



# LOWER MINNESOTA RIVER WATERSHED DISTRICT

Please note the Carver County Government is closed therefore the meeting will be held remotely.  
PLEASE CONTACT DISTRICT ADMINISTRATOR, LINDA LOOMIS FOR INSTRUCTIONS TO PARTICIPATE.

Lower Minnesota River Watershed District  
7:00 PM  
Wednesday, August 19, 2020  
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	<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>
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 June 17, 2020 and July 15, 2020 Regular Meeting            B. Receive and file July 2020 Financial reports            C. Approval of Invoices for payment           <ul style="list-style-type: none"> <li>i. Frenette Legislative Advisors - June lobbying services</li> <li>ii. Scott County Soil &amp; Water Conservation District - Q1 monitoring services</li> <li>iii. Manager Hartmann - 1st half 2020 per diem payment &amp; expenses</li> <li>iv. US Bank Equipment Finance - July &amp; August 2020 payment on copier lease</li> <li>v. Naiad Consulting, LLC - April &amp; May administrative services &amp; expenses</li> <li>vi. Redpath and Company - 2019 financial audit services</li> <li>vii. Time Savers Offsite Secretarial Service - for preparation of May 2020 meeting minutes</li> </ul>           D. Agreement for Legal Services            E. Agreement between LMRWD and Young Environmental Consulting Group, LLC for Professional Services</p>
5. Public Hearing	A. Public Hearing on the Proposed 2021 Budget and Preliminary Certification of Tax Levy Payable 2021
6. New Business/	A. Gully Inventory report

Presentations	
7. Old Business	A. 2020 Metro Children's Water Festival B. City of Carver Levee C. Remote meeting participation - no new information to report D. Dredge Management <ul style="list-style-type: none"> <li>i. Vernon Avenue Dredge Material Management site</li> <li>ii. Private Dredge Material Placement</li> </ul> E. Watershed Management Plan F. 2020 Legislative Action G. Education & Outreach H. LMRWD Projects - See Administrator Report for project updates <i><b>(only projects that require Board action will appear on the agenda. Informational updates will appear on the Administrator Report)</b></i> <ul style="list-style-type: none"> <li>i. Eden Prairie Study Area #3 Stabilization</li> </ul> I. Project Reviews - See Administrator Report for project updates <i><b>(only projects that require Board action will appear on the agenda. Informational updates will appear on the Administrator Report)</b></i> <ul style="list-style-type: none"> <li>ii. Freeway Dump and Landfill</li> <li>iii. Fort Snelling</li> <li>iv. Prairie Heights</li> </ul> J. MPCA Soil Reference Values - No new information since last update
8. Communications	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 7:00pm Wednesday, September 16, 2020

Upcoming meetings/Events

- UMWA - Thursday, August 20, 12:30pm to 1:30pm, contact District Administrator to join
- [Agricultural Drainage & the Future of Water Quality, Part 2](#) - Thursday, August 20, 8:00am to 12:00 noon, virtual conference
- USACE River Resource Forum #117 - August 25, 8:00am to 4:00pm, virtual meeting, contact District Administrator for instructions to participate.
- [Metro MAWD](#) - Tuesday, October 20, 7:00pm to 9:00pm
- [Water Resource Conference](#) - October 20-21, virtual conference, registration can be accessed through link provided.
- USACE River Resource Forum #118 - December 1-2, MN Valley US Fish & Wildlife Service Visitor's Center, Bloomington, MN

For Information Only

- **WCA Notices**
  - City of Shakopee - Quarry Lake, Notice of Application
  - City of Shakopee - Memorial Park Bridge Replacement, Notice of Application
  - Dakota County - MN River Greenway Pedestrian Bridge, Notice of Application

- City of Shakopee - Hentges Industrial Park Wetland Delineation, Notice of Decision
- City of Shakopee - Keyland Development, Notice of Decision
- **DNR Public Waters Work permits**
  - Dakota County - Request for Comments - Riprap (Natural Rock), Intake/Outfall Structure, Xcel Energy Black Dog Plant, Intake Screen House
  - City of Shakopee - Request for Comments - Bridge Construction/Modification/Replacement, Shakopee Memorial Park Bridge
- **DNR Water Appropriation permits**
  - City of Shakopee - Application issued for Biff's, for the purpose of cleaning portable toilets (discharge will be routed to Blue Lake WWTP)



# LOWER MINNESOTA RIVER WATERSHED DISTRICT

## Minutes of Regular Meeting

### Board of Managers

Wednesday, June 17, 2020

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

Approved \_\_\_\_\_, 2019

#### 1. CALL TO ORDER AND ROLL CALL

On Wednesday June 17, 2020, at 7:00 PM, President Hartmann called to order the meeting of the Board of Managers of the Lower Minnesota River Watershed District (LMRWD). The meeting was convened on-line due to the health emergency created by the COVID-19 pandemic.

The first item on the agenda was the Oath of Office for Manager Salvato. Manager Salvato was appointed to the LMRWD Board of Manager by the Carver County Board of Commissioners on June 2, 2020. The Oath of Office and the Manager's Bond signed by Manager Salvato were read into the record by Administrator Loomis.

**Manager Raby made a motion to accept Manager Salvato's Oath of Office and the Manager's Bond. The motion was seconded by President Hartmann. Upon a vote being taken the following voted in favor of the motion: Frey, Hartmann, Raby and Salvato; the following voted against: None.**

The Board welcomed Manager Salvato.

President Hartmann asked for roll call to be taken. The following Managers were present: Manager Adam Frey, Manager Dave Raby President Jesse Hartmann and Manager Lauren Salvato. In addition, the following joined the meeting: Linda Loomis, Naiad Consulting, LLC, LMRWD Administrator; Della Schall Young, Young Environmental Consulting Group, LLC, Technical Consultant; John Kolb, Rinke Noonan, Attorneys at Law, Legal Counsel; Lisa Frenette, Frenette Legislative Advisors, lobbyist for the LMRWD; Andy Hering, Redpath and Company auditor for the LMRWD; Jon Utecht, Scott County Soil ^ Water Conservation District; and Lindsey Albright, Dakota County Soil & Water Conservation District.

#### 2. APPROVAL OF THE AGENDA

Administrator Loomis said she had no additions or corrections to the Agenda.

**Manager Raby made a motion to approve the Agenda. The motion was seconded by President Hartmann. Upon a vote being taken the following voted in favor of the motion: Frey, Hartmann, Raby and Salvato; the following voted against: None.**

#### 3. CITIZEN FORUM

Administrator Loomis said she had not received any communications from anyone that wished to address the Board.

#### 4. CONSENT AGENDA

President Hartmann introduced the item.

- A. **Approve Minutes May, 2020 Regular Meetings**
- B. **Receive and file May 2020 Financial reports**
- C. **Approval of Invoices for payment**
  - i. **Daniel Hron - for May 2020 office rent**
  - ii. **Time Savers Offsite Secretarial Service - for preparation of March 2020 meeting minutes**
  - iii. **US Bank Equipment Finance - June 2020 payment on copier lease**
  - iv. **USGS - for Q2 2020 payment for sediment monitoring**
  - v. **Dakota County SWCD - for Q1 2020 monitoring**
  - vi. **DRB Consulting - for first installment of payment for data management**
  - vii. **Daniel Hron - for June 2020 office rent**
  - viii. **HDR Engineering, Inc. - for updating website with rules and permit applications**
  - ix. **Time Savers Off site Secretarial Services - for preparation of April 2020 meeting minutes**
  - x. **Young Environmental Consulting Group - For April 2020 technical services**

Manager Raby noted errors in to the Financial Report on page 2 YTD 2020. Administrator Loomis noted the errors and will make corrections. She will distribute the corrected report to the Board.

**Manager Raby made a motion to approve the Consent Agenda with the correction to the May 2020 Financial Report. The motion was seconded by Manager Frey. Upon a vote being taken the following voted in favor of the motion: Frey, Hartmann, Raby, and Salvato; the following voted against: None.**

#### 5. NEW BUSINESS

##### A. 2019 Financial Audit presentation

Administrator Loomis introduced Andy Hering, from Redpath and Company. Mr. Hering shared a PowerPoint presentation. He reported Redpath and Company has issued four reports as part of the audit of the LMRWD finances: an opinion on the financial statements, a report on internal controls, a report on legal compliance and a governance letter to the Board of Managers. The first report is the auditor's opinion on the financial statement and whether the amounts and disclosures in the financial statements are fairly stated for the year. He explained some of the ways the auditors test the financial statements to determine the accuracy and validity of the statements. In the course of the audit, several tests are run and nothing unusual was noted. The auditor's opinion on the LMRWD's financial statements is a clean or unmodified opinion.

The next report is a report on internal controls. The auditor is not required to audit all policies and procedures, but will look for checks and balances in the procedures. The result noted one internal control finding. The District received a grant and recorded revenue of \$91,000, the entire amount of the grant. Only \$36,000 of the revenue was earned in 2019. Manager Raby asked about the grant. Administrator Loomis explained that this grant was from the Clean Water Fund for the Metro-area Watershed Based Funding. She explained that until the District spends the grant money it is unearned revenue. She explained that little of the grant money was spent last year. Mr. Hering explained this type of error is quite common and is more of an accounting error than it is evidence of anything else.

Mr. Hering noted there were no compliance findings as result of the auditor's testing for the District's compliance with statutes.

Mr. Hering said lastly, there is a communications letter from the auditor to those charged with governance. There is a disclosure related to COVID-19 that states management is not able to

determine the impacts, in any, from COVID-19 on the District's finances. He said one impact from COVID-19 that may affect the District may be reduced collections of taxes levied.

Mr. Hering said there were no difficulties with the audit. He noted the audit was done completely remotely, which was something new for them. It was a smooth audit.

Mr. Hering noted the 2019 budget indicated a decrease to the District's fund balance of \$259,255. The actual decrease was only \$33,382. This was due to expenditures coming in \$246,223 under budget. He noted that the District transferred \$80,000 from the general fund to the 9 foot Channel Fund, so that fund now has a positive balance as opposed to a negative balance.

Manager Raby asked about the 9 foot Channel fund balance. He thought the District was trying only to make up the deficit in the fund and now there is a surplus. Administrator Loomis said they didn't know what the deficit was going to be at the end of 2019 before the transfer was made, so the transfer from the general fund to the 9 foot Channel fund was made based on what was in the budget. Manager Raby asked if they need to transfer it back. Administrator Loomis suggested that the surplus be left in the Channel Fund, since it can be transferred back at any time in the future.

Attorney Kolb explained the motion would be to accept the 2019 financial audit report as presented subject to final review by the managers of the full written report.

**President Hartmann made a motion to accept the 2019 Financial Audit report subject to final review by the Managers. The motion was seconded by Manager Raby. Upon a vote being taken the following voted in favor of the motion: Frey, Hartmann, Raby and Salvato; the following voted against: None.**

**B. Scott County SWCD 2019 monitoring results**

Administrator Loomis introduced Jon Utecht, Water Resource Specialist for the Scott County Soil and Water Conservation District.

Mr. Utecht shared his screen and provided the findings from the 2019 monitoring of water resources within the Lower Minnesota River Watershed District portion of Scott County. He showed a map of the sites monitored. He explained the monitoring can be broken up into three different groups: thermal monitoring, where continuous water temperature data are monitored in Eagle Creek and some tributaries; stream monitoring program which looks at water quality at the WOMP station on Eagle Creek and at the inlet to Dean Lake and includes chloride monitoring; and the final segment, well monitoring, which looks at ground water elevations in several observation wells in or near Savage fen.

Mr. Utecht began with thermal monitoring of Eagle Creek. He said the reason for monitoring temperatures in Eagle Creek is because it is a trout stream. He talked about the stresses on the fish due to high water temperatures. He talked about the temperatures and showed the times temperatures exceeded the limits needed to support trout. He noted thermal monitoring began in 2009 when it was noticed that rainfall events were flushing warm water into Eagle Creek. He pointed out the location of three temperature loggers and explained the logic behind the location placement of the loggers.

He noted the number of times temperatures exceeded the optimal range in 2019 (23 times) were fewer than in 2018 (52 times). He also noted the water temperatures tracked with atmospheric temperatures. He said this is likely because the rain water flushes water warmed by the air into the creek.

Mr. Utecht commented on the pond loggers. Water in the ponds heats up as the atmospheric temperatures heat up and contribute warm water to the creek.

Mr. Utecht reviewed the water quality stations; at the Eagle Creek WOMP station and the Dean Lake inlet. The WOMP station collects continuous data. In addition, grab samples are collected for comparison. On total 37 samples were collected. They collect regular grab samples as well as samples during peak flow events, such as after rain falls.

Mr. Utecht talked about the water quality standards and noted compared to 2018 data, nitrates, phosphorus and total suspended solids were all higher. Suspended sediment amounts were higher; up about 30% from last year. He noted the sediment levels in Eagle Creek are much lower when compared to other metropolitan stations. He said there is still an issue with E. coli. April 1 through October showed several spikes throughout the season. He is not sure what the source of the E. coli is. He noted there is a lot of wildlife in the area. He said it will be important to see if the trend in 2020 continues upward for all pollutants.

Mr. Utecht said chloride was sampled from November 2018 to May 2019. Chlorides can impact trout development and growth rate. The road density in the Eagle Creek watershed is greater than 18%, which is a high risk factor for chloride pollution. Highway 101 is a significant contributor of chloride to Eagle Creek. Overall Chloride levels in Eagle Creek are high.

He spoke about monitoring at the Dean Lake inlet. 16 bi-weekly samples and 4 event samples (after rainfalls) were taken. Flow monitoring and stage data are taken as well. They correlated levels of Dean Lake to the opening of the Prior Lake Outlet Channel and didn't see any patterns. Levels of nitrate, phosphorus and suspended solids were higher compared to 2018 data.

