken into account when assessing overall costs and benefits. The actual costs of a proposed project are balanced with the value of the benefits including the potential for an improved environment, aesthetic enhancement, and a more viable local community. Implementing a beneficial reuse option often means saving valuable primary resources and avoids creating more borrow pits. In addition, the combination of two projects (dredging project and reuse project) can create a cost-effective solution by accomplishing two things at once, such as maintaining depth and developing a natural habitat area.

However, the economic consequences for each particular use of dredged material must be thoroughly evaluated and all costs and benefits, both long-term and short-term, must be weighed. Where possible, local pricing estimates should be used for estimating the cost of activities associated with the beneficial use project. These numbers are supplemented with 2009 RS means, an annually updated construction cost information handbook.

Screening soil: The need for and degree of screening dredged material will depend on the end use of the sediment. A coarse screening may be necessary to remove rocks and debris from sediment. A fine screening may be necessary to separate topsoil, gravel and sand. Fine screening would use a screen with smaller holes resulting in a slower, costlier, more time consuming process. The screening process would cost approximately \$6 to \$9 per cubic yard, depending on the extent of coarse or fine screening that is necessary.

Loading of Truck: A front end loader would be required to load dump trucks for hauling sediment to the beneficial use project site. Depending on the conditions at the dewatering/storage site, either a wheel mounted or crawler mounted front-end loader will be used. A track mounted loader would be used on areas with a steep slope, while a wheel mounted loader would be used in areas sensitive to surface disturbance. Wheel mounted loaders are typically more expensive to maintain, therefore, it would be a more expensive option. RS Means indicates that the estimated cost for loading sediment using a front end loader would be \$9.35 per 5 CY (bucket capacity) for a track mounted loader or \$25.50 per 3 or 5 CY (bucket capacity depends on model of loader) for a wheel mounted loader. Cost of loading one 16.5 CY dump truck would cost about \$30 for a track mounted loader and \$80 for a wheel mounted loader.

Hauling Sediment: Costs are frequently lower when distances from the dredge material placement site to reuse placement site are reduced. For preliminary analysis purposes, it is assumed that sediment will be hauled from the Cargill East River (MN-14.2 RMP) site. Hauling costs can vary depending on amount being hauled, permitted speed on roads and total trip distance. A 16.5 cubic yard dump truck and average speed limit of 35 miles per hour was assumed for cost estimate purposes. Table 5 below indicates the average cost of hauling.

Table 5: Hauling Costs

Truck Size	Round Trip Distance at 35 MPH	Price per Loose CY
16.5 Cubic Yard	20 miles	\$ 7.05
16.5 Cubic Yards	30 miles	\$ 9.05
16.5 Cubic Yards	40 miles	\$12.65
Source: (RS Means Site Work and Landscape Cost Data 2009)		

Therefore, hauling sediment to a beneficial use project site located 10 miles from the Cargill East River (MN-14.2 RMP) site would cost approximately \$2,327 per truck load. A project located 20 miles away from the site would cost approximately \$8,349 per truck load to transport sediment. Trucking prices would vary depending on the capability of the end user to load and haul the dredge materials with their own equipment and staff.

4.2.5 Regulatory Requirements

Permits for the beneficial reuse of dredged material outside of the dewatering/storage area will be coordinated with federal, state, and local agency reviews as required by U.S. EPA, Corps, MPCA and any other local agencies. These permits could include:

Table 6: Required Permits and Clearances

Permit	Granting Agency	Applicable Portion of Project
Conditional Use Permit	County	For construction activity outside of uses permitted by right.
Minnesota Water Permit	MPCA	Applicable if proposed project results in fill or discharge any pollutant into, or adjacent to surface waters, withdraw surface water, otherwise alter the physical, chemical or biological properties of surface waters.
Erosion and Sediment Control Plan	County	Required at site of Beneficial Use Project.
Section 404/401	Corps and MPCA	Required if project occurs within Waters of the U.S.
Federal/State Threatened and Endangered Species	U.S. Fish and Wildlife Service	A site survey would be necessary for the project area. Permit requirements would be identified at later date.

Considerations for placement of dredged material and any required easements would be coordinated with the county and property owners. The county will first review a plan for the activity to ensure the proposed project satisfies the requirements of local zoning ordinances. In addition, a Performance Bond may be required by the county to ensure satisfactory completion of the project.

All activity associated with loading and hauling dredged sediment for beneficial reuse will be in compliance with the existing Conditional Use Permit and/or Erosion and Sediment Control Plan and associated conditions put in place for approval of a dewatering/storage site by County. The Conditional Use Permit would cover construction equipment accessing the parcel (s) to load and haul sediment, access across adjacent parcels to and from the dewatering/storage site to roads and necessary mitigation to rehabilitate the site. Conditions set forward in the Conditional Use Permit and Erosion and Sediment Control Plan for the dewatering site would also apply to Beneficial Reuse operations at the dewatering site including possible limits on hours of equipment use and trucking operation activity and avoidance of areas for resource protection.

Permits for the beneficial reuse of sediment outside of the dewatering/storage area would be the responsibility of the project proponent or end user. It is assumed that any beneficial reuse of the dredged materials would not adversely affect regulated wetlands and waters, and therefore would not require federal or state permits beyond those obtained for the dredging and dewatering operations. Local permits may be required, particularly where the placement of dredged material is part of a land disturbing project. Local permit requirements will be project specific.

4.2.6 Local Opportunity and Market Demand for Beneficial Use Projects

There are multiple potential beneficial reuse options that have been identified for dredged material. However, few of the potential reuse options have a confirmed market demand to absorb or use most or all of the potential volume of material that could be dredged from the Lower Minnesota River. Most of the specific reuse options would involve small quantities of material in comparison to targeted dredging volumes. The ability of many of the following reuse options to “mesh” with any navigational channel dredging project will require a balance of timing, cost, need, and the ability to screen, wash and/or blend the dredged material with other material on the site to enhance market value. Distance is another key factor in evaluating the feasibility of a particular reuse option; transporting sediment by truck is typically cost-prohibitive over long distances.

It is important to note that during the recent economic downturn, the demand for construction materials has decreased and that decreased will likely continue until the current economy recovers and construction activity shows an increasing trend. Discussion with local contractors including Frattalone Companies, S.M. Hentges, and Veit has confirmed that there is a small market for beneficial reuse of dredged material. If the material meets analytical and geotechnical specifications, it has greater potential to be used as fill at a construction site. The practicality of reuse would still depend on the dredge work having concurrent timing with and close proximity to local construction projects. Contractors who typically work with dredged material have more interest in offering their services to haul the material off-site at the District’s expense than purchasing the sediment for reuse.

4.3 Off-Site Disposal

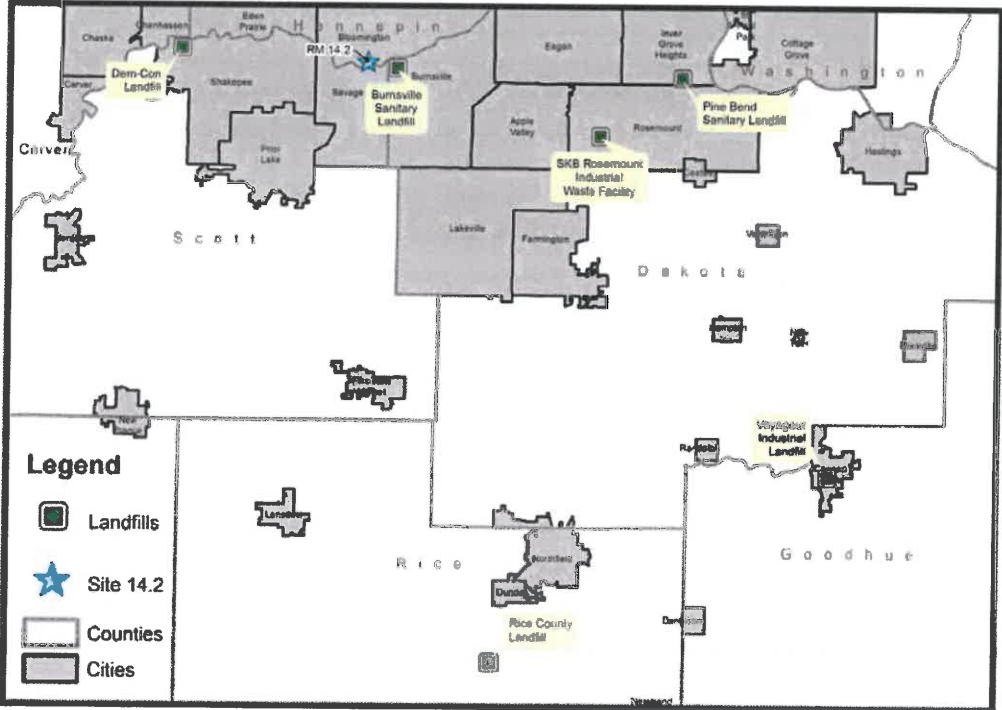
Off-Site disposal of dredged material is a consideration for landfills which accept mixed municipal solid waste or industrial waste. Landfills may also accept contaminated dredged material when properly permitted to do so by MPCA. Figure 4 shows the locations of landfill within 30 miles of the Cargill East River (MN-14.2 RMP) site which can accept sediment. The nearest facility is the Burnsville Sanitary Landfill, just less than 2 miles away.