Mr. Utecht stated in looking at the water levels in the Savage Fen wells, the overall trend in 2019 was down, even though it was a wet year. The historical trend, over the last ten years, show water levels have increased. Eagle Creek wells show the same pattern. They were able to get a couple of measurements from the bluff wells before they were sealed. These are deep wells and showed rising water levels. The historical trend in the bluff wells also shows an upward trend.

Mr. Utecht said they will continue the well monitoring and report the results to the DNR. He noted monitoring was delayed due to COVID, but expects the monitoring regime will be similar to previous years.

Manager Salvato asked about the high level of TSS and wondered if it was related to discharge. Mr. Utecht said the stream bottom is very sandy and prone to sediment. He noted there is a lot of waterfowl in the area that can dig up the bottom and cause sediment to become suspended. She also asked about the upward trend in the wells. Mr. Utecht said that is a question for the city of Savage. He has heard that the city has reduced the amount of water it has been pumping from the municipal wells in the area.

Ms. Young asked about the increased chloride levels and if Mr. Utecht was able to correlate the increased levels to other activities, such as days that salt was being used or if it was snowing. She noted that the District should be concerned with fluctuating water levels in the fens and that the District should chase down activities that might be contributing to fluctuating water levels. Mr. Utecht noted the Chloride report does indicate activities that could be causes of the high levels. Ms. Young also said that the District should look at sourcing the E. coli in Eagle Creek to see if there is some way to mitigate it.

Manager Raby asked about Dean Lake monitoring. He asked if the District would be better served by monitoring elsewhere. Ms. Young said that Manager Raby may be correct. She noted that there is a long history of data from this site and sometimes there is value in keeping data collection going. She noted that maybe the District could consider reducing the frequency in collecting data; perhaps go to a three year cycle. Manager Salvato encouraged an extended conversation on reducing monitoring. She said she thinks you could lose a lot of information by changing from every year to every three years. Ms. Young said we need to evaluate the loss of integrity by changing the monitoring regime.

Manager Frey asked what the term water usage means. Mr. Utecht said that relates to the ground water and the amount of ground water that is taken. Administrator Loomis said one reason to continue monitoring Dean Lake is to evaluate the efficacy of the Prior Lake Outlet Channel (PLOC) remainder project. That project is upstream of the Dean Lake inlet that the LMRWD and the City of Shakopee are working on. The goals of the project are to improve the water quality entering Dean Lake and monitoring data might be critical to evaluate the project.

Administrator Loomis noted that the City of Savage has municipal wells in the Savage Fen and Eagle Creek watershed, that have been known to impact water levels. The City has other wells upland and it may be drawing more water from the upland wells and reduced the withdrawals from the wells near the Fen.

President Hartmann thanked Mr. Utecht for the presentation.

**C. Future Board meetings and COVID -19**

Administrator Loomis said Carver County has not decided a date when the building will be open to the public to resume face to face meetings. She noted it will be up to the Board if they want to resume in person meetings and if they do, they need to talk about finding a meeting space if the Government Center does not open.

Attorney Kolb talked about the most recent emergency executive orders from the Governor, which said public bodies may decide whether or not to resume in person meetings, and that they will need to have a preparedness plan. He noted the LMRWD board is unique because they do not have their own facility. He noted that even if the County opened its facility, there will likely have to be compliance with the County's Emergency preparedness plans and the District's should develop its own preparedness plan. He said that if the LMRWD Board decides to go back to in person meetings that until the pandemic has subsided the Board needs to give consideration to accommodating members of the public, members of the public body and staff of the public body that may have individual risk thresholds or concerns that would prevent them from wanting to or being able to safely attend in person meetings; even with a preparedness plan, with physical distancing and wearing masks. Even if the Board goes back to in person meetings there will still need to be a level of remote participation, so that the public is not denied participation in the open meeting process just because they have concerns about their personal safety. He suggested meeting in this format (remotely) until there is a facility available to use and there is more clarity.

The board agreed and decided to keep meeting remotely. President Hartmann said they can look at this month to month.

**D. Braun 2020 Cost Share Application - 10312 Portland Avenue S., Bloomington**

Administrator Loomis said this is a Cost Share application received from Dustin Braun. Mr. Braun recently completed the Master Water Steward program and needs to complete a capstone project in order to be certified as a Master Water Steward. This project is his capstone project.



The application proposes to collect storm water to use for irrigation on his property. He is asking for a cost share of \$2, 418.00.

Manager Raby said this is the most detailed and complete application that he has seen. He said he would be interested in seeing the videos mentioned in the application.

President Hartmann asked how many cost share applications they receive. Administrator Loomis she said this is the third one that has been received this year. She said the maximum number of applications they have received in any given year was six and not all were funded. Last year they received two. Manager Raby noted that they have never spent all that is in the budget since he has been on the Board.

Manager Salvato asked if any of the funding goes to the County. Administrator Loomis explained that the District will fund the cost of one Water Steward per year and the Cost Share funding will go entirely toward the project. She noted that Hennepin County provides technical assistance to the program.

**Manager Raby made a motion to approve Braun 2020 Cost Share Application. The motion was seconded by Manager Salvato. Upon a vote being taken the following voted in favor of the motion: Frey, Hartmann, Raby and Salvato; the following voted against: None.**

**E. Professional Services Requests for Proposals**

Administrator Loomis said Minnesota Statutes require that every two years the District solicit interest proposals for legal, professional or technical consultant services before retaining services of an attorney or consultant or extending an annual services agreement. She noted that the District placed requests for proposal in the State Register May 4th and May 11th and on the District's website. Proposals for legal counsel, technical consultant and education & outreach coordinator were requested. The District received three proposals, one for each request. The Manager received the proposals electronically. All proposals came from the current service providers.

Manager Raby asked about the potential proposals. Administrator Loomis said she received inquiries about the request, but that none of the firms that she spoke with submitted proposals. She said the engineering firms she spoke with were looking to be in a pool of engineers. The inquiry for the education and outreach coordinator position did not identify themselves, but they did not submit a proposal.

The Managers discussed the proposal received for an education & outreach coordinator. Administrator Loomis said the one of the first goals will be to establish a Citizen Advisory Committee. Ms. Young explained her plans for meeting the District's education & outreach needs.

Attorney Kolb advised that since only one proposal was received for each request the Board could accept all proposals in the same motion.

**Manager Raby made a motion to accept the three proposals as presented for each of the services. The motion was seconded by President Hartmann. Upon a vote being taken the following voted in favor of the motion: Frey, Hartmann, Raby and Salvato; the following voted against: None.**

**6. OLD BUSINESS**

**A. Larson 2020 Cost Share Application - 1033 Sunny Ridge Drive, Carver**

Administrator Loomis reminded the Board that his item was considered at the May Board meeting and was tabled. The Board requested additional information about the proposed plant material, which was provided.

Manager Raby questioned some of the details. He said in general it is the information they need but the totals are confusing. Administrator Loomis said the requested information show costs that exceed \$5,000. The maximum cost share allowed under the program is \$2,500 with a 50% match and she is requesting the maximum.

Ms. Salvato commented about the lack of detail regarding the benefits of the project. She noted that she needed to document improvements of the project on the Hennepin County application she submitted. Administrator Loomis pointed out that unless an applicant has received technical assistance, they don't necessarily know how to do that. Manager Raby said that historically the District has not required that information, for the reason that homeowner don't have that expertise.

**President Hartmann made a motion to approve the Larson 2020 Cost Share Application – 1033 Sunny Ridge Drive, Carver. The motion was seconded by Manager Salvato. Upon a vote being taken the following voted in favor of the motion: Frey, Hartmann, Raby and Salvato; the following voted against: None.**

**B. City of Carver Levee**

No new information to report since last update.

**C. Remote meeting participation**

No new information to report since last update.

**D. Dredge Management**

**i. Vernon Avenue Dredge Material Management site**

Administrator Loomis said there was not any information to share other than what was in the Executive Summary. President Hartmann asked if construction will be able to start this fall with the weather patterns. Ms. Young said they are still planning to start this fall. Discussions with the contractor will start in August.

**ii. Private Dredge Material Placement**

No new information to report since last update.

**E. Watershed Management Plan**

Administrator Loomis said that the City of Shakopee was notified that all projects must come to the District for a permit. There was some confusion regarding the LMRWD rules and enforcement of the rules.

**F. 2020 Legislative Action**

Ms. Frenette provided an update. She said nothing is going on right now. She will continue to press for having the language desired by the LMRWD inserted any time there is a bill introduced.

**G. Education and Outreach Plan**

No information to report since last update.

**H. LMRWD Projects**

*(only projects that require Board action will appear on the agenda. Informational updates will appear on the Administrator Report)*

**I. Project/Plan Reviews**

***(only projects that require Board action will appear on the agenda. Informational updates will appear on the Administrator Report)***

**i. Prairie Heights, Eden Prairie**

Administrator Loomis said this is a residential development. The technical review was included. The project crosses the boundaries of the Lower Minnesota River Watershed District and Riley Purgatory Bluff Creek Watershed District. Staff is recommending approval of the project with the conditions that it is approved by RPBCWD and if any changes are requested by RPBCWD for approval that the LMRWD be notified of those changes. She noted the project is not in the steep slope overlay or a High Value Resource Area.

**Manager Raby made a motion to approve the Prairie Heights permit. The motion was seconded by President Hartmann. Upon a vote being taken the following voted in favor of the motion: Frey, Hartmann, Raby and Salvato; the following voted against: None.**

**ii. 565 Lakota Lane, Chanhassen, variance request**

Administrator Loomis said this item does not need to be discussed. This is a variance from a city ordinance. The LMRWD wanted to make sure the septic tanks were not located in the steep slope overlay zone.

**iii. Structures, Inc., Chaska**

President Hartmann asked for a reminder about this project. Administrator Loomis said that it was a commercial project in the City of Chaska. The project proposed construction of a new building on a site that already had a stormwater pond, which was 17 years old. The soils on the site do not allow for infiltration and could not meet the LMRWD requirements for rate control. In addition, the stormwater pond has not had any maintenance in 17 years. The District spoke with engineers for the project and asked for additional BMPs to be considered and a maintenance agreement for BMPs. After speaking with the engineers for the project, the City informed the District that the project was not moving forward.

**J. MPCA Soil Reference Values - no change since last update**

**7. COMMUNICATIONS**

**A. Administrator Report:** Administrator Loomis noted that the Administrator report was posted on the website. She provided a schedule for receipt of 1st half tax settlements from the Counties.

She reported on the Watershed Based Funding meeting for the Minnesota River North.

Administrator Loomis reported that staff met on site at the TH101 project in Chanhassen. The City of Chanhassen has retained Carver County SWCD to inspect the project and staff asked that the LMRWD be copied on inspection reports.

Administrator Loomis reminded the Board about the salt symposium in August. There is a special rate if you register by the end of June and that registration is per device so more than one person can participate. The event will be held virtually. Manager Salvato asked who the target audience is. Administrator Loomis said the meeting is targeted to anyone interested in Chloride pollution. She noted that previous Salt Symposiums focused on road salt, but this one will address other sources of Chloride such as waste water and water softeners.

- B. **Managers:** No report
- C. **Committees:** No report
- D. **Legal Counsel:** No report
- E. **Engineer:** No report

**8. ADJOURN**

**President Hartmann adjourned the meeting at 8:56pm. Manager Raby seconded the motion. Upon a vote being taken the following voted in favor of the motion: Frey, Hartmann, Raby and Salvato; the following voted against: None.**

**The next meeting of the LMRWD Board of Managers will be 7:00, Wednesday, June 17, 2020 and will be held at the Carver County Government Center, 602 East 4th Street, Chaska, MN. Electronic access will also be available.**

\_\_\_\_\_  
Dave Raby, Secretary

Attest:

\_\_\_\_\_  
Linda Loomis, Administrator



# LOWER MINNESOTA RIVER WATERSHED DISTRICT

## Minutes of Regular Meeting

### Board of Managers

Wednesday, July 15, 2020

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

Approved \_\_\_\_\_, 2019

#### 1. CALL TO ORDER AND ROLL CALL

On Wednesday June 17, 2020, at 7:00 PM, President Hartmann called to order the meeting of the Board of Managers of the Lower Minnesota River Watershed District (LMRWD). The meeting was convened on-line due to the health emergency created by the COVID-19 pandemic.

The first item on the agenda was the Oath of Office for Manager Hartmann, who was reappointed to the Board by the Scott County Board of Commissioners at its February 18, 2020 meeting. The Oath of Office and the Manager's Bond signed by Manager Hartmann were read into the record by Administrator Loomis.

**Manager Raby made a motion to accept Manager Hartmann's Oath of Office and the Manager's Bond. The motion was seconded by Manager Salvato. Upon a vote being taken the following voted in favor of the motion: Frey, Hartmann, Raby and Salvato; the following voted against: None.**

President Hartmann asked for roll call to be taken. The following Managers were present: Manager Adam Frey, Manager Dave Raby President Jesse Hartmann and Manager Lauren Salvato. In addition, the following joined the meeting: Linda Loomis, Naiad Consulting, LLC, LMRWD Administrator; Della Schall Young, Young Environmental Consulting Group, LLC, Technical Consultant; John Kolb, Rinke Noonan, Attorneys at Law, Legal Counsel; and Lindsey Albright, Dakota County Soil & Water Conservation District.

#### 2. APPROVAL OF THE AGENDA

Administrator Loomis requested that the Board remove the meeting minutes of June 2020 regular Board meeting from the agenda.

**Manager Raby made a motion to approve the Agenda with the June 2020 regular meeting minutes removed. The motion was seconded by President Hartmann. Upon a vote being taken the following voted in favor of the motion: Frey, Hartmann, Raby and Salvato; the following voted against: None.**

#### 3. CITIZEN FORUM

Administrator Loomis said she had not received any communications from anyone that wished to address the Board.

#### 4. CONSENT AGENDA

President Hartmann introduced the item.

~~A. Approve Minutes June, 2020 Regular Meetings~~

**B. Receive and file June 2020 Financial reports**

**C. Approval of Invoices for payment**

- i. DRB Consulting - first invoice for document management services
- ii. Braun Intertec Corp. - for inclinometer readings
- iii. Frenette Legislative Advisors - for May 2020 lobbying services
- iv. Freshwater Society - payment for 2019 Master Water Steward Program (D. Braun)
- v. Metro Sales, Inc. - payment on copier maintenance contract
- vi. MAWD - payment of 2020 Dues
- vii. Rinke Noonan, Attorneys at Law - April 2020 legal services
- viii. State of Minnesota Dept. of Administration - for advertisement for professional service providers in State Register
- ix. US Bank Equipment Finance - July 2020 payment on copier lease
- x. DRB Consulting - second invoice for document management services
- xi. Fortin Consulting - sponsorship of 2020 Salt Symposium
- xii. The Horton Group - payment of premium for Director's & Officers Insurance
- xiii. Rinke Noonan, Attorneys at Law - for May 2020 legal services
- xiv. Young Environmental Consulting Group - For May 2020 technical services

**D. Chimney Pines HOA Cost Share Project**

**E. Oak Savannah Cost Share Project**

**F. Larson 2020 Cost Share Application - 1033 Sunny Ridge Drive, Carver**

Manager Raby commented on the Larson cost share agreement. The question that he actually had was in regards to the Rathjen Cost Share project and was regarding reimbursing the applicant for equipment, like rakes, gloves, etc.. Administrator Loomis explained that she felt it was an eligible expense, because the equipment was purchased for volunteers that the applicant recruited to help prepare the site and plant.

**Manager Raby made a motion to approve the Consent Agenda. The motion was seconded by President Hartmann. Upon a vote being taken the following voted in favor of the motion: Frey, Hartmann, Raby and Salvato; the following voted against: None.**

#### 5. NEW BUSINESS

**A. 2021 Budget**

Administrator Loomis noted that the Budget was presented to the Board at a workshop prior to the Board meeting. She asked that the Board call for a public hearing at the August 19, 2020 Board meeting.

President Hartmann asked if that would give enough time for the public notice. Administrator Loomis said that it would.

**President Hartmann made a motion to call a public hearing on August 19, 2020 for the purpose of taking public comment on the proposed 2021 Budget. The motion was seconded by Manager Frey. Upon a vote being taken the following voted in favor of the motion: Frey, Hartmann, Raby and Salvato; the following voted against: None.**

**B. 2020 Metro Children's Water Festival**

Administrator Loomis said this is an annual event organized by the Metro Conservation Districts. She noted the LMRWD has sponsored this event since before she started with the District. Last

year the LMRWD made a contribution of \$1,650 to fund transportation of classrooms to the event.

She explained to the Board how this event has been run in the past. This year because of COVID-19 they are planning to do a virtual water festival. She said the organizers have asked to LMRWD to be a sponsor again this year.

Manager Raby asked about the proposed budget. President Hartmann noted a virtual event will cost much less. Administrator Loomis said she will check with the organizers and bring that information back to the Board.

Manager Raby thought this is a good event, but wants more information. Administrator Loomis recommended that the item be tabled until the August meeting.

**Manager Raby made a motion to table the 2020 Metro Children's Water Festival to the August board meeting. The motion was seconded by Manager Frey. Upon a vote being taken the following voted in favor of the motion: Frey, Hartmann, Raby and Salvato; the following voted against: None.**

## 6. OLD BUSINESS

### A. City of Carver Levee

No new information to report since last update.

### B. Remote meeting participation

No new information to report since last update.

### C. Dredge Management

#### i. Vernon Avenue Dredge Material Management site

Administrator Loomis has sent a notice to the U.S. Army Corps of Engineers that the LMRWD is planning to make improvements to the dredge site this year, but has not received any response from the Corps. There have been some personnel changes at the Corps and she has not received any notice as to who has replaced the District's previous contacts.

#### ii. Private Dredge Material Placement

Terminal operators have been informed that material must be removed from the site by September 15, 2020.

### D. Watershed Management Plan

No new information to report since last update.

### E. 2020 Legislative Action

A special session began again on Monday. Administrator Loomis said she spoke with Lisa Frenette on Monday and she (Lisa) will continue to push for inclusion of the legislation for the LMRWD in any bill that gets passed. Ms. Frenette said if the Board would like more information or to hear directly from Ms. Frenette, she is available. Manager Raby asked if the LMRWD would be included in the bonding bill. Administrator Loomis said yes.

### F. Education and Outreach Plan

Ms. Young is putting together a work plan for the Board to consider.

### G. LMRWD Projects

***(only projects that require Board action will appear on the agenda. Informational updates will appear on the Administrator Report)***

No action is necessary on any LMRWD project. All updates are provided in the July Administrator report.

#### H. Project/Plan Reviews

***(only projects that require Board action will appear on the agenda. Informational updates will appear on the Administrator Report)***

##### i. Vierling Industrial

Administrator Loomis explained that the City of Shakopee has been notified that all projects will need a permit from the District until the City receives a municipal permit from the District. This is a project that came in after the City was so informed. The City asked that the permit be expedited as the project was already in progress when they were informed that they needed a permit from the District. This is a city project.

Manager Raby said the Technical Memo was clear and he has no questions. Manager Salvato asked about accommodating the request to expedite the permit approval and setting a precedent. Administrator Loomis said it was made clear to the City that the District will accommodate this request, but that in the future projects need to apply for permits in a timely manner so that there is not a need to rush the permit approval. LMRWD staff is recommending approval of this permit. She explained this project is in an industrial area that is included in a regional stormwater plan.

**President Hartmann made a motion to approve the Vierling Industrial permit. The motion was seconded by Manager Raby. Upon a vote being taken the following voted in favor of the motion: Frey, Hartmann, Raby and Salvato; the following voted against: None.**

##### I. MPCA Soil Reference Values - no change since last update

#### 7. COMMUNICATIONS

**A. Administrator Report:** Administrator Loomis reported on the meeting of the Lower MN River North Watershed Based Funding meeting. She said they discussed a list of projects that other organizations in the group want funded. She said the next meeting is in August.

Administrator Loomis said she met with planning area 56 regarding the development of One Watershed One Plan for the northern half of the HUC 8 titled Lower Minnesota River. The group talked about who wanted to be included in the planning process. Many of the organizations in attendance wanted to be on a technical advisory group, but not part of the planning group. The group thought that maybe goals for the planning process should be identified that that might make it easier for everyone to decide whether or not they want to be part of the planning process. Administrator Loomis reminded the Board that it adopted a resolution to be part of this planning process.

Administrator Loomis told the Board that the US Army Corps of Engineers has changed its August River Resources Forum to a virtual event.

**B. Managers:** Manager Raby asked about getting a Dakota County Board representative. He asked if the Administrator has been in touch with Dakota County about filling the Manager position for Dakota County. She noted she has people for the citizen advisory committee.

President Hartmann asked if it would be possible to get names and addresses of residents of Dakota that live in the District. She said she would speak to the County and report back in August. Manager Salvato asked if it would be possible to reach out to the list of Master



Water Stewards to see if any of them live in the LMRWD and might be interested in being appointed to the Board.

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

**8. ADJOURN**

**At 7:41pm, President Hartmann made a motion to adjourn the meeting. Manager Raby seconded the motion. Upon a vote being taken the following voted in favor of the motion: Frey, Hartmann and Raby the following voted against: None.**

**The next meeting of the LMRWD Board of Managers will be 7:00, Wednesday, August 19, 2020 and will be held at the Carver County Government Center, 602 East 4th Street, Chaska, MN. Electronic access will also be available.**

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Dave Raby, Secretary

Attest:

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Linda Loomis, Administrator

**Item 4.B.**  
**LMRWD 8-19-20**

<b>BEGINNING BALANCE</b>	<b>30-Jun-20</b>	<b>\$ 2,264,307.90</b>
<b>ADD:</b>		
<b>General Fund Revenue:</b>		
Carver County 1st half 2020 tax settlement		\$ 25,448.53
Dakota County 1st half 2020 tax settlement		\$ 4,812.04
Hennepin County 1st half 2020 tax settlement		\$ 159,460.01
		\$ 189,720.58
<b>Total Revenue and Transfers In</b>		<b>\$ 189,720.58</b>
<b>DEDUCT:</b>		
<b>Warrants:</b>		
424540 Frenette Legislative Advisors June 2020 lobbying services		\$ 1,666.67
424555 Scott Co. SWCD Q1 monitoring services		\$ 8,692.36
424672 Manager Hartmann 1st half 2020 per diem & expenses		\$ 762.65
424708 US Bank Equipment Finance July/August 2020 copier lease payment		\$ 420.25
100013198 Naiad Consulting, LLC Apr. & May Admin. Services & expenses		\$ 23,038.03
100013205 Redpath and Company 2019 financial audits services		\$ 14,335.00
100013209 TimeSaver Off Site Secretarial prep of May 2020 meeting minutes		\$ 183.50
		\$ 49,098.46
<b>Total Warrants/Reductions</b>		<b>\$ 49,098.46</b>
<b>ENDING BALANCE</b>	<b>31-Jul-20</b>	<b><u><u>\$ 2,404,930.02</u></u></b>

EXPENDITURES	2020 Budget	July Actual	YTD 2020	Over (Under) Budget
<b>Administrative expenses</b>	\$ 250,000.00	\$ 40,406.10	\$ 123,347.52	\$ (126,652.48)
<b>Cooperative Projects</b>				
Eden Prairie Bank Stabilization Area #3	\$ 35,000.00	\$ -	\$ 5,138.21	\$ (29,861.79)
Gully Erosion Contingency Fund		\$ -	\$ -	\$ -
USGS Sediment & Flow Monitoring	\$ 19,700.00	\$ -	\$ 5,045.75	\$ (14,654.25)
Ravine Stabilization at Seminary Fen in Chaska	\$ 55,200.00	\$ -	\$ -	\$ (55,200.00)
Riley Creek Cooperative Project with RPBCWD	\$ 74,565.67	\$ -	\$ -	\$ (74,565.67)
Seminary Fen Ravine C-2	\$ -	\$ -	\$ 97.50	\$ -
<b>509 Plan Budget</b>				
<i>Resource Plan Implementation</i>				
Gully Inventory	\$ -	\$ -	\$ 28,320.79	\$ 28,320.79
TH 101 Shakopee Ravine	\$ 35,000.00	\$ -	\$ -	\$ (35,000.00)
Assumption Creek Hydrology Restoration		\$ -	\$ -	\$ -
Carver Creek Restoration	\$ 15,000.00	\$ -	\$ -	\$ (15,000.00)
Groundwater Screening Tool Model	\$ 50,000.00	\$ -	\$ -	\$ (50,000.00)
MN River Floodplain Model Feasibility Study	\$ -	\$ -	\$ -	\$ -
Schroeder Acres Park SW Mgmt Project	\$ 181,055.00	\$ -	\$ -	\$ (181,055.00)
PLOC Realignment/Wetland Restoration	\$ -	\$ -	\$ -	\$ -
Spring Creek Project	\$ -	\$ -	\$ -	\$ -
West Chaska Creek	\$ -	\$ -	\$ 162.50	\$ 162.50
Sustainable Lakes Mgmt. Plan (Trout Lakes)	\$ 50,000.00	\$ -	\$ 1,223.62	\$ (48,776.38)
Geomorphic Assessments (Trout Streams)	\$ 50,000.00	\$ -	\$ -	\$ (50,000.00)
Fen Stewardship Program	\$ -	\$ -	\$ 68,669.90	\$ 68,669.90
District Boundary Modification	\$ -	\$ -	\$ -	\$ -
E. Chaska Creek Bank Stabilization Project	\$ -	\$ -	\$ 36,012.40	\$ 36,012.40
E. Chaska Creek Treatment Wetland Project	\$ -	\$ -	\$ -	\$ -
MN River Sediment Reduction Strategy	\$ -	\$ -	\$ -	\$ -
MN River Fens - gap analysis	\$ -	\$ -	\$ 762.20	\$ 762.20
Dakota County Fen Management Study	\$ 25,000.00	\$ -	\$ -	\$ (25,000.00)
Local Water Management Plan reviews	\$ 8,000.00	\$ -	\$ 5,024.75	\$ (2,975.25)
Project Reviews	\$ 20,000.00	\$ -	\$ 32,867.40	\$ 12,867.40
<i>Monitoring</i>	\$ 65,000.00	\$ 8,222.36	\$ 12,484.36	\$ (52,515.64)
<i>Watershed Management Plan</i>	\$ 56,000.00	\$ -	\$ 22,647.60	\$ (33,352.40)
<i>Public Education/CAC/Outreach Program</i>	\$ 30,000.00	\$ 434.00	\$ 8,656.05	\$ (21,343.95)
<i>Cost Share Program</i>	\$ 20,000.00	\$ 36.00	\$ -	\$ (20,000.00)
<b>Nine Foot Channel</b>				
Transfer from General Fund	\$ 80,000.00	\$ -	\$ -	\$ (80,000.00)
Dredge Site Improvements	\$ 315,000.00	\$ -	\$ 4,624.05	\$ (310,375.95)
<b>Total:</b>	<b>\$ 1,184,520.67</b>	<b>\$ 49,098.46</b>	<b>\$ 355,084.60</b>	<b>\$ (952,881.09)</b>



# LOWER MINNESOTA RIVER WATERSHED DISTRICT

## Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting  
Wednesday, August 19, 2020

### Agenda Item

#### Item 5. A. - Public Hearing on the Proposed 2021 Budget and Preliminary Certification of Tax Levy Payable 2021

#### Prepared By

Linda Loomis, Administrator

#### Summary

At the July meeting of the Board of Managers, staff presented the proposed 2021 Budget and suggested preliminary certification.