Costs of off-site disposals at these facilities can vary. The Burnsville Sanitary Landfill would charge \$8.50 to \$12 per ton, with up front fee of \$680 for the material. On the opposite side of the cost range, the Pine Bend Sanitary Landfill in Inver Grove Heights charges \$45 per ton with an additional \$28 per ton in taxes. The amount of tons in each cubic yard of dredge material varies depending on sediment types and water content. Generally, there is approximately 1.5 to 2.0 tons per cubic yard of sediment leading to disposal cost ranges of \$13.20 to \$146 per cubic yard (plus loading and trucking).

There may be some discounts imposed at landfill facilities based on volume of business and if the material can be used as daily cover. SKB Rosemount Industrial Waste Facility suggested that their price is negotiable and can be discounted for repeat business, and if the dredged material is used as daily cover their price could be reduced by roughly 33%. Most of disposal facilities indicated discounted rate if the material could be used for daily cover. The potential for using the material as daily cover depends on the timing of disposal and the characteristics of the dredged sediment.

Since the Burnsville Sanitary Landfill is the closest and most cost effective, a preliminary estimate of dredged material hauling and disposal costs would include approximately \$1.87 per cubic yard for loading and \$7.05 per cubic yard for hauling as described in the Beneficial Use Section 4.2.4 above (RS. Means); and the estimated Burnsville Sanitary Landfill disposal cost would be \$8.50 per ton or approximately \$13.20 per cubic yard. Therefore, the cost of loading, hauling and disposing of dredged material at the closest landfill without factoring any additional cost savings would be approximately \$22.12 per cubic yard. Since the Cargill East River (MN-14.2 RMP) site has been estimated to potentially store as much as 193,600 cubic yards (or more) of dredged material, a total site cleanout that includes disposal at the nearby Burnsville Sanitary Landfill would be approximately \$4.3 million based on the estimated costs summarized above.

Figure 4. Landfills Accepting Dredge Materials Within 30 Miles of Cargill East River (MN-14.2 RMP) site



4.4 Material Use Summary

After review of the options available to the District for material use, the option with the least uncertainty the option of hauling the material off-site. As noted, hauling the material off-site would cost the District approximately \$4.3 million to clear the Cargill East River (MN-14.2 RMP) site. Fund required to cover the expense would have to be generate by a special assessment against the benefitted property or an ad valorem levy.

5.0 ALTERNATIVE MANAGEMENT SCENARIOS

Removal of snags and boulder between the mouth of the Minnesota River and the mouth of the Yellow Medicine River at RMP 237.0 was authorized by the US Congress in 1867. In 1892, the Rivers and Harbors Act authorized the maintenance of a 4-foot navigation channel from the mouth of the Minnesota River to RMP 25.6. The existing 9-foot navigation channel on the Minnesota River from its mouth to RMP 14.7 was authorized by the Rivers and Harbors Act of 1958, Public Law 85-500, in accordance with Senate Document 144, 84th Congress, 2nd Session. The enabling legislation required local contributions including provision for dredge material placement sites. The District was created to act as the local sponsor. As the local sponsor, the District is required to furnish “without cost to the United States all lands, easements, and rights-of-way necessary for the construction of the project and for subsequent maintenance when and as required.”(Strandberg, 1962)

A one-time special assessment against benefitted properties in the District was done in support of the Corps’ initial construction of the 9-foot channel. This was supplemented in 1980 by a District-wide ad valorem levy. The balances from those activities were kept in a special fund (the 9-Foot Channel Fund). The 9-foot Channel Fund was used for implementation activities that address commercial navigation purposes, such as the purchase of the Cargill East River (MN-14.2 RMP) site and management of the Kraemer (MN-12.1-RMP) and the Cargill East River (MN-14.2 RMP) dredge material placement sites. Over the years, the 9-Foot Channel Fund has been depleted. The status of the 9-foot Channel Fund and disagreements between District managers about how to generate revenue has caused District managers to evaluate alternative management scenarios for the 9-foot Channel and the Cargill East River (MN-14.2 RMP) dredge material placement site. The following sections explore the potential management scenarios.

5.1 Alternative A: District maintains role as local sponsor

Alternative A consists of the District maintaining its role as the local sponsor. The District would generate funds to operate and manage the Cargill East River (MN-14.2 RMP) site and to purchase additional dredge placements sites, if necessary. Alternative A will require the District to use funding mechanisms afforded them by Minnesota Statutes 103B and 103D to generate fund.

5.2 Alternative B: District operates and manages the Cargill East River (MN-14.2 RMP) site and other dredge material placement sites purchased and funded by the State of Minnesota

Alternative B consists of the District serving as the operator and manager of the Cargill East River (MN-14.2 RMP) site and other dredge placements sites for the 9-foot Channel. Alternative B would be fully funded by the State of Minnesota

5.3 Alternative C: District ends role as local sponsor

Alternative C consists of the District ending its role as the local sponsor. If this alternative is chosen, the District will notify the appropriate agencies to take the proper regulatory actions.

6.0 REFERENCES

Dem-Con Companies "Beneficial Use of Dredge Material Use and Disposal." *Personal Conversation with Mike Ryan, HDR Engineering, Inc.* Minneapolis, MN, January 8, 2013.

Great Lakes Commission. *Waste to Resource: Beneficial Use of Great Lakes Dredged Material.* December 04, 2001. www.glc.org/benuse/ (accessed March 25, 2010).

Frattalones Companies "Beneficial Use of Dredge Material Use and Disposal." *Personal Conversation with Mike Ryan, HDR Engineering, Inc.* Minneapolis, MN, January 8, 2013.

Lower Minnesota River Watershed District. "Operation Manual for Material Management at LMRWD Dredge Disposal Site R.M 14.2." Chaska, 2012.

Rivers and Harbors Act 1958. Public Law 85-500 (85th Congress, S.3910, July 3, 1958).

"RS Means Site Work and Landscape Cost Data." Kingston, MA, 2009.

S.M. Hentges "Beneficial Use of Dredge Material Use and Disposal." *Personal Conversation with Mike Ryan, HDR Engineering, Inc.* Minneapolis, MN, January 8, 2013.

Steve Opstad, interview by Mike Ryan HDR Engineering Inc. *SKB Rosemont Industrial Waster Facility* (January 8, 2013).

U.S. Army Corps of Engineers - St. Paul District. "Dredged Material Management Plan/ Environmental Assessment, Minnesota River above I-35W Bridge." Scott, Hennepin and Dakota Counties, Minnesota, 2007.

U.S. EPA and U.S. Army Corps of Engineers. "Beneficial Use Planning Manual." 2007.

USACE. *Beneficial Uses of Dredged Material.* 2006.

<http://el.erdc.usace.army.mil/dots/budm/intro.cfm?Topic=Intro> (accessed April 3, 2010).

—. "Minnesota River Channel Coordinator." *Email to Peter Berrini, HDR Engineering, Inc.* Fountain City: U.S. Army Corps of Engineers, St. Paul District, December 17, 2012.

Veit Company "Beneficial Use of Dredge Material Use and Disposal." *Personal Conversation with Mike Ryan, HDR Engineering, Inc.* Minneapolis, MN, January 8, 2013.

W. B. Strandberg (U.S. Army Corps of Engineers, St. Paul District, St. Paul, MN) Letter to: A. W. Hubbard (Lower Minnesota River Watershed District, Minneapolis, MN) 1962 September 13

Appendix A: Chemical Analyses Data for the Minnesota River

EXHIBIT C
INSURANCE

Prior to the execution of this Agreement, Manager shall furnish to Owner copies of insurance certificates evidencing that it maintains the following coverages or any higher amounts as required by law or regulation. All policies shall name owner as an additional insured:

Types of Insurance	Limits
Workers' Compensation	Statutory
Employers' Liability	\$1,000,000 each occurrence
Commercial General Liability, including Contractual Liability	Bodily injury and death: \$2,000,000 each occurrence
Automobile Liability	Property damage: \$2,000,000, Combined single limits

Owner shall be included as an additional insured on Manager's general liability policy. Manager, or its representative, shall provide Owner with at least thirty (30) days prior written notice of cancellation or non-renewal of any insurance coverage. The general liability insurance coverage will be written on an occurrence rather than on a claims' made basis and will remain in effect during the Term. Coverage amounts may be met by excess or umbrella policies so long as written on an occurrence rather than on a claims' made basis.



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting

Monday, January 7, 2019

Agenda Item

Item 6. B. - Watershed Management Plan

Prepared By

Linda Loomis, Administrator

Summary

Staff has been working on rules for areas of the District that do not have an LGU (unincorporated areas of the District), like Fort Snelling and for certain linear projects. Rules will also address water appropriations that fall below the DNR permit threshold.

Staff plans to have a draft ready for internal review January 21, 2019. Rules must be submitted to state agencies for review, so the Board will be asked to authorize distribution of draft rules to the state agencies at the March 2019 Board meeting. Staff plans to have comments back from the agencies in time to approve the rules at the May meeting.

Staff will also address requirements for cities to be given a general permit, as requested by some of the cities.

Attachments

No attachments

Recommended Action

No recommended action



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting

Monday, January 7, 2019

Agenda Item

Item 6. E. - LMRWD Projects

Prepared By

Linda Loomis, Administrator

Summary

- i. **Eden Prairie Area #3 Stabilization**
No new information to report since last update.
- ii. **Riley Creek Cooperative project/Lower Riley Creek restoration**
No new information to report since last update.
- iii. **Seminary Fen ravine stabilization project**
No new information to report since last update.
- iv. **East Chaska Creek (Carver County Watershed Based Funding)**
Staff is scheduled to meet with the city of Chaska on Tuesday January 8th. Staff validated the findings of the 2016 report and conducted a field inspection. This report was included in the November 2018 meeting packet. The 2016 Feasibility Report was updated and included in the December 2018 meeting packet. The next step for this project is to mve into the design phase and requests the Board to authorize design of the project.
- v. **Schroeder Acres Park (Scott County Watershed Based Funding)**
No new information to report since last update.
- vi. **Shakopee Downtown BMO Retrofit (Scott County Watershed Based Funding)**
No new information to report since last update.
- vii. **PLOC (Prior Lake Outlet Channel) Restoration (Scott County Watershed Based Funding)**
No new information to report since last update.
- viii. **Dakota County Fen Gap Analysis and Conceptual Model (Dakota County Watershed Based Funding)**
No new information to report since last update.
- ix. **Hennepin County Chloride Project (Hennepin County Watershed Based Funding)**
No new information to report since last update.
- x. **Vegetation Management Plan**
No new information to report since last update.

Item 6. E. - LMRWD Projects

Executive Summary

January 7, 2019

Page 2

- xi. Sustainable Lake Management Plan - Trout Lakes**
No new information to report since last update.
- xii. Geomorphic Assessment of Trout Streams**
No new information to report since last update.
- xiii. Spring Creek Cost Share**
No new information to report since last update.

Attachments

- East Chaska Creek filed inspection report
- [East Chaska Creek Assessment, dated December 10, 2018](#)

Recommended Action

Motion to authorize design phase of East Chaska Creek Project

SITE LOCATION: East Chaska Creek Project Area - Chaska, MN

PURPOSE: Review Current Site Conditions of Project Area and Compare to 2016 Report Conducted by Burns & McDonnell (B&M)

DATE AND TIME: 8 November 2018, noon –2:30 p.m.

ATTENDEES: Sarah Duke Middleton, Water Resources Scientist
Young Environmental Consulting Group, LLC., on behalf of the Lower Minnesota River Watershed District (LMRWD)

Adam Howard, Water Resources Engineer
Barr Engineering Co.

WEATHER: 30° F., overcast, light and variable winds

DISCUSSION

Adam and I met on the southern end of the designated project area, near the Carver County Courthouse and Courthouse Lake. We walked the entire length of the defined project area, starting on the southern end at the levee and finishing just south of Engler Blvd. at the bridge. Prior to this meeting, both Adam and I reviewed the 2016 B&M report. Our main areas of focus were the recommended maintenance items cited for the City of Chaska to complete, and the recommended creek stabilization projects. All recommendations were reviewed during the site visit and photographed. See the attached photo log to compare the site during the 2016 field visits to current conditions.

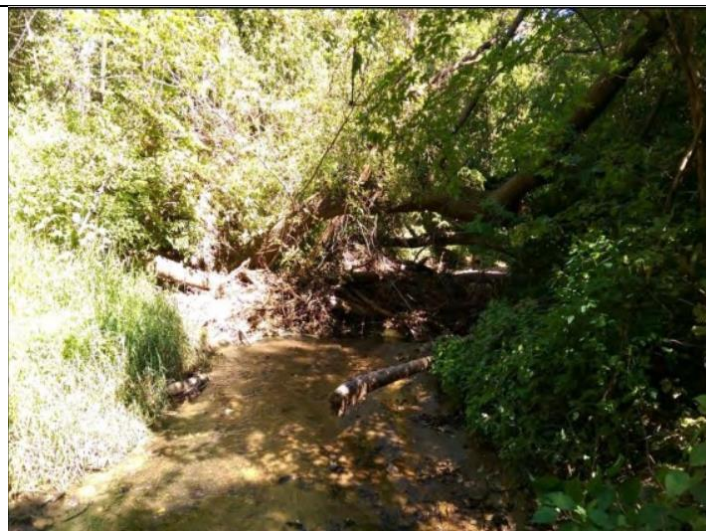
It was evident that the City of Chaska has addressed most of the maintenance items cited in the 2016 B&M report. While reviewing the site, Adam and I discussed our findings at length. We agree that the 2016 B&M report appeared thorough, with only a few minor items missing (small outlets in 2–3 locations). Based on field visits, Adam indicated that the creek stabilization recommendations were logical, and he would likely recommend something similar to what the 2016 B&M report presented.

At the conclusion of the site visit, Adam indicated he would work with Jeff Weiss (Barr Engineering) to generate a feasibility study for the proposed East Chaska Creek Restoration Project.

PHOTO LOG

The following log is a visual comparison of East Chaska Creek project site conditions in 2015 (when field work for the 2016 report was conducted) and November 2018. If the exact location of a photograph from 2015 was not known, a 2018 photo in that same general area of the creek was used.

Site Photograph from 2016 Report (2015 field season)	8 November 2018 Field Visit Photograph
	
<p>2016 Report: East view of debris, creek levee crossing, and proposed settling basin area.</p>	<p>Nov. 2018 Site Visit: Evidence of site maintenance since 2015 field visits.</p>
	
<p>2016 Report: Creek levee crossing and debris.</p>	<p>Nov. 2018 Field Visit: Site maintenance evident.</p>



2016 Report: View east of debris.



Nov. 2018 Field Visit: Debris downstream of levee, near Carver County Courthouse.



2016 Report: View east of RCP outlet.



Nov. 2018 Field Visit: Upstream (western) view of RCP outlet.



2016 Report: Upstream of Courthouse Lake.

Nov. 2018 Field Visit: Upstream of Courthouse Lake (in general area of 2016 photo).



2016 Report: Downstream bridge near intersection of Oak St. and E. Sixth St.

Nov. 2018 Field Visit: Downstream view from pedestrian bridge near Oak St. and E. Sixth St.



2016 Report: Upstream of bridge near intersection of Oak St. and E. Sixth St.

Nov. 2018 Field Visit: Near Oak St. and E. Sixth St, upstream of pedestrian bridge.



2016 Report: Downstream of County Road 61

Nov. 2018 Field Visit: Downstream of County Road 61, looking at old pedestrian bridge.



Photo 1



Photo 2

2016 Report: Outfall A – just downstream of Arby’s parking lot.

Nov. 2018 Field Visit: Photo 1 – outfall. Photo 2 – downstream of outfall. Outfall discharges at lower right corner of photograph.

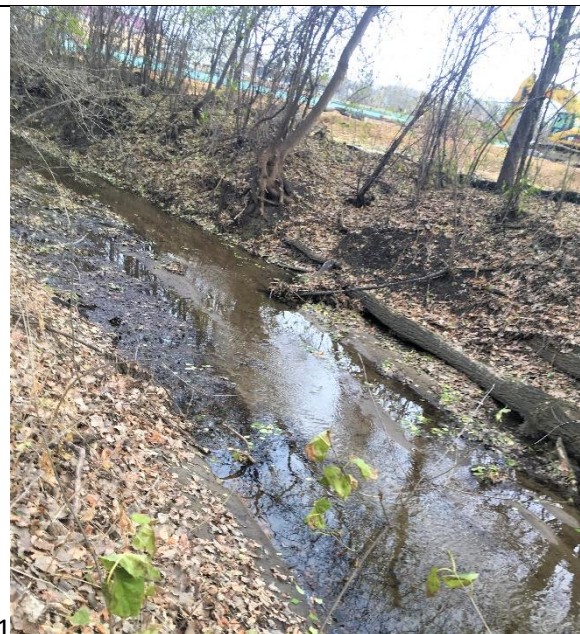


Photo 1



Photo 2

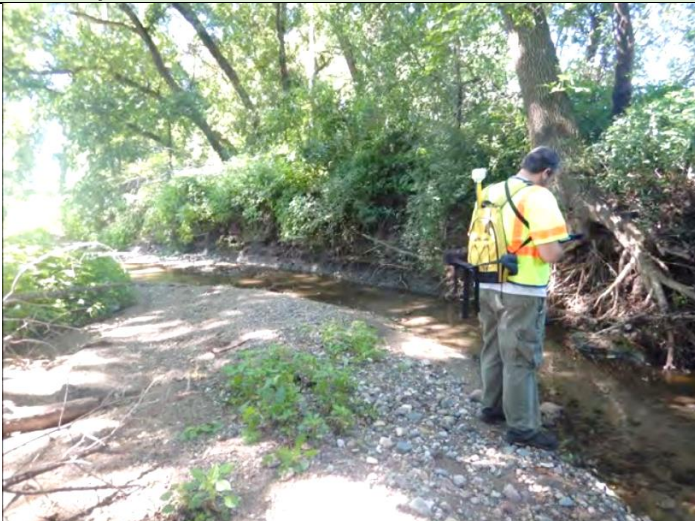
2016 Report: Pedestrian bridge north of CR 61 and downstream

Nov. 2018 Field Visit: Photo 1- creek bed downstream of pedestrian bridge (looking north/upstream). Photo 2 - view from pedestrian bridge (north of Hwy 61) looking downstream.



2016 Report: Dual 12" CMP outfalls.

Nov. 2018 Field Visit: Dual outfalls.



2016 Report: View south of eroded bank.

Nov. 2018 Field Visit: Eroded bank slightly upstream for dual outfalls.



2016 Report: View of eroded bank.

Nov. 2018 Field Visit: View of eroded bank.



2016 Report: Eastern bank eroded.

Nov. 2018 Field Visit: Eroded eastern bank – in both images (2016 and 2018) the light gray coloring is concrete installed to mitigate loss of bank.