In accordance with MN Statutes 103D.911 Subd. 2, "on or before September 15 of each year, the managers shall adopt a budget for the next year and decide on the total amount necessary to be raised from ad valorem tax levies to meet the watershed district's budget." Further, the Statute requires in Subd. 1(a) that "Before adopting a budget, the managers shall hold a public hearing on the proposed budget".

Notice was published as required in Subd. 1(b) in the Star Tribune on Sunday, August 9, 2020 and again on Sunday, August 16, 2020. The notice that was published is attached.

The total budget proposed for the year 2021 is \$1,065,000.00 and proposes total levies of \$725,000; an administrative levy of \$250,000 and a planning and implementation levy of \$475,000. The remainder of the budget will be paid for using the District's fund balance. The levies will be allocated to the counties as follows:

Carver County	\$42,871.43
Dakota County	\$72,959.65
Hennepin County	\$318,293.13
Scott County	\$290,875.80
<b>TOTAL</b>	<b>\$725,000.00</b>

The Proposed 2021 Budget and Resolutions are attached for each county reflecting levies from the table above. In addition there are several other documents for the Board's information. The Proposed Budget has not changed since the July 2020 Board meeting other than the YTD expenditures have been updated.

#### Attachments

2021 Proposed Budget and Preliminary Certification of Levy Payable 2021

Explanation of Budget Line items

Notice of Public Hearing

RESOLUTION 20-05 - PRELIMINARY CERTIFICATION OF PROPERTY TAX LEVIES FOR CARVER COUNTY FOR TAXES PAYABLE 2021 AND APPROVAL OF 2021 PROPOSED BUDGET

Item 5. A. - Preliminary approval of proposed 2021 budget and certification of levy payable 2021

Executive Summary

August 19, 2020

Page 2

RESOLUTION 20-06 - PRELIMINARY CERTIFICATION OF PROPERTY TAX LEVIES FOR DAKOTA COUNTY FOR TAXES PAYABLE 2021 AND APPROVAL OF 2021 PROPOSED BUDGET

RESOLUTION 20-07 - PRELIMINARY CERTIFICATION OF PROPERTY TAX LEVIES FOR HENNEPIN COUNTY FOR TAXES PAYABLE 2021 AND APPROVAL OF 2021 PROPOSED BUDGET

RESOLUTION 20-08 - PRELIMINARY CERTIFICATION OF PROPERTY TAX LEVIES FOR SCOTT COUNTY FOR TAXES PAYABLE 2021 AND APPROVAL OF 2021 PROPOSED BUDGET

RESOLUTION 20-09 - APPROVING MID-YEAR BUDGET ADJUSTMENT FOR FISCAL YEAR 2020 AND AUTHORIZING DISTRICT ADMINISTRATOR TO IMPLEMENT SAME

CIP Spreadsheet

Work plans for CIP Projects

Table of historical LMRWD levies

**Recommended Action**

Motion to adopt resolutions of Preliminary Certification of Property Tax Levies and Approval of 2021 Proposed Budget

**Proposed Levy 2021**

General Fund	250,000.00
Planning and Implementation Fund	475,000.00
One time levy to balance channel fund	<u>-</u>
<b>Apportioned Payable 2020 Levy</b>	<b>725,000.00</b>

<u>County</u>	<u>Net Tax Capacity % Distribution</u>	<u>Apportioned Payable 2021 Levy</u>
Carver	5.9133%	42,871.43
Dakota	10.0634%	72,959.65
Hennepin	43.9025%	318,293.13
Scott	40.1208%	290,875.80
<b>Watershed Total</b>	<b>100.0000%</b>	<b>725,000.00</b>

2021 Proposed Total Budget  
2019 Adopted Budget/Actuals - 2020 Adopted Budget/YTD/Projected - 2021 proposed

	Account	2019 Adopted	2019 Actual	2020 Adopted	2020 YTD	Projected 2020	Proposed 2021
	<b>Revenues:</b>						
	General Property Tax						
1	Carver County	\$ 48,442.33	\$ 49,664.89	\$ 42,833.00	\$ 25,448.53	\$ 42,833.00	\$ 42,871.43
2	Dakota County	\$ 76,001.75	\$ 74,820.97	\$ 70,735.35	\$ 37,450.76	\$ 70,735.35	\$ 72,959.65
3	Hennepin County	\$ 276,570.10	\$ 274,817.86	\$ 321,491.83	\$ 159,460.01	\$ 321,491.83	\$ 318,293.13
4	Scott County	\$ 323,985.83	\$ 620,708.63	\$ 289,939.83	\$ 38,454.22	\$ 289,939.83	\$ 290,875.80
	<b>Total Levy:</b>	<b>\$ 725,000.01</b>	<b>\$ 1,020,012.35</b>	<b>\$ 725,000.01</b>	<b>\$ 260,813.52</b>	<b>\$ 725,000.01</b>	<b>\$ 725,000.00</b>
5	Interest Income	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6	MCES WOMP Grant	\$ 5,500.00	\$ 4,500.00	\$ 5,500.00	\$ 5,500.00	\$ 5,500.00	\$ 5,000.00
7	State of MN Grant for Dredge Material Management	\$ 240,000.00	\$ -	\$ 240,000.00	\$ 240,000.00	\$ 240,000.00	\$ 240,000.00
8	Metro-Area Watershed Based funding grants	\$ 182,042.00	\$ 91,021.00	\$ 91,021.00	\$ -	\$ 91,021.00	\$ -
9	License Revenue from placement of dredge	\$ 25,000.00	\$ -	\$ 25,000.00	\$ -	\$ 25,000.00	\$ 25,000.00
10	Revenues from sale of dredge material	\$ 5,000.00	\$ -	\$ 5,000.00	\$ -	\$ 5,000.00	\$ 5,000.00
11	Permit Fees	\$ -	\$ -	\$ -	\$ 1,000.00	\$ 1,000.00	\$ -
12	Miscellaneous Income	\$ -	\$ 4,585.49	\$ -	\$ -	\$ -	\$ -
	<b>Total Revenues:</b>	<b>\$ 1,182,542.01</b>	<b>\$1,120,118.84</b>	<b>\$1,091,521.01</b>	<b>\$507,313.52</b>	<b>\$ 1,092,521.01</b>	<b>\$ 1,000,000.00</b>
	<b>Expenses:</b>						
13	<b>Administration</b> (from Administrative Budget Page)	\$ 250,000.00	\$ 243,541.53	\$ 250,000.00	\$ 118,073.52	\$ 250,000.00	\$ 250,000.00
	<b>Cooperative Projects</b>						
14	Eden Prairie Bank Stabilization -Area #3	\$ -	\$ 4,026.80	\$ 35,000.00	\$ 5,138.21	\$ 35,000.00	\$ 100,000.00
15	Eagle Creek	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
16	Gully Erosion Contingency	\$ -	\$ -	\$ -	\$ 28,320.79	\$ 120,000.00	\$ -
17	USGS	\$ 19,700.00	\$ 19,788.00	\$ 19,700.00	\$ 5,045.75	\$ 19,700.00	\$ -
18	Ravine Stabilization at Seminary Fen in Chaska	\$ -	\$ 110,400.00	\$ 55,200.00	\$ -	\$ -	\$ -
19	Riley Creek Cooperative Project with RPBCWD	\$ -	\$ -	\$ 74,565.67	\$ -	\$ 150,000.00	\$ -
	Seminary Fen Ravine Restoration site A	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 75,000.00
20	Seminary Fen Ravine C-2	\$ -	\$ 313.50	\$ 20,000.00	\$ 97.50	\$ 20,000.00	\$ -
	<b>509 Plan Budget</b>						
	Resource Plan Implementation						
21	Gully Inventory	\$ -	\$ -	\$ 80,000.00	\$ -	\$ 80,000.00	\$ -
22	Minnesota River Corridor Management Project	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 75,000.00
23	TH 101 Ravine/Shakopee	\$ -	\$ 402.97	\$ 35,000.00	\$ -	\$ 350.00	\$ -
24	Assumption Creek Hydrology Restoration Project	\$ 30,000.00	\$ -	\$ -	\$ -	\$ 30,000.00	\$ -
25	Carver Creek restoration Project	\$ 80,000.00	\$ -	\$ 15,000.00	\$ -	\$ -	\$ -
26	Groundwater Screening Tool Model	\$ 50,000.00	\$ -	\$ 50,000.00	\$ -	\$ 50,000.00	\$ -
27	Eagle Creek (East Branch) Project	\$ 10,000.00	\$ -	\$ -	\$ -	\$ -	\$ -
28	Minnesota River Floodplain Model Feasibility Study	\$ 30,000.00	\$ -	\$ -	\$ -	\$ 30,000.00	\$ -
29	Schroeder's Acres Park/Savage Fen Stormwater Management P	\$ 39,555.00	\$ -	\$ 181,055.00	\$ -	\$ 181,055.00	\$ -
30	PLOC Realignment/Wetland Restoration	\$ 71,727.00	\$ -	\$ -	\$ -	\$ -	\$ 70,000.00
31	Spring Creek Project	\$ 45,000.00	\$ 4,543.78	\$ -	\$ -	\$ 45,000.00	\$ 75,000.00
32	West Chaska Creek Project	\$ 50,000.00	\$ -	\$ -	\$ 162.50	\$ 50,000.00	\$ -
33	Sustainable Lakes Management Plan (Trout Lakes)	\$ -	\$ 33,599.90	\$ 50,000.00	\$ 1,223.62	\$ 50,000.00	\$ -
34	Geomorphc Assessments (Trout Streams)	\$ -	\$ 88,771.08	\$ 50,000.00	\$ -	\$ 50,000.00	\$ -
35	Fen Stewardship Program	\$ 25,000.00	\$ 68,183.20	\$ 25,000.00	\$ 68,659.90	\$ -	\$ 25,000.00
36	District Boundary Modification Project	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
37	East Chaska Creek Bank Stabilization Project	\$ 50,000.00	\$ 34,809.45	\$ -	\$ 36,012.40	\$ 50,000.00	\$ -
38	East Chaska Creek Water Quality Treatment Project	\$ 50,000.00	\$ -	\$ -	\$ -	\$ -	\$ -
39	Minnesota River Sediment Reduction Strategy	\$ 25,000.00	\$ -	\$ -	\$ -	\$ -	\$ -
40	Riley Creek Bank Stabilization below CSAH 61	\$ -	\$ 74,724.49	\$ -	\$ -	\$ -	\$ -
41	Local Water Management Plan reviews	\$ 12,000.00	\$ 2,410.70	\$ 8,000.00	\$ 5,024.75	\$ 8,000.00	\$ 15,000.00
42	Project Reviews	\$ 20,000.00	\$ 55,889.43	\$ 20,000.00	\$ 32,867.40	\$ 60,000.00	\$ 50,000.00
43	Monitoring	\$ 65,000.00	\$ 50,030.70	\$ 65,000.00	\$ 12,484.36	\$ 65,000.00	\$ 75,000.00
44	Watershed Management Plan						
45	Next Generation Watershed Management Plan	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
46	Plan Clarification and proposed rules/Rule implementation	\$ 25,000.00	\$ 23,622.62	\$ 56,000.00	\$ 22,647.60	\$ 25,000.00	\$ -
47	Plan Amendment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,000.00
48	Vegetation Management Standard/Plan	\$ 50,000.00	\$ 6,456.10	\$ -	\$ -	\$ 50,000.00	\$ -
49	Public Education/Citizen Advisory Committee/Outreach Program	\$ 30,000.00	\$ 4,533.55	\$ 30,000.00	\$ 8,656.05	\$ 30,000.00	\$ 30,000.00
50	Cost Share Program	\$ 20,000.00	\$ -	\$ 20,000.00	\$ 36.00	\$ 20,000.00	\$ 50,000.00
	<b>Nine Foot Channel</b>						
51	Transfer from General Fund	\$ 80,000.00	\$ 80,000.00	\$ -	\$ -	\$ -	\$ -
52	Dredge Site Restoration	\$ 240,000.00	\$ 60,794.39	\$ 315,000.00	\$ 4,624.05	\$ 315,000.00	\$ 240,000.00
53	<b>Total Non-administrative Expenses:</b>	<b>\$ 1,117,982.00</b>	<b>\$ 723,300.66</b>	<b>\$ 1,204,520.67</b>	<b>\$ 231,000.88</b>	<b>\$ 1,534,105.00</b>	<b>\$ 890,000.00</b>
54	<b>Total Administrative Expenses (from line 13)</b>	<b>\$ 250,000.00</b>	<b>\$ 243,541.53</b>	<b>\$ 250,000.00</b>	<b>\$ 118,073.52</b>	<b>\$ 250,000.00</b>	<b>\$ 250,000.00</b>
55	<b>Total Expenses</b>	<b>\$ 1,367,982.00</b>	<b>\$ 966,842.19</b>	<b>\$ 1,454,520.67</b>	<b>\$ 349,074.40</b>	<b>\$ 1,784,105.00</b>	<b>\$ 1,140,000.00</b>
56	Revenue less Expenses	\$ (185,439.99)	\$ 153,276.65	\$ (362,999.66)	\$ 158,239.12	\$ (691,583.99)	\$ (140,000.00)
57	Beginning Fund Balance - January 1		\$ 1,968,596.14	\$ 2,121,872.79	\$ 2,121,872.79		\$ 1,758,873.13
58	Total Revenue		\$ 1,120,118.84	\$ 1,091,521.01	\$ 507,313.52		\$ 1,000,000.00
59	Total Expenses		\$ (966,842.19)	\$ (1,454,520.67)	\$ (349,074.40)		\$ (1,140,000.00)
60	Ending Fund Balance - December 31 (bold figures are projected)		\$ 2,121,872.79	\$ 1,758,873.13	\$ 2,280,111.91		\$ 1,618,873.13