Photo 1



Photo 2



2016 Report: Photo 1 – east view of bridge crossing. Photo 2 – western view of bridge and scour hole.

Nov. 2018 Field Visit: Eastern view of bridge crossing

Memorandum

To: Della Schall Young, Principal, Young Environmental Consulting Group, LLC
Linda Loomis, Administrator, Lower Minnesota River Watershed District
From: Jeff Weiss, PE, Senior Water Resources Engineer
Adam Howard, PE, Water Resources Engineer
Subject: East Chaska Creek Assessment
Date: December 10, 2018
Project: 23101028.02

1.0 Background and Purpose

The Lower Minnesota River Watershed District (LMRWD) has identified East Chaska Creek as a source of sediment entering the Minnesota River. In 2012, LMRWD completed a Strategic Resources Evaluation (SRE) (HDR, Inc., 2015), in which several streams, including East Chaska Creek, were assessed for current and on-going erosion and maintenance issues. In 2015, LMRWD completed a more detailed erosion assessment of East Chaska Creek and published a report in early 2016 titled East Chaska Creek Restoration Project (Burns and McDonnell, 2016). The study identified multiple areas of erosion along East Chaska Creek, which generally coincided with those identified in the SRE; and the study provided recommendations and cost estimates for channel stabilization projects. The study also identified several locations where maintenance is needed to mitigate small, localized issues. Maintenance items included removing fallen trees, removing debris, and installing riprap at storm sewer outfalls. Channel stabilization projects included larger areas of eroding banks and channel instability. Maintenance projects are the primary responsibility of the city of Chaska to complete, and LMRWD helps to facilitate the implementation of the channel stabilization projects.

Since the 2016 East Chaska Creek report, the City has completed some identified maintenance projects, and LMRWD has begun preparing to implement channel stabilization projects. The goals of this study are the following:

- 1) Reassess previously identified maintenance and erosion sites to
 - a. Assess the condition of locations where the City has completed maintenance and stabilization work;
 - b. Determine if any erosion sites have worsened;
 - c. Evaluate the previous recommendations and reassess their feasibility.
- 2) Identify new erosion sites that may have developed.
- 3) Update cost estimates for completing remaining stabilization work.

2.0 Channel Assessment

2.1 Overall assessment

On November 8, 2018, staff from Barr Engineering Co. (Barr) and Young Environmental Consulting Group (Young Environmental) walked East Chaska Creek from approximately Engler Boulevard to the levee gate structure. Overall, the channel appeared to be in relatively good condition. The creek appeared to have adequate connection to a floodplain in most places, so it does not appear to be incised. There are localized erosion locations contributing sediment to the stream; however, it does not appear to have significant systemic issues related to channel incision.

As noted in the 2016 report, the channel is likely a man-made channel constructed to serve local industry. As such, it was likely designed for the industrial purposes and was not designed with geomorphic principals in mind. Some of the localized erosion issues could be attributed to the channel being constructed as a relatively straight channel with few meanders. When straightened, streams always try to create a more meandering path, so some of the localized erosion is likely caused by the channel trying to create a more sinuous, meandering path. The diversion channel located upstream of this reach controls flows through this reach and likely helps prevent some erosion from becoming worse by reducing the peak flows.

2.2 Maintenance Sites

Staff from Barr and Young Environmental noted if previously recommended maintenance activities had been completed. Table 1 and Figure 1 summarize the status of maintenance activities.

Table 1 Summary of Maintenance Sites

Maintenance No.	Description	Completed Status	Recommendation
M1	Riprap toe at RCP Outfall	No	Complete as planned
M2	Repair bank, riprap at dual 12" diameter CMP outfalls	No	Complete as planned
M3	Remove debris	No	Complete as planned
M4	Remove debris	No	Complete as planned
M5	Remove debris	No	Complete as planned
M6	Repair bank, install riprap at PVC outfall	No	Complete as planned
M7	Remove debris	No	Not necessary
M8	Remove debris	No	Not necessary
M9	Remove debris	No	Not necessary
M10	Remove debris	No	Not necessary

M11	Remove flap gate off RCP outlet, repair riprap	No	Complete as planned
M12	Remove debris	No	Complete as planned
M13	Remove debris and remove material pile on left bank, seed	Yes	N/A
M14	Install riprap at end of storm sewer outfalls	No	Added in 2018

It appeared that one maintenance item (M13) has been completed. Most other previously recommended maintenance tasks (M1, M2, M3, M4, M5, M6, M11, and M12) should still be completed. Of those it should be noted that M12 includes failing riprap with erosion at the site. Also, the debris at M12 is significant enough that it is staging water upstream. Site M14 was added to the list with this assessment as staff observed erosion at the storm sewer outfalls on the downstream side of Chaska Boulevard.

After evaluating photos and field notes, Barr concluded that the maintenance items at M7, M8, M9, and M10 are the lowest priorities, or could be excluded from maintenance activities. Debris is still located at each site and should be removed if it can be done without creating a significant additional disturbance; however, they are minor issues that are not causing significant adverse impacts.

Photos of many of the maintenance sites are included in Attachment A.

2.3 Stabilization Sites

The 2016 report recommended stabilizing several erosion areas, and they were grouped into three recommended stabilization projects. Barr and Young Environmental evaluated the erosion at each of these locations, and the following sections provide a review of the recommended projects. The Barr and Young Environmental evaluation observed one new erosion location, so there is a new recommended stabilization project. Photos of the stabilization sites are included in Attachment A

2.3.1 Repair Scour Hole Downstream of Crosstown Boulevard Bridge

The channel under the Crosstown Boulevard Bridge is lined with concrete so it is wide and flat (Site S1 in Figure 2). The downstream end of the concrete lining is also above the existing channel bed, resulting in a drop of approximately one to two feet. It is possible that the channel downstream developed a headcut that created the drop at this location; however, the banks downstream of the bridge do not have a similar evidence of a headcut moving through the section of stream. In general, the banks are gradually sloping and appear to be at a reasonable height compared to the stream. If a headcut came through this section, the impacts of the headcut appear to have self-mitigated downstream of the bridge. Alternatively, it is also possible that the bridge was originally installed with an elevation drop at the downstream end.

Regardless of the cause, the current situation has a handful of issues that should be mitigated. The main issue present is primarily caused by the fact that the wide, flat concrete lining disperses flow along the entire width of the channel bottom at a nearly even depth, and it spills over the end of the lining like a weir. This results in bank erosion and an over-widened channel for approximately 20-30 feet downstream of the bridge. Furthermore, the combination of the elevation drop and the flat, sheet flow through the bridge also create a barrier for aquatic organism passage.

The 2016 report recommended salvaging the existing riprap, regrading, reinstalling riprap, and adding some additional riprap. Barr concurs that this approach is likely the most cost effective option with the following considerations:

- 1) The design of the riprap at the end of the bridge should try to eliminate the weir flow at the end of the bridge and direct flow into a channel width that mimics the channel width downstream of the bridge. Eliminating the weir flow will reduce erosive pressure on the banks immediately downstream of the bridge. There are multiple ways of achieving this that will depend on other design parameters related to the bridge hydraulics.
- 2) Given the elevation drop from the end of the bridge to the existing channel, the design should plan to incorporate a scour hole at the end of riprap. Scour holes naturally occur downstream of elevation drops in streams, so a scour hole is likely to develop anyway. Incorporating it into the design will reduce the risk of adverse impacts.
- 3) If possible, riprap at the end of the bridge should extend above the bottom of the bridge to create additional flow depth to provide for aquatic organism passage. Bridge flow capacity and hydraulics will determine if this is possible.

The construction cost estimate for this reach is estimated to be approximately \$18,980, including a 30% contingency. The estimated construction cost for specified items is similar to the cost estimated in 2016; however, this estimate includes a larger assumed percent for mobilization and contingency. A full cost estimate summary, including estimated engineering fees, is included at the end of this section.

2.3.2 Install Bank Armoring, Toe Protection, and Grade Control Structures behind Lenzen Chevrolet

There are multiple eroding banks within this reach (Sites S2 – S6, Figure 2) that threaten the City's paved trail located between the channel and the Lenzen Chevrolet parking lot. The creek appears to be developing point bars and a meandering pattern through this reach that is otherwise relatively straight. Given the man-made origins of the channel, the original channel may have been created too large for the flows it currently experiences in this location, so a smaller, meandering pattern appears to be developing within the larger channel.

The 2016 report recommended a variety of measures to stabilize the reach, including installing a grade control structure, removing temporary asphalt repairs, installation of hard armoring for approximately 320 feet of banks, and installation of toe protection for approximately 340 feet of banks.

After reviewing the site, Barr concurs that all of the erosion sites should be stabilized, and we concur with the recommendation to remove temporary asphalt repairs. The armoring and toe protection previously recommended would be effective. The previously recommended grade control structure (S2, Figure 2) can be eliminated because headcutting does not appear to be an issue within this reach.

Alternatively, other stabilization measures could be used to achieve the same goals. Toe protection with riprap is still the most effective option in some places; however, rock vanes and root wads would be used in many locations to provide bank protection at a lower cost. The following table provides a comparison of the 2016 recommendations and alternatives considered in this analysis.

Table 2 Comparison of stabilization recommendations

Site	Original Recommendation	Alternate Recommendation
S2	Install grade control structure	Not necessary
S3	Armor bank (320 LF)	Install riprap toe protection and riprap armoring along approximately 100 feet of bank. Install approximately 6 rock vanes in other locations to direct flow away from the banks
S4	Install toe protection (130 LF)	Install riprap toe protection along approximately 50 feet, and install 4 rock vanes.
S5	Install toe protection (150 LF)	Grade banks and use removed trees from the project to install root wads for bank protection
S6	Install toe protection (60 LF)	Install 2 rock vanes to direct flow away from bank.
Construction Cost Estimate¹	\$122,200	\$96,850

1 – Includes 30% construction contingency.