2021 proposed LMRWD Budget for Administration Operations  
 2019 Adopted Budget/Actuals - 2020 Adopted Budget/YTD/Projected - 2021 Proposed

Account	Adopted 2019	2019 Actual	Adopted 2020	YTD 2020 (Through 5/31/20)	Projected 2020	Proposed 2021
Expenses:						
61 Wages-General	\$ -		\$ -	\$ -	\$ -	\$ -
62 Severance Allowance	\$ -					
63 Benefits	\$ -		\$ -	\$ -	\$ -	\$ -
64 PERA Expense	\$ -		\$ -			
65 Payroll Tax (FICA/Medicare)	\$ -		\$ -	\$ -	\$ -	\$ -
66 Unemployment compensation	\$ -		\$ -			
67 Manager Per Diem	\$ 9,000.00	\$ 3,075.00	\$ 11,250.00	\$ 750.00	\$ 11,250.00	\$ 11,250.00
68 Manager Expense (mileage/food/registrations)	\$ 4,000.00	\$ 1,089.78	\$ 3,000.00	\$ 12.65	\$ 3,000.00	\$ 3,000.00
69 Telecommunications-Cell-Internet/Phone	\$ -	\$ -	\$ 1,000.00	\$ -	\$ 1,000.00	\$ 1,000.00
70 Office Supplies	\$ 300.00	\$ 150.42	\$ 300.00	\$ 76.54	\$ 300.00	\$ 300.00
71 Meeting Supplies/Expense	\$ 100.00	\$ 136.57	\$ 100.00	\$ -	\$ 100.00	\$ 100.00
72 Rent	\$ 8,000.00	\$ 7,800.00	\$ 7,800.00	\$ 3,900.00	\$ 7,800.00	\$ 7,800.00
73 Dues	\$ 7,500.00	\$ 7,500.00	\$ 7,500.00	\$ 7,500.00	\$ 7,500.00	\$ 7,500.00
74 Miscellaneous-General	\$ 3,000.00	\$ 1,585.00	\$ 3,000.00	\$ 811.00	\$ 3,000.00	\$ 3,000.00
75 Training & Education	\$ 1,500.00	\$ 455.56	\$ 1,500.00	\$ -	\$ 1,500.00	\$ 1,500.00
76 Insurance & Bonds	\$ 10,000.00	\$ 9,293.00	\$ 10,000.00	\$ 1,188.00	\$ 10,000.00	\$ 11,000.00
77 Postage	\$ 500.00	\$ -	\$ 500.00	\$ 60.95	\$ 500.00	\$ 375.00
78 Photocopying	\$ 2,000.00	\$ 29.26	\$ 1,000.00	\$ 23.11	\$ 1,000.00	\$ 875.00
79 Legal Notices-General	\$ 1,500.00	\$ 660.80	\$ 1,500.00	\$ 1,867.20	\$ 1,500.00	\$ 1,500.00
80 Subscriptions & License Fees	\$ -	\$ -	\$ -	\$ 282.00	\$ 222.00	\$ 250.00
81 Mileage	\$ 6,000.00	\$ 4,017.57	\$ 5,000.00	\$ 1,160.49	\$ 4,778.00	\$ 5,000.00
82 Taxable meal reimbursement	\$ 500.00	\$ 233.43	\$ 500.00	\$ 52.86	\$ 500.00	\$ 500.00
83 Lodging/ Staff Travel	\$ 1,500.00	\$ 344.67	\$ 1,500.00	\$ -	\$ 1,500.00	\$ 1,500.00
84 Accounting/Payroll Fees	\$ 5,000.00	\$ 5,034.32	\$ 5,500.00	\$ 2,620.10	\$ 5,500.00	\$ 5,382.00
85 Audit Fees	\$ 14,000.00	\$ 14,110.00	\$ 15,000.00	\$ 14,525.00	\$ 15,000.00	\$ 15,000.00
86 Professional Services-General	\$ 121,100.00	\$ 131,118.75	\$ 121,050.00	\$ 53,343.75	\$ 121,050.00	\$ 120,168.00
87 Legal Fees-General	\$ 11,000.00	\$ 5,771.50	\$ 10,000.00	\$ 2,535.00	\$ 10,000.00	\$ 10,000.00
88 Engineering-General	\$ 20,000.00	\$ 27,227.73	\$ 20,000.00	\$ 15,580.81	\$ 20,000.00	\$ 20,000.00
89 Equipment-General	\$ -	\$ 1,610.63	\$ -	\$ -	\$ -	
90 Equipment-Maintenance	\$ 500.00	\$ 414.79	\$ 500.00	\$ 187.09	\$ 500.00	\$ 500.00
91 Equipment-Lease	\$ 3,000.00	\$ 1,882.72	\$ 2,500.00	\$ 1,596.95	\$ 2,500.00	\$ 2,500.00
92 Newsletter Expense(Web Articles)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
93 Lobbying	\$ 20,000.00	\$ 20,000.03	\$ 20,000.00	\$ 10,000.02	\$ 20,000.00	\$ 20,000.00
94 Total Expense for Administration:	\$ 250,000.00	\$ 243,541.53	\$ 250,000.00	\$ 118,073.52	\$ 250,000.00	\$ 250,000.00



Manager \_\_\_\_\_ introduced the following resolution and moved its adoption:

RESOLUTION 20-05

LOWER MINNESOTA RIVER WATERSHED DISTRICT

PRELIMINARY CERTIFICATION OF PROPERTY TAX LEVIES FOR CARVER COUNTY

FOR TAXES PAYABLE 2021

AND APPROVAL OF 2021 PROPOSED BUDGET

WHEREAS, the Board of Managers of the Lower Minnesota River Watershed District ("LMRWD") has proposed a total budget of One Million Sixty Five Thousand and 00/100 Dollars (\$1,065,000.00) for the fiscal year commencing January 1, 2021; and

WHEREAS, the proposed budget requires Seven Hundred Twenty Five Thousand Dollars (\$725,000) to be raised from an ad valorem tax levy on taxable property in the LMRWD, apportioned according to the attached Schedule A, for the purpose of paying administrative expenses (Minnesota Statutes § 103D.905 Subd. 3) of Two Hundred Fifty Thousand Dollars (\$250,000) and providing for a planning and implementation fund (Minnesota Statutes § 103B.241) of Four Hundred Seventy Five Thousand Dollars (\$475,000).

NOW, THEREFORE, BE IT RESOLVED, that the Secretary, in accordance with Minnesota Statutes, shall certify to the Auditors of Carver County, the following sum to be raised by levy on all taxable property in the Lower Minnesota River Watershed District payable in the year 2021 for the purposes noted above: Forty Two Thousand Eight Hundred Seventy One and 43/100 Dollars (\$42,871.43), as provided in Minnesota Statutes, Sections 103D.911 and 103D.915; and

BE IT FURTHER RESOLVED by the Board of Managers of the LMRWD that the 2021 Budget as proposed is hereby approved.

Adopted by the Board of Managers of the Lower Minnesota River Watershed District this 19th day of August, 2020.

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Jesse Hartmann, President

ATTEST:

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David L. 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: Frey, Hartmann, Raby and Salvato; and the following voted against the same: None. Whereupon said resolution was declared passed and adopted, this 19th day of August, 2020, signed by the President and his signature attested by the Secretary/Treasurer.

**SCHEDULE A**

District 060 - Lower MN River Watershed

The following table was presented for the Managers' consideration with regard to the proposed amounts to be levied in each separate county, based upon the net tax capacities available:

**Preliminary Certification of Apportioned Levies**

**Payable 2021**

1)	General Fund (M.S. 103D.905, Subd.3)		\$250,000.00	
2)	Planning and Implementation Fund (M.S. 103B.241)		\$475,000.00	
3)	Payable 2021 Property Tax Levy		\$725,000.00	
	<u>County</u>	(4) Payable 2020 Taxable Net Tax Capacity	(5) Net Tax Capacity Percent Distribution	(6) Apportioned Payable 2020 Levy \$725,000 x column (5)
	Carver	\$7,176,843	5.9133%	\$42,871.43
	Dakota	\$12,213,736	10.0634%	\$72,959.65
	Hennepin	\$53,283,230	43.9025%	\$318,293.13
	Scott	\$48,693,595	40.1208%	\$290,875.80
	<b>TOTAL</b>	<b>\$121.367,404</b>	<b>100.00%</b>	<b>\$725,000.01</b>

Manager \_\_\_\_\_ introduced the following resolution and moved its adoption:

RESOLUTION 20-06

LOWER MINNESOTA RIVER WATERSHED DISTRICT

PRELIMINARY CERTIFICATION OF PROPERTY TAX LEVIES FOR DAKOTA COUNTY

FOR TAXES PAYABLE 2021

AND APPROVAL OF 2021 PROPOSED BUDGET

WHEREAS, the Board of Managers of the Lower Minnesota River Watershed District ("LMRWD") has proposed a total budget of One Million Sixty Five Thousand and 00/100 Dollars (\$1,065,000.00) for the fiscal year commencing January 1, 2021; and

WHEREAS, the proposed budget requires Seven Hundred Twenty Five Thousand Dollars (\$725,000) to be raised from an ad valorem tax levy on taxable property in the LMRWD, apportioned according to the attached Schedule A, for the purpose of paying administrative expenses (Minnesota Statutes § 103D.905 Subd. 3) of Two Hundred Fifty Thousand Dollars (\$250,000) and providing for a planning and implementation fund (Minnesota Statutes § 103B.241) of Four Hundred Seventy Five Thousand Dollars (\$475,000).

NOW, THEREFORE, BE IT RESOLVED, that the Secretary, in accordance with Minnesota Statutes, shall certify to the Auditors of Dakota County, the following sum to be raised by levy on all taxable property in the Lower Minnesota River Watershed District payable in the year 2021 for the purposes noted above: Seventy Two Thousand Nine Hundred Fifty Nine and 65/100 Dollars (\$72,959.65), as provided in Minnesota Statutes, Sections 103D.911 and 103D.915; and

BE IT FURTHER RESOLVED by the Board of Managers of the LMRWD that the 2021 Budget as proposed is hereby approved.

Adopted by the Board of Managers of the Lower Minnesota River Watershed District this 19th day of August, 2020.

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Jesse Hartmann, President

ATTEST:

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David L. 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: Frey, Hartmann, Raby and Salvato; and the following voted against the same: None. Whereupon said resolution was declared passed and adopted, this 19th day of August, 2020, signed by the President and his signature attested by the Secretary/Treasurer.

**SCHEDULE A**

District 060 - Lower MN River Watershed

The following table was presented for the Managers' consideration with regard to the proposed amounts to be levied in each separate county, based upon the net tax capacities available:

**Preliminary Certification of Apportioned Levies**

**Payable 2021**

1)	General Fund (M.S. 103D.905, Subd.3)		\$250,000.00	
2)	Planning and Implementation Fund (M.S. 103B.241)		\$475,000.00	
3)	Payable 2021 Property Tax Levy		\$725,000.00	
	<u>County</u>	(4) Payable 2020 Taxable Net Tax Capacity	(5) Net Tax Capacity Percent Distribution	(6) Apportioned Payable 2020 Levy \$725,000 x column (5)
	Carver	\$7,176,843	5.9133%	\$42,871.43
	Dakota	\$12,213,736	10.0634%	\$72,959.65
	Hennepin	\$53,283,230	43.9025%	\$318,293.13
	Scott	\$48,693,595	40.1208%	\$290,875.80
	<b>TOTAL</b>	<b>\$121.367,404</b>	<b>100.00%</b>	<b>\$725,000.01</b>

Manager \_\_\_\_\_ introduced the following resolution and moved its adoption:

RESOLUTION 20-07

LOWER MINNESOTA RIVER WATERSHED DISTRICT

PRELIMINARY CERTIFICATION OF PROPERTY TAX LEVIES FOR HENNEPIN COUNTY

FOR TAXES PAYABLE 2021

AND APPROVAL OF 2021 PROPOSED BUDGET

WHEREAS, the Board of Managers of the Lower Minnesota River Watershed District ("LMRWD") has proposed a total budget of One Million Sixty Five Thousand and 00/100 Dollars (\$1,065,000.00) for the fiscal year commencing January 1, 2021; and

WHEREAS, the proposed budget requires Seven Hundred Twenty Five Thousand Dollars (\$725,000) to be raised from an ad valorem tax levy on taxable property in the LMRWD, apportioned according to the attached Schedule A, for the purpose of paying administrative expenses (Minnesota Statutes § 103D.905 Subd. 3) of Two Hundred Fifty Thousand Dollars (\$250,000) and providing for a planning and implementation fund (Minnesota Statutes § 103B.241) of Four Hundred Seventy Five Thousand Dollars (\$475,000).

NOW, THEREFORE, BE IT RESOLVED, that the Secretary, in accordance with Minnesota Statutes, shall certify to the Auditors of Hennepin County, the following sum to be raised by levy on all taxable property in the Lower Minnesota River Watershed District payable in the year 2021 for the purposes noted above: Three Hundred Eighteen Thousand Two Hundred Ninety Three and 13/100 Dollars (\$318,293.13), as provided in Minnesota Statutes, Sections 103D.911 and 103D.915; and

BE IT FURTHER RESOLVED by the Board of Managers of the LMRWD that the 2021 Budget as proposed is hereby approved.

Adopted by the Board of Managers of the Lower Minnesota River Watershed District this 19th day of August, 2020.

\_\_\_\_\_  
Jesse Hartmann, President

ATTEST:

\_\_\_\_\_  
David L. 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: Frey, Hartmann, Raby and Salvato; and the following voted against the same: None. Whereupon said resolution was declared passed and adopted, this 19th day of August, 2020, signed by the President and his signature attested by the Secretary/Treasurer.



Manager \_\_\_\_\_ introduced the following resolution and moved its adoption:

RESOLUTION 20-08

LOWER MINNESOTA RIVER WATERSHED DISTRICT

PRELIMINARY CERTIFICATION OF PROPERTY TAX LEVIES FOR SCOTT COUNTY

FOR TAXES PAYABLE 2021

AND APPROVAL OF 2021 PROPOSED BUDGET

WHEREAS, the Board of Managers of the Lower Minnesota River Watershed District ("LMRWD") has proposed a total budget of One Million Sixty Five Thousand and 00/100 Dollars (\$1,065,000.00) for the fiscal year commencing January 1, 2021; and

WHEREAS, the proposed budget requires Seven Hundred Twenty Five Thousand Dollars (\$725,000) to be raised from an ad valorem tax levy on taxable property in the LMRWD, apportioned according to the attached Schedule A, for the purpose of paying administrative expenses (Minnesota Statutes § 103D.905 Subd. 3) of Two Hundred Fifty Thousand Dollars (\$250,000) and providing for a planning and implementation fund (Minnesota Statutes § 103B.241) of Four Hundred Seventy Five Thousand Dollars (\$475,000).

NOW, THEREFORE, BE IT RESOLVED, that the Secretary, in accordance with Minnesota Statutes, shall certify to the Auditors of Scott County, the following sum to be raised by levy on all taxable property in the Lower Minnesota River Watershed District payable in the year 2021 for the purposes noted above: Two Hundred Ninety Thousand Eight Hundred Seventy Five and 80/100 Dollars (\$290,875.80), as provided in Minnesota Statutes, Sections 103D.911 and 103D.915; and

BE IT FURTHER RESOLVED by the Board of Managers of the LMRWD that the 2021 Budget as proposed is hereby approved.

Adopted by the Board of Managers of the Lower Minnesota River Watershed District this 19th day of August, 2020.

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Jesse Hartmann, President

ATTEST:

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David L. 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: Frey, Hartmann, Raby and Salvato; and the following voted against the same: None. Whereupon said resolution was declared passed and adopted, this 19th day of August, 2020, signed by the President and his signature attested by the Secretary/Treasurer.

**SCHEDULE A**

District 060 - Lower MN River Watershed

The following table was presented for the Managers' consideration with regard to the proposed amounts to be levied in each separate county, based upon the net tax capacities available:

**Preliminary Certification of Apportioned Levies**

**Payable 2021**

1)	General Fund (M.S. 103D.905, Subd.3)		\$250,000.00	
2)	Planning and Implementation Fund (M.S. 103B.241)		\$475,000.00	
3)	Payable 2021 Property Tax Levy		\$725,000.00	
	<u>County</u>	(4) Payable 2020 Taxable Net Tax Capacity	(5) Net Tax Capacity Percent Distribution	(6) Apportioned Payable 2020 Levy \$725,000 x column (5)
	Carver	\$7,176,843	5.9133%	\$42,871.43
	Dakota	\$12,213,736	10.0634%	\$72,959.65
	Hennepin	\$53,283,230	43.9025%	\$318,293.13
	Scott	\$48,693,595	40.1208%	\$290,875.80
	<b>TOTAL</b>	<b>\$121.367,404</b>	<b>100.00%</b>	<b>\$725,000.01</b>



Manager \_\_\_\_\_ introduced the following resolution and moved its adoption:

RESOLUTION 20-09

LOWER MINNESOTA RIVER WATERSHED DISTRICT

RESOLUTION APPROVING MID-YEAR BUDGET ADJUSTMENT FOR FISCAL YEAR 2020 AND  
AUTHORIZING DISTRICT ADMINISTRATOR TO IMPLEMENT SAME

WHEREAS, the Board of Managers approved and adopted the Lower Minnesota River Watershed District ("LMRWD") annual budget for the current fiscal year 2020; and

WHEREAS, in order to address changes to the LMRWD operations, certain revised funding allocation and adjustments to the annual budget need to be made and accounted for, upon recommendations of the District Administrator and approval by the Board of Managers; and

WHEREAS, the LMRWD Channel Fund has a surplus and the transfer of funds from the General Fund is no longer necessary; and

WHEREAS, the LMRWD identified the need to inventory gullies and ravines within the boundaries of the LMRWD in Dakota and Scott Counties; and

WHEREAS, the City of Chaska determined to proceed in 2020 with a study to assess Ravine C-2, which was scheduled for the year 2024.

NOW, THEREFORE, BE IT RESOLVED by the Board of Managers of the LMRWD, that the Board of Managers hereby amends the 2020 Channel Fund budget by eliminating the \$80,000 transfer from the General Fund and allocates that money to funding the gully inventory and condition assessment for those portions of Dakota and Scott Counties that fall within the boundaries of the LMRWD; and

BE IT FURTHER RESOLVED by the Board of Managers of the LMRWD that \$20,000 from the 2020 Water Resource Fund will be used to fund the study of Ravine C-2 in the City of Chaska.

Adopted by the Board of Managers of the Lower Minnesota River Watershed District this 19th day of August, 2020.

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Jesse Hartmann, President

ATTEST:

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David L. 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: Frey, Hartmann, Raby and Salvato; and the following voted against the same: None. Whereupon said resolution was declared passed and adopted, this 19th day of August, 2020, signed by the President and his signature attested by the Secretary/Treasurer.

Project Name/account number		Fiscal Year	Revenues	Expenses	Balance/(Shortfall)
Gully Erosion Contingency Fund 77-701-000-0101	This fund was set up after the LMRWD retained the services of the MN Conservation Corps to conduct a Gully Inventory. The District has set aside a contingency fund to finance projects which consist of constructing bluff stabilization projects with cooperating partners (primarily municipalities) in those areas identified in the District's gully inventory as having severe erosion that have yet to be stabilized or identified specifically in the CIP for the Plan. No City has ever requested funding. This funding is currently being used to update the Gully Inventory by assessing the conditions of the inventoried gullies and by documenting additional gullies.	2012	\$ 25,000.00	\$ -	
		2013	\$ 5,000.00	\$ -	
		2014	\$ -	\$ 67,681.00	
		2015	\$ 40,000.00	\$ 875.00	
		2016	\$ 40,000.00	\$ -	
		2018	\$ 40,000.00	\$ -	
		2019	\$ -	\$ -	
		2020	\$ -	\$ 28,320.79	
			<b>\$ 150,000.00</b>	<b>\$ 96,876.79</b>	<b>\$ 53,123.21</b>
Credit River 77-701-000-0102	This money was to be completed in cooperation with Scott County. It consists of projects aimed at restoring the Credit River at five sites within the LMRWD as outlined in the 2008 Credit River Geomorphic Assessment Report. One of the projects consists restoration of the natural channel and involves rebuilding a portion of stream channel in Savage north of Highway 13 in the Minnesota River floodplain. Two projects consist of riparian vegetative restoration in Savage south of Highway 13. The final two projects consist of replacement and repair of the culvert crossing which spans Highway 13 in Savage.	2013	\$ 1,000.00	\$ -	\$ 1,000.00
			<b>\$ 1,000.00</b>	<b>\$ -</b>	
Dakota Ravine Project Savage Scott/WMO 77-701-000-0116	This project was to stabilize a ravine in the City of Savage. The City and Scott County were partners with the LMRWD. The ravine was located north of Savage City Hall on Dakota Avenue. The project was completed several years ago. The LMRWD never received a request for funding and likely will not at this point.	2013	\$ 5,000.00	\$ -	\$ 5,000.00
			<b>\$ 5,000.00</b>	<b>\$ -</b>	
Seminary Fen Restoration 77-701-000-0118	This project proposed to restore a 6 acre portion of Seminary Fen that was formerly ditched and tiled. This project proposed to restore the natural hydrologic regime by rendering the tile and ditch ineffective in draining the wetland by partial removal and blocking of the tile and ditch modifications to eliminate the man made hydrologic scope and affect on the wetland. The project will restore the native plant community by controlling reed canary grass and re-introducing native plant species. Collection of seed for this project will be from City owned land adjacent to the project site to insure local ecotype seed is utilized. Restoring native vegetation will offere further vegetative buffering protection to the Seminary Fen, protecting the Fen's native plant diversitv	2012	\$ 36,000.00	\$ -	\$ 33,911.50
		2013	\$ -	\$ -	
		2014	\$ -	\$ 471.50	
		2015	\$ -	\$ 1,617.00	
			<b>\$ 36,000.00</b>	<b>\$ 2,088.50</b>	
Ravine Stabilization @ Seminary Fen* 77-701-000-0103	Ravine erosion was causing a large area of sedimentation along the north half of Seminary Fen. This project is phase 2 of a project that was completed in 2009 by the City of Chaska that invovled restoration of a wetland outlet for rate control to the ravine. Stabilization of the ravine is still necessary to reduce the transport of sediment to the Fen complex. Annualized sediment transport was modeled using 1-D bedload sediment tranpsort model by Meyer-Peter and Muller (1948). Under existing conditions, sediment transport to the Fen is estimated at 1.85 million tons per year. The goal of this project is to complete ravine stabilization improvements that are estimated to reduce the transport rate of sediment to 0.68 million tons per year. This represents a 63% reduction in sediment load to Seminary Fen. This is the project that the LMRWD received a grant from the Clean Water Fund. This is the grant funding that was lost because of the late filing of the final reporting.	2012	\$ 50,000.00	\$ -	
		2013	\$ 100,000.00	\$ -	
		2014	\$ 100,000.00	\$ 90.00	
		2015	\$ 100,000.00	\$ -	
		2016	\$ -	\$ 100,000.00	
		2017	\$ -	\$ 147,856.39	
		2018	\$ -	\$ -	
		2019	\$ -	\$ 110,400.00	
		2020	\$ -	\$ -	
			<b>\$ 350,000.00</b>	<b>\$ 358,346.39</b>	
Long Meadow Outfall* 77-701-000-0117	This project consists of implementing, in cooperation with the City of Bloomington, one of two alternatives to address water quality improvement downstream of Long Meadow Lake. The two alternatives include: abandon storm sewer outfall to Long Meadow Lake from Bloomington Central Station area and reroute through a regional infiltration basin likely on the Kelley Farm property during redevelopment. From the Kelley Farm property the storm sewer would discharge to the Bass Ponds area, keeping in mind the trout stream currently being stocked in the Bass Ponds area.	2013	\$ 100,000.00	\$ -	\$ 200,000.00
		2014	\$ 100,000.00	\$ -	
		2015	\$ 100,000.00	\$ 100,000.00	
			<b>\$ 300,000.00</b>	<b>\$ 100,000.00</b>	

Long Meadow Outfall* (continued)	The completed project reconstructed existing storm sewer outfall to Long Meadow Lake from the Bloomington Central Station area and incorporated water quality best management practices to provide additional treatment.				
Dean Lake Feasibility Study 77-701-000-0104	The LMRWD prepared a feasibility study of Dean Lake. This project was to implement the results of the study. The project consisted of financing adjacent septic systems connection to city sanitary sewer, construction of sedimentation basins, water quality treatment BMPs in the upstream watershed, improvements to the inlet and outlet, shoreline restoration and/or in-lake management such as dredging and chemical treatment. Dean Lake was listed as impaired for nutrients on the 303(d) list. In the course of the study it was determined that Dean Lake functions more like an open water wetland than a shallow lake. The LMRWD requested that the MPCA consider changing the classification of Dean Lake from a shallow lake to an open water wetland. Dean Lake was removed from the 303(d) list in 2018.	2013 2014 2015	\$ 15,000.00 \$ 100,000.00 \$ 30,000.00 <b>\$ 145,000.00</b>	\$ 13,761.81 \$ 25,719.00 \$ 1,634.75 <b>\$ 41,115.56</b>	<b>\$ 103,884.44</b>
Vegetation Management Standard 77-702-000-0104	This project addresses Policy 7.2.1 in the LMRWD Watershed Management Plan; Develop a Vegetation Management Standard/Plan. The strategy consists of the District undertaking an effort in partnership with the DNR, USFWS, BWSR, NRCS, and NGOs (e.g. Great River Greening), to develop a vegetation management standard/plan for unique natural resources within the District. This plan would be functional for all who live, work, and invest in the District. While many of the cities and counties within the District have vegetation management standards, the standards are inconsistent. In addition, the District has not established vegetation management standards addressing practices such as vegetative cutting, and clearing on bluffs, and steep slopes.	2013 2014 2015 2016 2018 2019	\$ 10,000.00 \$ 15,000.00 \$ 15,000.00 \$ 15,000.00 \$ - \$ 50,000.00 <b>\$ 105,000.00</b>	\$ - \$ - \$ - \$ - \$ 3,304.75 \$ 9,927.90 <b>\$ 13,232.65</b>	<b>\$ 91,767.35</b>
Data Assessments & Program Review 77-702-000-0123	This item has the same activity code as the Fen project. It was in the 2011 Plan without an explanation as to what the funds would be used for. The costs shown here are expenses that have been incurred by the District for Technical Assistance provided by the SWCD's.	2012 2014 2016 2017 2018 2019	\$ 40,000.00 \$ 40,000.00 \$ 40,000.00   <b>\$ 120,000.00</b>	  \$ 491.00 \$ 2,223.58 \$ 2,410.50 \$ 676.00 <b>\$ 5,801.08</b>	<b>\$ 114,198.92</b>
USGS 77-701-000-0115	This project is a partnerships between USGS, the US Army Corps of Engineers and the LMRWD to monitor suspended sediment concentration and bedload sediment accumulation in the Minnesota River. The USGS is wrapping up the project this year (2020) because the location of monitoring equipment was washed away by the 2019 flooding. The pier that supported the equipment was owned by the Metropolitan Council and it was decided that it is too expensive to replace.	2013 2014 2015 2016 2017 2018 2019 2020	\$ - \$ 8,000.00 \$ 18,000.00 \$ 10,000.00 \$ 18,500.00 \$ 18,500.00 \$ 19,700.00 \$ 19,700.00 <b>\$ 112,400.00</b>	\$ 12,800.00 \$ 19,692.00 \$ 15,088.00 \$ 18,188.00 \$ 18,631.00 \$ 19,400.00 \$ 19,788.00 \$ 10,091.50 <b>\$ 133,678.50</b>	<b>\$ (21,278.50)</b>
Study Area #3 77-701-000-0105	To address river bank erosion, the LMRWD will analyze the design and construction a project to stabilize the Minnesota River bank at Study Area #3 in Eden Prairie. A study was completed in 2008 for the City of Eden Prairie in cooperation with the District. The District is currently undertaking a project that will update and expand the 2008 study by collecting and analysing additional data that will extend to the final design, permitting and construction.	2016 2017 2018 2019 2020 2021	\$ - \$ 75,000.00 \$ - \$ - \$ 35,000.00 \$ 100,000.00 <b>\$ 210,000.00</b>	\$ 1,081.00 \$ 5,144.66 \$ 1,371.00 \$ 4,026.80 \$ 10,150.48 \$ - <b>\$ 21,773.94</b>	<b>\$ 188,226.06</b>