Based on Barr’s cost assumptions and the assessment completed by Barr and Young Environmental, the alternative recommendations for stabilizing this reach have the potential to have a lower cost than those included in the original recommendation in 2016. A full cost estimate summary, including estimated engineering fees, is included at the end of this section.

2.3.3 Install toe protection on right bank east of Oak Street

The original recommendation included installing toe protection for approximately 120 feet of the right bank (Figure 3). The 2018 assessment found that the City had recently completed some stabilization work

on this site, including grading and revegetating the bank. As a result, Barr recommends not completing additional stabilization work in this area.

2.3.4 Install cross vane for grade control

A new recommended stabilization measure is to still a cross vane downstream of the old railroad bridge on the downstream side of Chaska Boulevard. We observed two small headcuts in this area, and a cross vane would provide grade control to reduce the risk of upstream migration. This is also in the vicinity of the new maintenance recommendation, so it may be possible to coordinate the maintenance and stabilization measures.

2.4 Cost Estimate

Table 3 summarizes the cost estimate for the stabilization projects summarized in this memorandum. We assumed larger percentages for some items, such as mobilization, construction contingency, and engineering compared to those used in the 2016 report. The percentages used are those that Barr typically uses for a feasibility-level cost estimate on projects of this order of magnitude. Detailed cost estimates are included in Attachment B.

Table 3 Cost Estimate Summary

Site No.	Description	Estimated Cost
S1	Repair erosion downstream of Crosstown Boulevard	\$14,600
S2	Stabilize bank erosion near Lenzen Chevrolet	\$74,500
S3	No recommended action	\$0
S4	Install cross vane as grade control downstream of Chaska Boulevard	\$13,200
	Subtotal	\$102,300
	Contingency (30%)	\$30,690
	Construction Subtotal	\$132,990^a
	Survey	\$10,000
	Engineering (30% of Construction Subtotal)	\$39,900
	Project total	\$182,900^b

a – includes the subtotal plus contingency

b – includes the Construction Subtotal, Survey, and Engineering

The current cost estimate represents an increase of approximately \$14,400 over the 2016 cost estimate of \$168,506. Some items were assumed to cost less with the current estimate while other items were added or assumed to cost more. Some key differences include:

- 1) Barr assumed mobilization costs 10% of remaining construction costs, whereas the 2016 report assumed 5% for mobilization. Mobilization percentages in bids can vary widely, and Barr typically assumes 10% in cost estimates.
- 2) Barr included a 30% contingency instead of 20%. Barr typically assumes a 30% contingency at a feasibility level cost estimate. Furthermore, since this is a relatively small project, the contingency amount could be consumed quickly by one or two additions, so the larger contingency provides some additional funds for unforeseen items or sites.
- 3) Barr assumed \$10,000 for surveying instead of \$5,000 because some sites could prove to be challenging to survey, depending on the time of year.
- 4) Barr added the stabilization recommendation at Site S4.
- 5) Barr assumed 30% of the construction subtotal for engineering and design, rather than 15%. This percentage is often near 15% for larger projects; however, Barr feels 30% is a realistic percentage for this size of project.

Despite these differences that typically added costs, the overall cost estimate is similar to the original estimate in 2016.

3.0 Recommendations

Barr recommends that LMRWD move forward with planned maintenance and stabilization projects with the following recommendations:

- 1) Add Site M16 to the recommendation maintenance items
- 2) Add Site S4 to the recommended stabilization projects
- 3) Coordinate with the city of Chaska to save money by completing maintenance and stabilization projects at the same time.

Figures

Barr Footer: ArcGIS 10.6, 2018-12-04 13:38 File: I:\Client\LowerMinnesota\Work Orders\2018_East_Chaska_Creek\Maps\Basemaps\Figure 1 Overview.mxd User: EMA