Overlook Outfall 77-701-000-0119	The City of Bloomington proposed to replace a failing storm sewer outfall between Overlook Lake and Coleman Lake. This project came from the City of Bloomington when the previous generation of the LMRWD Plan was developed. The project was completed using FEMA money the City received after heavy rains in 2014.	2015	\$ 100,000.00	\$ -	\$ 100,000.00
			\$ 100,000.00	\$ -	
Seminary Fen Draintile 77-701-000-0120	This project was brought to the District by the City of Chaska in 2015. MNDOT was looking for alternatives for TH 41 to cross the MN River. One option was to bridge Seminary Fen. An in-depth study was done. The study identified an area of the peat dome within the fen that was tiled many years ago. The City of Chaska proposed that the tile be removed or the lines be broken to end the ability of the tile to convey water. Working with the DNR it was decided that a project such as this may have a detrimental affect on the fen, so the project did not ever move forward.	2015	\$ 25,000.00	\$ -	\$ 25,000.00
			\$ 25,000.00	\$ -	
Bluff Creek Cooperative Project 77-701-000-0121	This was a project of the Riley Prugatory Bluff Creek Watershed District. The project would have stabilized banks of Bluff Creek below the MN River Bluffs Trail and created a fish passage through the reach of stabilized creek and the tunnel under the trail. RPBCWD was never able to obtain easements necessary to construct the project and lost the grant. The project was never completed. The funds allocated to this project were originally planned to be used to fund restoration of a portion of river bank in the City of Carver. The City addressed the issue without funding from the LMRWD.	2015	\$ 50,000.00	\$ -	\$ 50,000.00
			\$ 50,000.00	\$ -	
Eagle Creek 77-702-000-0108	This project will restore approximately 2,400 feet of stream and repair erosion under the 128th Street Bridge. The goals of the project are to reduce erosion and improve fish habitat. Due to beaver dams, the stream cuts into three valley walls, contributing to significant deposits of sediment. This project will be a partnership with the DNR and possibly Trout Unlimited.	2017	\$ 12,000.00	\$ -	\$ 22,000.00
		2019	\$ 10,000.00	\$ -	
			\$ 22,000.00	\$ -	
East Chaska Creek 77-702-000-0124	Identified in the East Chaska Creek Restoration feasibility study, the scour hole downstream of Crosstown Boulevard Bridge will be repaired, bank amoring installed, toe protection and grade control structures added behind Cuzzy's Brickhouse Restaurant, and bank amoring and protection installed on the right bank of East Oak Street. Completion of this project is planned for fall of 2020. The LMRWD received a grant of \$25,472 under the Metro-area Watershed Based Funding Pilot Program.	2015	\$ -	\$ 19,369.65	\$ 157,561.58
		2016	\$ 200,000.00	\$ 2,006.35	
		2018	\$ -	\$ 3,510.74	
		2019	\$ 50,000.00	\$ 27,700.38	
		2020	\$ -	\$ 39,851.30	
		2021	\$ -	\$ -	
	\$ 250,000.00	\$ 92,438.42			
East Chaska Creek Treatment Wetland 77-702-000-0129	The East Chaska Creek feasibility study reported that an ideal location to construct a treatment wetland was south of the creek in two vacant lots along Chaska Boulevard. Most lots there are paved right up to the edge of the creek bank. Creek flow could be diverted from the channel into a stormwater treatment system to provide for sediment removal, flood storage and bacteria treatment. East Chaska Creek is impaired for Acquatic macroinvertebrate bioassessments, fishes bioassessments, turbidity and fecal coliform. The vacant lots were owned by the Chaska Economic Development Authority and since the feasibility study have been developed. It is unlikely this project will be completed.	2018	\$ 10,000.00	\$ -	\$ 60,000.00
		2019	\$ 50,000.00	\$ -	
			\$ 60,000.00	\$ -	
Bloomington Non-degradation Volume Reduction Project 77-702-000-0106 (This account number has been reassigned)	The City of Bloomington was one of 30 Minnesota municipalities required to meet non-degradtion requirements as part of the NPDES MS4 Permit. The non-degradation report evaluated changes in runoff quantity and quality from 1988 to the present, and projected changes from the present to the year 2020. Where significant increases in stormwater runoff occurred or were projected to occur, options to keep pollutant loading from receiving waters at the 1988 levels were discussed. This project would involve a volume reduction to meet the non-degradation requirement and return pollutant loading to 1988 levels. The City has addressed this issue in by other means in its most recent Surface Water Management Plan.	2016	\$ 125,000.00	\$ -	\$ 125,000.00
			\$ 125,000.00	\$ -	

Riley Creek Cooperative Project 77-701-000-0107	This project is a joint project between RPBCWD, the City of Eden Prairie and the LMRWD. RPBCWD planned to restore a portion of Riley Creek to stabilize the banks and reconnect the creek with its floodplain. The LMRWD wanted to restore and stabilize a portion of Riley Creek in the LMRWD. The LMRWD reach was completed by Ames Construction as part of the Flying Cloud Drive transportation improvement project. Because the project in the RPBCWD will reduce the amount of sediment in Riley Creek, the LMRWD is contributing \$150,000 to that portion of the project. This is in addition to the project completed in the LMRWD. The City of Eden Prairie will be responsible for maintenance of the project within RPBCWD once it is complete.	2016 2017 2018 2019 2020	\$ 45,000.00 \$ 100,000.00 \$ 50,000.00 \$ - \$ 74,565.67	\$ 39,052.63 \$ 6,315.55 \$ 75,075.49 \$ - \$ -	<b>\$ 149,122.00</b>
<b>Fen Assessment &amp; Analysis</b>	This project consists of completing a floristic quality assessment that provides a replicable, descriptive picture in time of the fens. Used as a baseline indicator of fen condition to be compared against conditions in the future (i.e., track degradation or functional lift). The project will update the MLCCS and MnRAM to: provide a complete, accurate baseline dataset of wetland plant communities found in the marshes. Include quality control of existing data and addition of new information.  All three of these categories (listed to the left) have been dedicated to the LMRWD's work on calcareous fens, even though the name of the line in the budget has changed from year to year. This is the same activity code as the Data Assessment and Program Reviews. The revenues reflect the year and title listed in LMRWD budget.	2015 2016 2017	\$ - \$ - \$ 75,000.00	\$ 11,911.75 \$ 2,818.25 \$ 7,000.01	<b>\$ 210,581.24</b>
<b>Dakota County Ground Water Modeling</b>		2017 2019 2020	\$ 35,000.00 \$ 50,000.00 \$ 50,000.00		
<b>Fen Stewardship Project</b> 77-702-000-0123		2018 2019 2020 2021	\$ 75,000.00 \$ 25,000.00 \$ 25,000.00 \$ 25,000.00	\$ 2,655.51 \$ 50,681.45 \$ 74,351.79	
			<b>\$ 360,000.00</b>	<b>\$ 149,418.76</b>	
Sustainable Lakes Management Plan (trout waters) 77-702-000-0104	This project will develop a plan for management of trout lakes within the LMRWD. The Sustainable Lakes Management Plan (SLMP) will assess aquatic plant coverage, exotic species issues, shoreline conditions, nutrients and temperature dynamics, stormwater and groundwater contributions, and roles and responsibilities. A management plan will be developed, as well as an implementation plan and schedule. Recreational opportunities will be assessed.	2018 2019 2020 2021	\$ 50,000.00 \$ - \$ 50,000.00	\$ - \$ 17,554.65 \$ 12,343.87	<b>\$ 70,101.48</b>
Geomorphic Assessment of Trout Streams 77-702-000-0106	The geomorphic assessment of trout streams will consider changes in trout stream alignment, confluence point(s), or geometry, and stream reaches upstream and downstream of the confluence point(s). Stream width-to-depth ratios, stream bed slope, meander pattern, and other bed features shall be modeled according to a stable reference reach. Reference reaches are nearby, hydrologically, and geomorphically-stable stream segments. A reference reach could be upstream or downstream, or in a nearby watershed. Assessment of the current and future discharge and sediment regimes shall be based on watershed conditions that are above stream or as close as possible to the stream.	2018 2019 2020 2021	\$ 50,000.00 \$ - \$ 50,000.00 \$ -	\$ 2,729.75 \$ 91,175.37	<b>\$ 6,094.88</b>
Paleolimnology Study 77-702-000-0111	This project was completed in partnership with Freshwater and LaCore at the University of Minnesota. Cores were taken from floodplain lakes in the Minnesota River Valley and analyzed to determine if sedimentation rates could be correlated with changes to upstream land uses.	2018	\$ 50,000.00 <b>\$ 50,000.00</b>	\$ 37,200.00 <b>\$ 37,200.00</b>	<b>\$ 12,800.00</b>
District Boundary adjustments 77-702-000-0128	This project will work with adjacent water management organizations to better align LMRWD boundaries with the flow of surface water.	2018	\$ 10,000.00 <b>\$ 10,000.00</b>	\$ - <b>\$ -</b>	<b>\$ 10,000.00</b>
MN River Sediment reduction strategy 77-702-000-0130	This project will collaborate with the MPCA to develop strategies for evaluating and mitigating sediment loads coming into the Minnesota River.	2018 2019	\$ 25,000.00 \$ 25,000.00 <b>\$ 50,000.00</b>	\$ - \$ - <b>\$ -</b>	<b>\$ 50,000.00</b>

Lower Minnesota River Watershed District Capital Improvement Project Spreadsheet  
as of June 30, 2020

Add a column for project schedule

Assumption Creek Hydrology Restoration	Assumption Creek is a trout stream, so it is important to maintain the temperature of the groundwater discharge. According to the City of Chaska, portions of the creek dry out periodically. It is unknown exactly what has reduced the hydrology of the creek. It may have been the U.S. Army Corps of Engineers' diversion project, historic creek rerouting for the brick factory, road construction, or other development effects. This project will evaluate opportunities available to resupply the groundwater hydrology to the creek. Assumption Creek is impaired for Aquatic macroinvertebrates bioassessments.	2019	\$ 30,000.00	\$ -	\$ 30,000.00
			\$ 30,000.00	\$ -	
Carver Creek	This project includes stabilizing the outer bends of Carver Creek with toe protection, grading banks to a more stable slope and stabilizing the gully. Carver Creek is impaired for Nutrients, Turbidity, Fecal Coliform, Fishes bioassessment and Aquatic macroinvertebrates bioassessments.	2019	\$ 80,000.00	\$ -	\$ 95,000.00
		2020	\$ 15,000.00	\$ -	
			\$ 95,000.00	\$ -	
MN River Floodplain Model feasibility study 77-702-000-0110	This project will review the existing Minnesota River floodplain model to determine if updates are required. The current model was a partnership between the LMRWD, DNR and the U.S. Army Corps of Engineers' and was developed in 2004.	2019	\$ 30,000.00	\$ -	\$ 30,000.00
			\$ 30,000.00	\$ -	
Schroeder Acres Park WBF/Savage	Schroeder Acres Park is located in the city of Savage within the LMRWD. The goal is to improve the overall health of Eagle Creek, a designated trout stream, by reducing bacteria, and nutrients, managing temperature, reducing volume, evaluate impacts of chlorides. The LMRWD has received a \$60,000 grant through the Metro-area Watershed Based Funding Pilot Program for this project.	2019	\$ 39,555.00	\$ -	\$ 220,610.00
		2020	\$ 181,055.00	\$ -	
			\$ 220,610.00	\$ -	
Prior Lake Outlet Channel Realignment	This project includes a feasibility study to determine potential water quality benefits to Dean Lake that would result from restoration of the Prior Lake Outlet Channel including altering the alignment (creating meanders) and constructing a flow-through wetland complex to slow the flow of water. Funds will also be used towards the construction of identified activities/BMP's that will benefit water quality in Dean Lake and, subsequently, the Minnesota River downstream. The LMRWD has received a \$71,570 grant through the Metro-area Watershed Based Funding Pilot Program for this project.	2019	\$ 71,727.00	\$ -	\$ 141,727.00
		2020	\$ -	\$ -	
		2021	\$ 70,000.00	\$ -	
			\$ 141,727.00	\$ -	
Spring Creek restoration project	This project is to study Spring Creek hydrology and hydraulics to validate the proposed 2019 stabilization designs for 112 5th Street West and 404 Broadway Street in Carver, MN. Spring Creek is impaired for Fecal Coliform. (Although it is not on the public waters inventory)	2019	\$ 45,000.00	\$ 4,543.78	\$ 115,456.22
		2020	\$ -	\$ -	
		2021	\$ 75,000.00	\$ -	
			\$ 120,000.00	\$ 4,543.78	
West Chaska Creek Cooperative Project/CCWMO	The project will re-meander approximately 1,100 linear feet of a ditched segment of West Chaska Creek. Lengthening the channel will reduce water velocity, lower sheer stress on the banks, reconnect the creek to its floodplain and reduce the amount of sediment transported downstream to the Minnesota River. Based on upstream reference reaches and changes observed since the creek was straightened, the project will reduce TSS by an estimated 4,400 pounds per year for 30 years. This project is a partnership with Carver County WMO, who is responsible for development and execution of the project. The LMRWD agreed to contribute \$50,000 to the project. West Chaska Creek is impaired for Fecal Coliform.	2019	\$ 50,000.00	\$ -	\$ 49,837.50
		2020	\$ -	\$ 162.50	
			\$ 50,000.00	\$ 162.50	
TH101 Ravine/Shakopee	This project addresses a storm water issue at the site of the Amazon Fulfillment Center in Shakopee that was flowing across a burial site located within the boundaries of Murphy's Landing. Funding for this project was allocated from the Water Resource Fund.	2019	\$ -	\$ 402.97	\$ 34,597.03
		2020	\$ 35,000.00	\$ -	
			\$ 35,000.00	\$ 402.97	
Gully Inventory	This work will build upon the 2020 Gully Inventory and Condition Assessment report by identifying potential gullies that were not inspected or assessed in the original 2007 Gully Inventory. Using GIS software and supplemental fieldwork, this work will identify potential gullies that are	2020	\$ 80,000.00	\$ -	\$ 80,000.00
			\$ 80,000.00	\$ -	