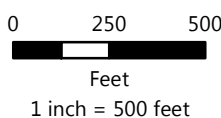


Imagery: Nearmap, 9/2018

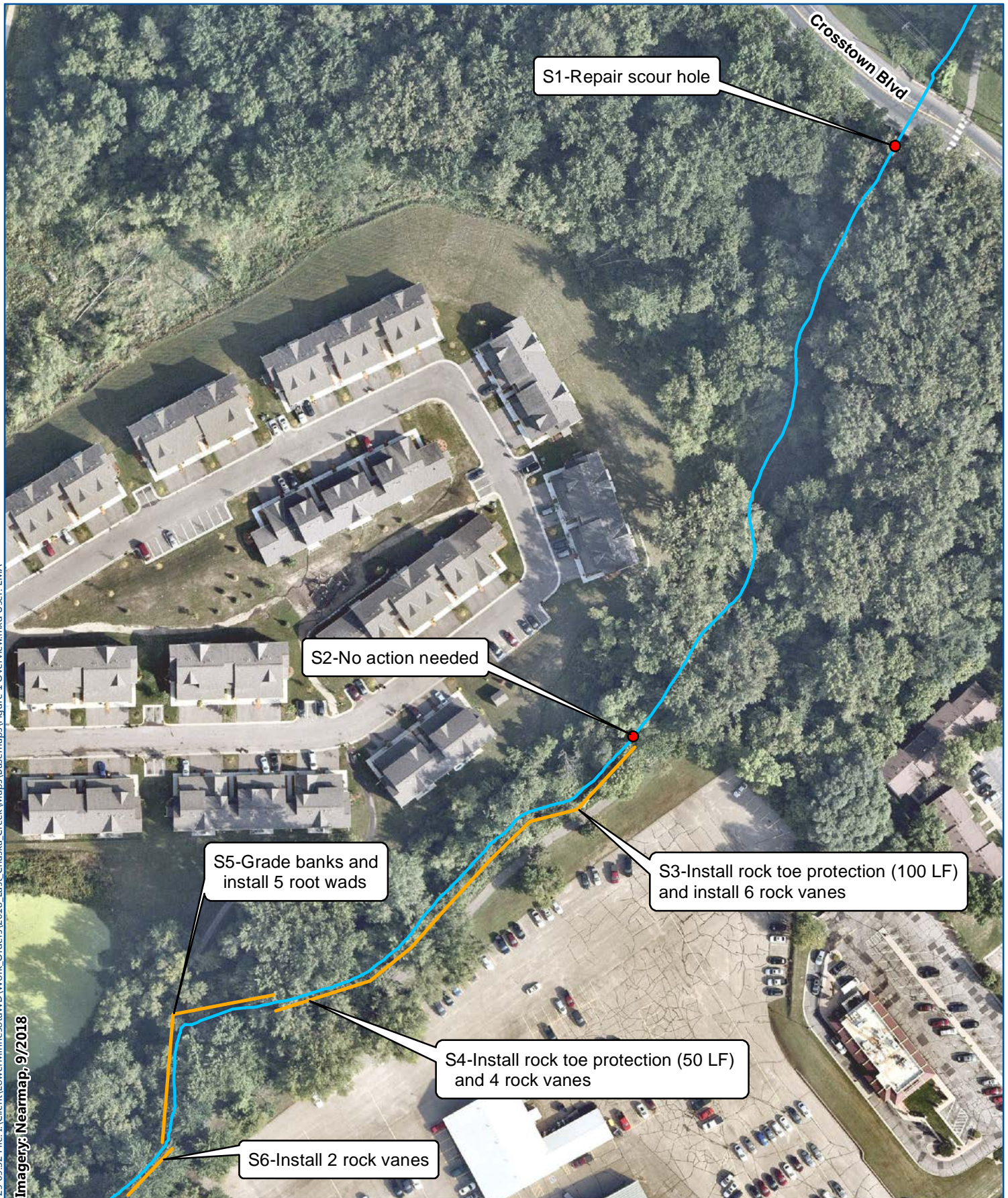


Legend

- East Chaska Creek
- Recommended Maintenance Activity Location

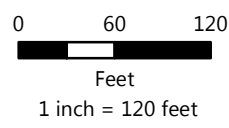


**RECOMMENDED
MAINTENANCE
ACTIVITIES**
East Chaska Creek Project
Chaska, MN
FIGURE 1

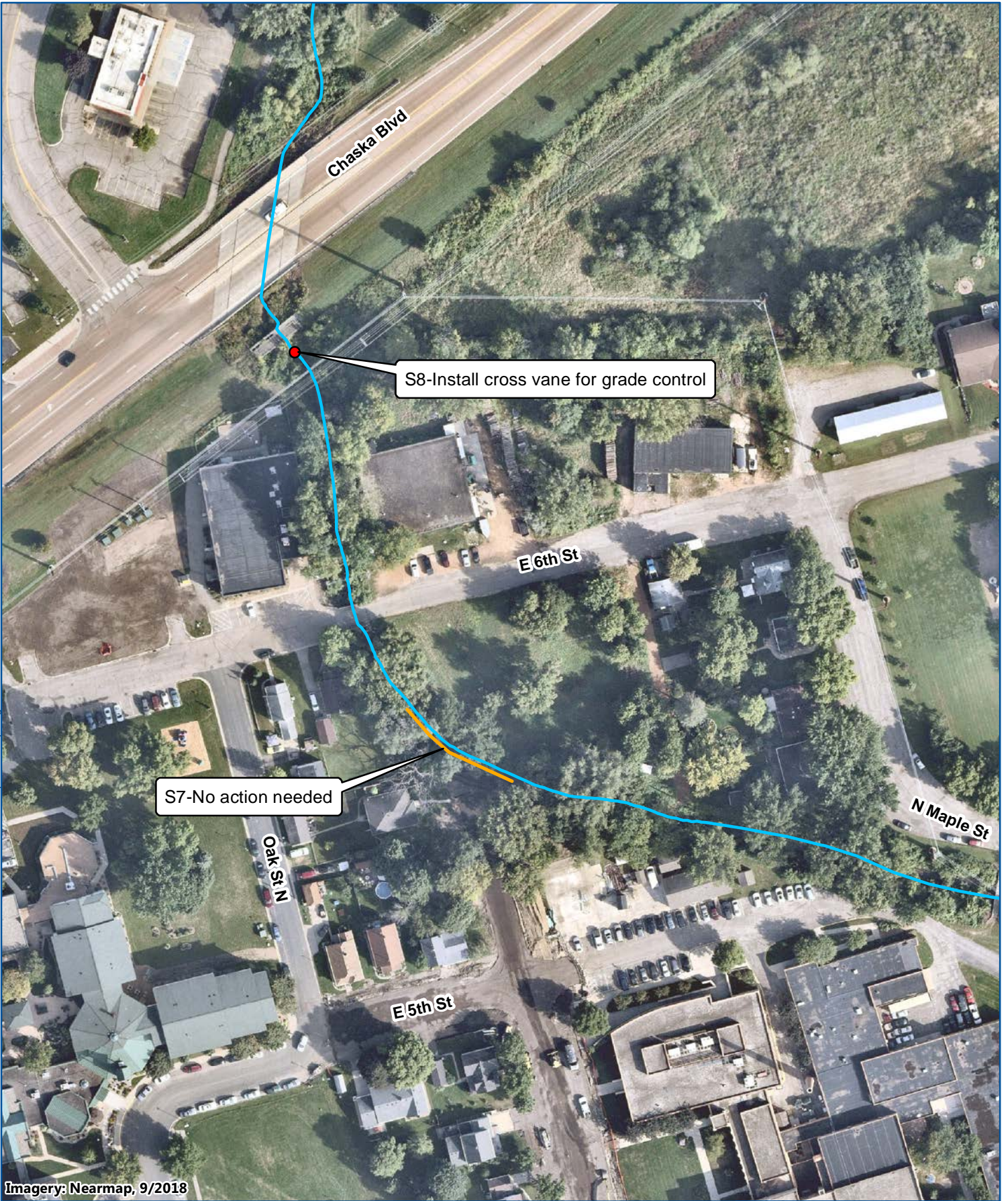


Legend

- East Chaska Creek
- Recommended Channel Stabilization Project (Stream Bank)
- Recommended Channel Stabilization Project (Single Location)






**RECOMMENDED
CHANNEL STABILIZATION
PROJECTS**
East Chaska Creek Project
Chaska, MN
FIGURE 2



Imagery: Nearmap, 9/2018



Legend

-  East Chaska Creek
-  Recommended Channel Stabilization Project (Stream Bank)
-  Recommended Channel Stabilization Project (Single Location)



0 60 120
 Feet
 1 inch = 120 feet

**RECOMMENDED
 CHANNEL STABILIZATION
 PROJECTS**
 East Chaska Creek Project
 Chaska, MN
FIGURE 3

Attachment A

Site Photos

Chaska Creek Site Photos, November 8, 2018



Photo 1: Site M2 –erosion around culvert outfalls.



Photo 2: Site M3 – debris in channel creating blockage and minor erosion



Photo 3: Site M6 – bank erosion adjacent to a PVC outfall



Photo 4: Site M7 – debris in channel causing blockage



Photo 5: Site M8 – debris in channel



Photo 6: Site M9 – debris in channel upstream of site repaired by city of Chaska



Photo 7: Site M10 – debris in channel downstream of site repaired by city of Chaska



Photo 8: Site M11 – flap on RCP outlet and minor bank erosion



Photo 9: Site M12 – debris jam causing blockage and backwater



Photo 10: Site M13 – culvert outlet through the levee.



Photo 11: Site S1 – scour hole and erosion downstream of Crosstown Boulevard



Photo 12: Channel near site S2



Photo 13: Site S3 – eroding bank between channel and paved trail near Lenzen Chevrolet



Photo 14: Site S4 – eroding bank and debris in the channel



Photo 15: Site S5 – eroding bank and undercut trees



Photo 16: Site S6 – minor bank erosion downstream on Lenzen Chevrolet



Photo 17: Site S7 – recent repairs made by city of Chaska



Photo 18: Site S8 – Two small headcuts in the channel between Chaska Boulevard and the old railroad bridge

Attachment B

Detailed Cost Estimates

EAST CHASKA CREEK STABILIZATION SITES
COST ESTIMATE
December 4, 2018

Site: Repair Scour Hole Downstream of Crosstown Boulevard

Item	Description	Units	Quantity	Unit Price	Extension
1.01	Mobilization (10%)	Lump Sum	1	\$ 1,400.00	\$ 1,400.00
1.02	Erosion Control	Lump Sum	1	\$ 300.00	\$ 300.00
1.03	Clearing and grubbing	Lump Sum	1	\$ 1,000.00	\$ 1,000.00
1.04	Salvage existing riprap	CY	30	\$ 25.00	\$ 750.00
1.05	Grading	CY	100	\$ 50.00	\$ 5,000.00
1.06	Granular filter material	Ton	15	\$ 60.00	\$ 900.00
1.07	Replace salvaged riprap	CY	30	\$ 25.00	\$ 750.00
1.08	install new riprap	Ton	50	\$ 80.00	\$ 4,000.00
1.09	Site restoration	Lump Sum	1	\$ 500.00	\$ 500.00
Subtotal					\$ 14,600.00
Contingency					30%
Total					\$ 18,980.00

Site: Repair Eroding Banks by Lenzen Chevrolet

Item	Description	Units	Quantity	Unit Price	Extension
1.01	Mobilization (10%)	Lump Sum	1	\$ 6,800.00	\$ 6,800.00
1.02	Erosion Control	Lump Sum	1	\$ 1,400.00	\$ 1,400.00
1.03	Clearing and grubbing	Lump Sum	1	\$ 5,000.00	\$ 5,000.00
1.04	Remove asphalt stabilization	CY	15	\$ 30.00	\$ 450.00
1.05	Grading	CY	750	\$ 15.00	\$ 11,250.00
1.06	granular filter	Ton	100	\$ 60.00	\$ 6,000.00
1.07	Riprap - toe protection	Ton	250	\$ 80.00	\$ 20,000.00
1.08	Rock vanes	LF	140	\$ 120.00	\$ 16,800.00
1.09	Root wads	Each	6	\$ 800.00	\$ 4,800.00
1.10	Site restoration	Lump Sum	1	\$ 2,000.00	\$ 2,000.00
Subtotal					\$ 74,500.00
Contingency					30%
Total					\$ 96,850.00

Site: Install Cross Vane Downstream of Chaska Boulevard

Item	Description	Units	Quantity	Unit Price	Extension
1.01	Mobilization (10%)	Lump Sum	1	\$ 1,200.00	\$ 1,200.00
1.02	Erosion Control	Lump Sum	1	\$ 2,000.00	\$ 2,000.00
1.03	Clearing and grubbing	Lump Sum	1	\$ 500.00	\$ 500.00
1.04	Install cross vane	LF	45	\$ 200.00	\$ 9,000.00
1.05	Site restoration	Lump Sum	1	\$ 500.00	\$ 500.00
Subtotal					\$ 13,200.00
Contingency					30%
Total					\$ 17,160.00



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting

Monday, January 7, 2019

Agenda Item

Item 6. F. - LMRWD Project Review

Prepared By

Linda Loomis, Administrator

Summary

- i. **City of Burnsville - Burnsville Sanitary Landfill**
The District was notified that Waste Management has made an application to amend its Conditional Use Permit to increase the disposal capacity of the landfill, adding up to 26 million cubic yards of municipal solid waste and raise the elevation of the landfill to a height of 1,082 feet above mean seal level or about 260' above the currently permitted height located at 2650 Cliff Road W. Staff will review documents as they become available.
- ii. **City of Carver - Local Surface Water Management Plan**
The District received the Local Surface Water Management Plan from the city of Carver on December 27 and is in the processing reviewing the Plan for conformance to the LMRWD Plan. The LMRWD has received plans from all cities except Shakopee, Savage and Mendota.
- iii. **City of Eden Prairie - Peterson Wetland Bank**
No new information to report since last update.
- iv. **City of Chanhassen - TH 101 Improvements**
Staff met with engineers for this project to discuss impacts of the project on water resources. There are steep slopes in the projects area and several residential properties have already experienced slope failures. Engineers for the project were informed of the LMRWD standard for steep slope. We also discussed the need for extra resources for erosion protection during construction. It was determined that one area designated for an infiltration pond is in the LMRWD Steep Slope Overlay Zone and therefore infiltration will not be allowed.
- v. **City of Savage - 12113 Lynn Avenue**
No new information to report since last update.
- vi. **MNDOT - I494 Brush removal**
No new information to report since last update.
- vii. **MNDOT - TH 5 Signage projects**
No new information to report since last update.
- viii. **MPCA - MN River TSS TMDL**
No new information to report since last update.

ix. MN Valley State Trail - EAW (Environmental Assessment Worksheet)

The Minnesota Department of Natural Resources (DNR) has issued its Record of Decision regarding the Need for an Environmental Impact Statement (EIS) for the proposed Minnesota Valley State Trail, Bloomington Segment project in Hennepin County.

The DNR has concluded that an EIS is not required because the project does not have the potential for significant environmental effects. The justification for this determination is contained in the Record of Decision. The Record of Decision also contains the Department's responses to all substantive written comments received on the Environmental Assessment Worksheet during the 30-day public review and comment period.

Issuing this Record of Decision concludes the state environmental review process for this project according to the Minnesota Environmental Quality Board rules, Minnesota Rules, part 4410.1000 to 4410.1700. This project can proceed to permitting and approvals.

The cover letter received, which is attached, has a link to the Record of Decision.

x. Hennepin County - CSAH 61/Flying Cloud Drive

On December 21, 2018, staff inspected the project area, because of the warm weather and rain in December. The inspection report is attached.

xi. MNDOT - I494/TH 5/TH 55 Mill & Overlay project

No new information to report since last update.

xii. MNDOT - I35W Bridge Replacement

No new information to report since last update.

xiii. MNDOT - I494 from TH169 to Minnesota River

Staff has spoken with HZ United, drainage engineers for this project. Discussion centered on the changes to the LMRWD Standards contained in the new Watershed Management Plan and impacts those changes have on the project. MNDOT has some studies conducted in preparation for this project that staff is in the process of reviewing. The studies were developed under the previous standards of the LMRWD.

xiv. City of Shakopee - Amazon Fulfillment Center drainage

No new information to report since last update.

xv. MAC/LMRWD/MCWD boundary realignment

No new information to report since last update.

xvi. Fort Snelling - Dominion Housing

No new information to report since last update.

xvii. USACOE/USFWS - Bass Ponds, Marsh & Wetland

No new information to report since last update.

Attachments


- Record of Decision Cover letter dated December 20, 2018
- [November 19, 2018 CSAH 61/Flying Cloud Drive Inspection report](#)

Recommended Action

No action recommended

Date: December 20, 2018

To: Parties on the EAW Distribution List / Other Interested Parties

From: 
Lisa Fay, EAW Project Manager

Subject: Minnesota Valley State Trail, Bloomington Segment Project, Record of Decision on Environmental Assessment Worksheet

The Minnesota Department of Natural Resources (DNR), as the Responsible Governmental Unit for environmental review of the Minnesota Valley State Trail, Bloomington Segment Project, located in the city of Bloomington, Hennepin County, Minnesota, has issued the attached Record of Decision regarding the Need for an Environmental Impact Statement for the project. The project's Environmental Assessment Worksheet (EAW) notice was published in the EQB *Monitor* on October 15, 2018 (Vol. 42; No. 42).

A copy of the Record of Decision is also available online at:

<http://www.dnr.state.mn.us/input/environmentalreview/mnvalley/index.html>

The DNR has concluded that an Environmental Impact Statement (EIS) is not required because the project does not have the potential for significant environmental effects. The justification for this determination is contained in the Record of Decision. The Record of Decision also contains the Department's responses to all substantive written comments received on the EAW during the 30-day public review and comment period.

Issuing this Record of Decision concludes the state environmental review process for this project according to the Minnesota Environmental Quality Board rules, Minnesota Rules, part 4410.1000 to 4410.1700. This project can proceed to permitting and approvals.

For additional information or copies of the Record of Decision, please call (651) 259-5110.

Attachment: Record of Decision (December 17, 2018)

SITE LOCATION: CSAH 61-Flying Cloud Drive

PURPOSE: Construction Stormwater Site Visit on Behalf of the Lower Minnesota River Watershed District (LMRWD)

DATE & TIME: 21 December 2018, 0820-1000

INSPECTOR: Sarah Duke Middleton, Water Resources Scientist
Young Environmental Consulting Group, LLC

WEATHER: 24°F, overcast with light winds

SITE CONDITIONS: Recent warm weather (temperatures in the 30s and low 40s) has resulted in several days of snowmelt across the site. Light intermittent rain also fell during this warm period with no measurable accumulation. In undisturbed locations, the site is firm but not frozen. In active construction areas where dirt work is taking place, the soil is soft. Snowpack across the project ranges from 0 (exposed soils) to 1 inch. Approximately 10 percent of the site has snow cover.

PHASE: Active construction, including the construction of walls, preparation for bridge construction (predominately in the middle section of the project), and some grading.

DISCUSSION

At the start of my site inspection I met with Ames Construction Site Manager Nathan Bren. He provided a general overview of site activities. He stated that crews are working on walls throughout the project and installing pylons. I indicated that during frozen conditions, I will visit the site on a monthly basis, unless otherwise directed by the LMRWD.

INSPECTION NOTES

Significant snowmelt has taken place on site since the December 4th site visit. Previous snowpack, 3-6 inches in depth, has melted. Much of the site has bare ground, with a few small patches of snow.

Bare ground conditions allowed for a clear view of grading activities. Since the last inspection, several areas of the project have been graded, including places that previously had extensive erosion. These areas were quite soft, and my boots sank into the soil at least 1-2 inches. See photos 26, 34, and 36 for grading activities.

Dewatering is still taking place in several locations. The dewatering setups can be seen in photos 10-12 and 15.

Site stabilization efforts were observed throughout the project, predominately in the form of hydromulch. During my site visit, I observed a crew stabilizing several slopes with fresh hydromulch. These areas appeared to have been recently regraded.

See the attached photo log for documentation of current site conditions.

RECOMMENDATIONS

Lower Minnesota River Watershed District:

- Attend the next project meeting to present the District's concerns about erosion and sediment management of the project as well as the potential negative effects to adjacent water and natural resources.

Project Team/Site Supervisor:

- Numerous BMPs appear to have failed. Review site conditions (slope, drainage, etc.), and provide and install appropriate BMPs for site conditions and anticipated seasonal precipitation.
- Culverts draining stormwater: Culverts on the northern side of the road receive drainage from nearby construction activity. Without BMPs in place, sediment-laden stormwater flows directly into the culvert and outputs into Rice Lake or other down-gradient water features. See the following photos for reference: 3-5 and 21-22.
- Actively maintain and install all site BMPs per regulatory requirements, design, and installation specifications.
- Remove construction debris and trash from the site (used oil bottles, fiber, rope, food waste, etc.).

NEXT PROJECT SITE VISIT

Site visits will take place on a monthly basis during frozen conditions, unless warmer weather or a rain event occur. The next site visit will take place in mid-January 2019, unless otherwise directed by the LMRWD.

PHOTO LOG

The following photographs were taken during the site visit on Friday, December 21, 2018. All photos show a red arrow indicating north and a text box indicating the general location of Rice Lake. Aerial photos of the project site are incorporated to designate where site features are located/photographed.

Due to the linear nature of the project, the site has been divided into four segments (see aerial photo ->). The photo log will highlight locations of site features at the segment level.





Segment 1



Photo No.: 1

Location: 44°48'49.30"N 93°31'57.53"W

BMPs Present: Green geotextile blanket; two rows of silt fence

Description: ROW conditions after significant snowmelt. This section of the project is stable with no evidence of new erosion.

	<p><u>Photo No.:</u> 2</p> <p><u>Location:</u> 44°48'49.82"N 93°31'57.79"W</p> <p><u>BMPs Present:</u> None visible</p> <p><u>Description:</u> New utilities installed on northern side of the ROW (since December 4th site visit).</p>
	<p><u>Photo No.:</u> 3</p> <p><u>Location:</u> 44°48'50.48"N 93°31'53.97"W</p> <p><u>BMPs Present:</u> None visible</p> <p><u>Description:</u> Culvert inlet alongside the original roadway. This inlet is on the southern side of the road.</p>
	<p><u>Photo No.:</u> 4</p> <p><u>Location:</u> 44°48'50.23"N 93°31'53.52"W</p> <p><u>BMPs Present:</u> Straw blanket; two rows silt fence</p> <p><u>Description:</u> Outlet culvert (see photo 3 for inlet). The straw mulch blanket is a new addition, installed after my last site visit (December 4th).</p>

 <p>Rice Lake</p>	<p>Photo No.: 5</p> <p>Location: 44°48'48.72"N 93°31'53.38"W</p> <p>BMPs Present: Two rows of silt fencing; sandbag berms at lip of outlet</p> <p>Description: Culvert outlet. This area is stable with no evident runoff. See photo 3 and 4 for inlet.</p>
 <p>Rice Lake</p>	<p>Photo No.: 6</p> <p>Location: 44°48'49.16"N 93°31'53.29"W</p> <p>BMPs Present: Silt fence; straw mulch blanket</p> <p>Description: Close up of newly installed straw mulch blanket, downslope of the culvert outlet (see photo 5).</p>
	<p>Photo No.: 7</p> <p>Location: 44°48'50.83"N 93°31'53.27"W</p> <p>BMPs Present: Hydromulch; ESC blanket</p> <p>Description: Stabilization on the northern side of the ROW.</p>



Photo No.: 8

Location: 44°48'54.20"N 93°31'40.28"W

BMPs Present: Vegetation buffer

Description: A stream on the northern side of the ROW. Area is stable.



Photo No.: 9

Location: 44°48'54.92"N 93°31'38.63"W

BMPs Present: Silt fence; vegetative buffer

Description: Outlet of small creek (see photo 8 for upstream on north side of ROW). Area is stable and undisturbed.



Photo No.: 10

Location: 44°48'54.64"N 93°31'37.71"W

BMPs Present: Dewatering bag

Description: Dewatering taking place on the northern side of the ROW in a wetland area. This area has been used for dewatering activities for several weeks. In the past the bag has not been connected to the hose. During this inspection, the hose is attached to the black filter bag.

An older gray filter bag (referenced in previous inspection reports) is visible beneath the hose and snow.



Photo No.: 11

Location: 44°48'54.95"N 93°31'37.78"W

BMPs Present: Dewatering bag

Description: Close-up of the dewatering set up. The gray matter from previous dewatering activities (in early December and November) is visible beneath the new bag.



Photo No.: 12

Location: 44°48'55.04"N 93°31'37.60"W

BMPs Present: None visible

Description: Dewatering setup connected to bag and hose in photos 10 and 11.



Photo No.: 13

Location: 44°48'55.54"N 93°31'30.01"W

BMPs Present: Vegetative buffer

Description: ROW conditions during site visit.



Photo No.: 14

Location: 44°48'55.95"N 93°31'29.65"W

BMPs Present: None visible

Description: Northern side of ROW conditions.



Photo No.: 15

Location: 44°48'56.32"N 93°31'27.26"W

BMPs Present: Vegetative buffer; dewatering bag

Description: Dewatering setup on the southern side of the ROW. At the time of the site visit, dewatering was not taking place.



Photo No.: 16

Location: 44°48'56.73"N 93°31'26.53"W

BMPs Present: ESC blanket; biologs; vegetative buffer; two rows of silt fencing.

Description: ROW conditions on the southern side of the project. Area is largely unchanged, despite snowmelt in recent days.



Photo No.: 17

Location: 44°48'58.27"N 93°31'21.65"W

BMPs Present: Rock checks; hydromulch

Description: Northern side of ROW conditions. No new washouts were evident in this area.



Rice Lake

Photo No.: 18

Location: 44°48'58.01"N 93°31'20.69"W

BMPs Present: Some ESC blanket; biologs; several rows of silt fence

Description: Culvert outlet leading to Rice Lake. Area soils are firm but not frozen. Site conditions appear to be similar to pre-snow conditions earlier in the month.



Rice Lake

Photo No.: 19

Location: 44°48'58.05"N 93°31'20.20"W

BMPs Present: ESC blanket; biologs; two rows of silt fencing

Description: Area upslope of photo 18 culvert outlet.



Segment 2

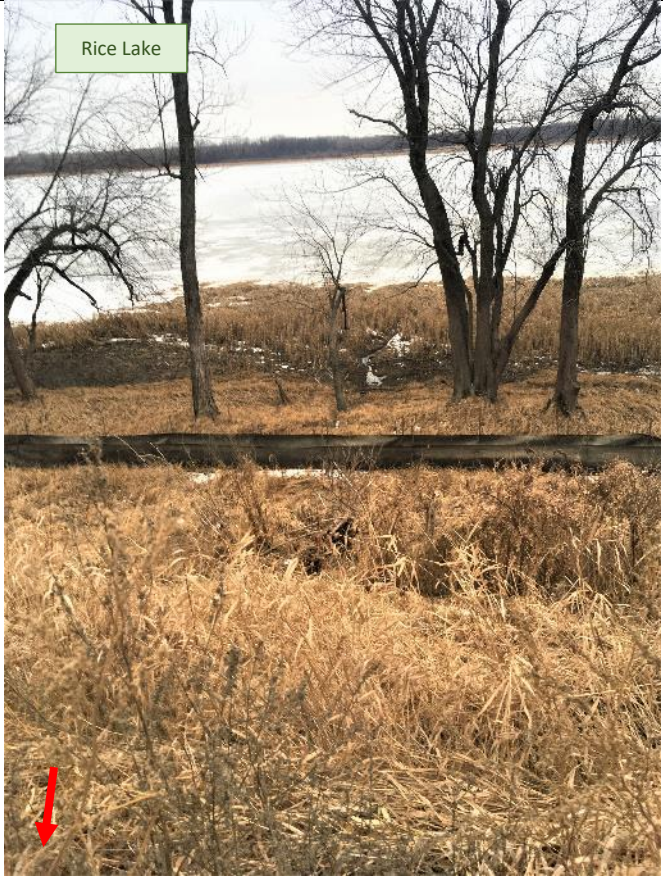


Photo No.: 20

Location: 44°49'00.26"N 93°31'13.71"W

BMPs Present: Two rows of silt fencing; vegetative buffer

Description: Stable southern side of ROW.



Photo No.: 21

Location: 44°49'02.05"N 93°31'09.27"W

BMPs Present: None visible

Description: Northern side of the ROW. Green arrows indicate drainage from wall and above slope. See photo 22 to view drainage inlet.



Photo No.: 22

Location: 44°49'02.26"N 93°31'09.57"W

BMPs Present: None visible

Description: Drainage inlet partially buried by debris. See photo 21 for drainage leading to the inlet.

 <p>Rice Lake</p>	<p>Photo No.: 23</p> <p>Location: 44°49'02.32"N 93°31'07.53"W</p> <p>BMPs Present: Biologs; two rows of silt fencing; ESC blanket</p> <p>Description: Southern side of ROW conditions and large outlet (see photo 24 for closeup of outlet).</p>
 <p>Rice Lake</p>	<p>Photo No.: 24</p> <p>Location: 44°49'01.99"N 93°31'06.88"W</p> <p>BMPs Present: Sandbag berm; two rows of silt fencing; biologs (not visible in picture)</p> <p>Description: Culvert outlet. Recent snow melt does not appear to have greatly altered the site. Slight channeling does suggest waterflow occurred recently from the outlet, past the down silt fencing, and into Rice Lake.</p>
	<p>Photo No.: 25</p> <p>Location: 44°49'02.04"N 93°31'06.90"W</p> <p>BMPs Present: ESC Blanket</p> <p>Description: Slopes leading to photo 24 area and culvert outlet. ESC blanket appears unchanged from prior inspections before snowfall. Area is firm, but not frozen. No new erosion is evident at the time of my inspection.</p>



Photo No.: 26

Location: 44°49'02.04"N 93°31'06.90"W

BMPs Present: Biologs

Description: Slope leading to photo 24 area and culvert outlet. This area is several yards east photo 25. Crews have removed the ESC blanket and regraded the area. Soils are very soft, but no erosion was evident during the inspection.



Photo No.: 27

Location: 44°49'03.72"N 93°30'59.10"W

BMPs Present: Silt fencing: two rows, one row backed with jersey barriers

Description: Southern slopes leading to Rice Lake. Silt fencing is intact and filled with snowpack.

	<p>Photo No.: 28</p> <p>Location: 44°49'03.72"N 93°30'59.10"W</p> <p>BMPs Present: Silt fencing: two rows, one row backed with jersey barriers</p> <p>Description: Southern perimeter of the project. Largely unchanged since last site visit, apart from the loss of snowpack.</p>
	<p>Photo No.: 29</p> <p>Location: 44°49'05.60"N 93°30'59.19"W</p> <p>BMPs Present: Silt fencing: two rows, one row backed with jersey barriers</p> <p>Description: Culvert inlet on the northern side of the ROW. During the last site visit (December 4th), this area was actively being graded. Soils are still soft but are no longer saturated.</p> <p>During the site visit water was flowing from the wetland area, over the silt fencing, and into the culvert. See the green arrows for path of drainage.</p>



Photo No.: 30

Location: 44°49'05.50"N 93°30'52.76"W

BMPs Present: Silt fencing backed with jersey barriers

Description: Stream channel through running through the project. The area is stable, and no erosion or sedimentation was evident during the inspection.



Photo No.: 31

Location: 44°49'06.26"N 93°30'48.96"W

BMPs Present: Two rows of silt fence

Description: Crews pouring concrete on site.



Segment 3



Photo No.: 32
Location: 44°49'08.22"N 93°29'47.91"W
BMPs Present: Hydromulch
Description: Crews onsite installing walls along the northern side of the ROW. Fresh hydromulch has been spread just outside of the work area.



Photo No.: 33
Location: 44°49'08.02"N 93°29'44.07"W
BMPs Present: Silt fencing; vegetative buffer
Description: Stable ROW conditions along the southern perimeter of the project.



Photo No.: 34

Location: 44°49'07.60"N 93°29'38.24"W

BMPs Present: Hydromulch

Description: The northern side of the ROW after crews sprayed hydromulch on the slopes.



Segment 4



Photo No.: 35

Location: 44°49'06.51"N 93°29'34.80"W

BMPs Present: Silt fencing

Description: Southern side of the ROW after snowmelt. There is some channeling leading to the silt fence. Water and snow have pooled near the silt fence.



Photo No.: 36

Location: 44°49'06.22"N 93°29'35.78"W

BMPs Present: Silt fence; riprap

Description: Southern side of ROW. The site appears to have been regraded recently, likely in preparation for hydromulch.

	<p>Photo No.: 37</p> <p>Location: 44°49'06.00"N 93°29'13.85"W</p> <p>BMPs Present: Black ESC fabric</p> <p>Description: Culvert outlet and downslope ROW. See photo 38 for additional culvert outlets downslope of this one. The culvert in this photo lies 8-10 ft. below the road grade. The culverts in photo 38 are several yards downslope.</p>
	<p>Photo No.: 38</p> <p>Location: 44°49'05.45"N 93°29'13.64"W</p> <p>BMPs Present: Two rows of silt fence; riprap</p> <p>Description: Culvert outlets at base of southern slope. This area is downslope of the outlet in photo 37. The area appears largely unchanged from past site visits in early December and November.</p>
	<p>Photo No.: 39</p> <p>Location: 44°49'05.72"N 93°29'05.47"W</p> <p>BMPs Present: Two rows of silt fence; hydromulch</p> <p>Description: The southern side of the ROW shortly after hydromulch was applied.</p>