Lower Minnesota River Watershed District Capital Improvement Project Spreadsheet  
as of June 30, 2020

Add a column for project schedule

Gully Inventory (continued)	contributing to the flow and sediment accumulation of the Minnesota River from the cities of Burnsville, Eagan, Savage, and Shakopee as well as develop recommendations for future field work to assess the condition of these gullies. Funding for this projects is the re-allocation of funds that were being used to address the deficit in the 9 foot Channel Fund.				
Minnesota River Corridor Management Project	Using the Minnesota River as a focal point, this project will examine issues facing the river's complex natural system, a shared resource and a place where varied interests and other systems converge. The LMRWD seeks to (1) creat a greater understanding of the Lower Minnesota River Corridor and its landscape, (2) demonstrate a desired future for the river and how change in the surrounding landscape can help attain this future, (3) suggest a structure or framework by which the vision can be implemented and (4) identify shared community and public values that form the basis of the project. (this design is modeled after the Vermillion River Corridor Plan.)	2021	\$ 75,000.00	\$ -	\$ 75,000.00
			<b>\$ 75,000.00</b>	<b>\$ -</b>	<b>\$ 75,000.00</b>
				<b>TOTAL CIP Funds</b>	<b>\$ 2,681,975.52</b>

Items highlighted in blue are projects that are did not occur or are complete and have funds remaining.

\* There are multiple years these projects were included in the yearly budget on which the levy was based. This resulted in an increase in the fund balance.





Young Environmental Consulting  
Group, LLC

# Technical Memorandum

**To:** Linda Loomis, Administrator  
Lower Minnesota River Watershed District

**From:** Della Schall Young, CPESC, PMP

**Date:** August 14, 2020

**Re:** LMRWD 3rd and 4th quarter 2020 and 2021 Work Plans

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Below is a table summary of the attached work plans for the third and fourth quarter 2020 and 2021. Young Environmental developed the work plans, as requested, to present the purpose and intent of each project where funds have been levied or will be levied according to the activities outlined in the District's watershed management plan.

Projects	2012–19	2020	2021
<b>Spring Creek Hydrology and Hydraulic Study:</b> The proposed study resulted from complaints from two residents with properties abutting Spring Creek that have and continue to sustain damage from erosion. This study is designed to develop the modeling to validate and potentially enhance the proposed 2019 creek stabilization designs for 112 5th Street West and 404 Broadway Street in Carver, Minnesota.	X	X	X
<b>Calcareous Fens:</b> This brings three activities for moving the District's understanding of these high-value resources: (1) completing the value engineering workshop, which will guide the development of the predictive tool and monitoring network; (2) to complete the Gun Club Fen stormwater intrusion study; and (3) to draft the Seminary Fen Management Plan.	X	X	X
<b>Assumption Creek Hydrology Assessment:</b> The hydrology of the trout stream needs to be studied and restored. As noted in the 2019 Geomorphic Assessment and highlighted in the watershed management plan, the hydrology needs to be evaluated for opportunities to resupply the surface and groundwater to the creek.	X		

Projects	2012–19	2020	2021
<p><b>Minnesota River Floodplain Model Feasibility Study:</b> The District Rules have incorporated the flood fringe into the overall floodplain management. However, modeling for projects is evaluated individually, not based on the cumulative effects of all these projects on the Minnesota River floodplain and flood fringe. This study would review the current models and consider the cumulative effects of the projects on the Minnesota River floodplain and flood fringe.</p>	X		
<p><b>Gully Inventory and Assessment (South Side):</b> This work will build upon the 2020 Gully Inventory and Condition Assessment report by identifying potential gullies that were not inspected or assessed in the original 2007 Gully Inventory. Using GIS software and supplemental fieldwork, this work will identify potential gullies that are contributing to the flow and sediment accumulation of the Minnesota River from the cities of Burnsville, Eagan, Savage, and Shakopee, as well as develop recommendations for future field work to assess the condition of these gullies.</p>		X	
<p><b>Minnesota River Corridor Management Project:</b> The plan will examine the pressures on the river from inside the watershed and will expand to consider areas upland of the watershed, given that the river is itself a complex natural system and a shared resource where varied interests such as recreation and commerce converge. The outcome will be the development of a shared vision for maximizing public benefits, including the following: (1) creating greater understanding of the Lower Minnesota River Corridor and its landscape, (2) describing a desired future for the river and discussing how change in the surrounding landscape can help attain this future, (3) suggesting a structure or framework by which the vision can be implemented, and (4) identifying shared public values that form the basis of the project.</p>			X
<p><b>Education and Outreach:</b> This presents the activities for the newly formed E&amp;O activities, such as the 60th Anniversary, as well as the formation and management of the citizen advisory committee and watershed signages.</p>			X

## LOWER MINNESOTA RIVER WATERSHED DISTRICT

### Spring Creek Hydrology and Hydraulics Study

WORK PLAN – August 3, 2020

#### **Summary**

<i>Outcome:</i>	Spring Creek hydrology and hydraulics study to validate the proposed 2019 stabilization designs for 112 5 <sup>th</sup> Street West and 404 Broadway Street in Carver, MN.
<i>Project Partners:</i>	Minnesota Department of Natural Resources (MNDNR), U.S. Army Corps of Engineers (USACE), Carver County, and City of Carver
<i>Timeline for Completion of Project:</i>	September through December 2020
<i>Total Project Budget:</i>	\$20,900–\$26,200

#### **Objective 1. Project Management**

*Task 1-1: Project plan development and project management.* Finalize the workplan; assign project tasks; determine whether additional resources are needed; set dates for deliverables; generate and maintain project schedule/Gantt chart.

*Timeline for Completion:* September 2020

*Deliverables:* Invoices and project updates

*Estimated Budget:* \$2,500–\$3,000

#### **Objective 2. Data Collection and Review**

*Task 2-1: Gather available information.* Collect available background resource information and modeling data from public resources including the City of Carver, the Minnesota Department of Natural Resources, and the U.S. Army Corps of Engineers. Hydrology information from the USGS StreamStats website also will be reviewed to determine if it is appropriate for this project in lieu of developing a separate hydrology model. Any available soils data also will be collected to evaluate the potential for scour and sediment transport. The data collected and used will be summarized in a technical memorandum in Objective 5.

*Timeline for Completion:* September 2020

*Estimated Budget:* \$2,600–\$2,900

#### **Objective 3. Hydrology Model**

*Task 3-1: Develop a hydrology dataset for the hydraulic modeling.* Evaluate the StreamStats data collected in Objective 2 and determine if it is appropriate to use these flows for the hydraulic modeling. If the error associated with the StreamStats data is determined to be too high or uncharacteristic of the flows occurring in Spring Creek, then develop a preliminary HEC-HMS model to determine design flows for the Spring Creek watershed. Flows to be determined include bankfull (approximately 1- to 2-year event), 10-year, 50-year, 100-year, and 500-year flood events, consistent with FEMA requirements for floodplain submittals.

*Task 3-2: Evaluate changes in hydrology and watershed.* The 2019 Spring Creek Assessment Summary conducted by Barr included recommendations to evaluate changes in hydrology from the larger Spring Creek watershed to determine what the area may experience in the future and aid in the design of stabilization measures. Using the LMRWD “Climate Assessment” memorandum developed as part of the 2020 LMRWD “Fens

Sustainability Gaps Analysis,” we also will estimate future hydrologic conditions as influenced by climate change and future land use changes in the City of Carver.

*Timeline for Completion:* September through October 2020

*Deliverable:* Design flows for existing conditions as well as predicted conditions

*Estimated Budget:* \$2,300–\$5,400

#### **Objective 4. Hydraulic Model**

*Task 4-1: Develop preliminary model:* Using HEC-RAS, we will develop a 1D model of the lower Spring Creek existing conditions, from the confluence with the Minnesota River to approximately 6<sup>th</sup> Street West in the City of Carver, consistent with current FEMA floodplain standards. Using the design flows developed in Objective 3, the existing conditions and future hydrologic conditions will be evaluated and water surface elevations, velocities, and stream power within the channel will be determined. Preliminary results will be presented in tabular and graphical form for review.

*Task 4-2: Quality control and review:* Barr Engineering will provide a review of the hydrology and hydraulic models and results developed in Tasks 3 and 4 to ensure compatibility with regional and federal floodplain standards and to confirm that best engineering practices have been applied. Barr Engineering will provide Young Environmental with a summary of specific comments that should be addressed in Task 4-3.

*Task 4-3: Finalize models:* Based on the comments received by Barr Engineering in Task 4-2, Young Environmental will update the hydrologic and hydraulic models and revise the result tables and figures.

*Task 4-4: Evaluate 2019 proposed designs:* The 2019 Barr report included the Carver SWCD conceptual plans for two residences along Spring Creek (112 5<sup>th</sup> Street West and 404 Broadway Street). Those proposed designs will be reevaluated based on the updated channel flows and velocities determined in Task 4-3. Recommendations will be made to improve the resilience of the proposed stabilization measures for long-term success.

*Timeline for Completion:* October through November 2020

*Deliverables:* HEC-RAS modeling, results, and maps; design recommendations

*Estimated Budget:* \$5,700–\$6,300

#### **Objective 5. Documentation**

*Task 5-1: Develop a draft technical memorandum:* Develop a draft technical memorandum that will document the data collected, methods and software used, and results from the hydrologic and hydraulic models. Based on the results from the hydraulic modeling, the proposed stabilization designs will be evaluated, and any proposed revisions will be presented. The draft memo will be submitted to the District and city partners for consideration and written feedback.

*Task 5-2: Finalize the Report:* Finalize draft report and incorporate project partners, district administrator, and managers’ written feedback.

*Timeline for Completion:* November–December 2020

*Deliverables:* Draft and final memo and results

*Estimated Budget:* \$7,800–\$8,600

## LOWER MINNESOTA RIVER WATERSHED DISTRICT

### Calcareous Fens

WORK PLAN—August 3, 2020

*During 2019–2020, the District completed a comprehensive review of the calcareous fens within its jurisdiction, and the review is documented in the 2020 Fen Sustainability Gaps Analysis for Carver, Dakota, and Scott Counties Minnesota report (Report). The fens are Gun Club Lake North and South Fens, Nicols Meadow Fen and Black Dog Fen in Dakota County, Seminary Fen in Carver County, and Savage Fen in Scott County. The report recommends a number of activities necessary to protect and preserve these high value resources. The recommendations for priority action are presented below and are based on partner interest and the available information.*

#### **Summary**

<i>Outcome:</i>	various reports and analysis
<i>Project partners:</i>	Minnesota Department of Natural Resources (DNR), US Fish and Wildlife Service (USFWS), stakeholder organizations, other partner agencies
<i>Timeline for completion of project:</i>	October 2020–December 2021
<i>Total project budget:</i>	\$87,000–\$109,250

#### **Objective 1. Groundwater Recharge Value Engineering Workshop**

*Task 1-1: Value Engineering Workshop.* Over the past few years, the District has considered numerous methods of understanding the sustainability of calcareous fens within its jurisdiction, including modeling and predicting the effects of permitted pumping and climate on the system as well as monitoring and tracking both dynamic and static water levels of the fens. Through a facilitated two- to three-hour workshop, we will bring groundwater professionals together to review the available information on the fens and the District’s goals to develop the best approach for understanding fen groundwater management sustainability.

*Timeline for completion:* two months

*Deliverables:* invitational e-mail, agenda, review package, and instructions and outcomes summary

*Estimated objective 1 budget:* \$5,000–\$7,500

#### **Objective 2. Gun Club Fen Stormwater Intrusion Study**

*Task 2-1: Stormwater Intrusion Study.* During spring 2020, the DNR approached the District about investigating a scar that has formed within the Gun Club North Fen (see the attached map). This study will investigate the sources of the stormwater channeled toward the fen and will generate concept plans to mitigate the flow upstream and/or diffuse it when it enters the fen to correct the scar.

*Timeline for completion:* three months

*Deliverables:* draft and final feasibility study

*Estimated objective 2 budget:* \$17,000–23,750

### **Objective 3: Seminary Fen Management Plan**

*Task 3-1. Complete the Fen Management Plan.* Over the past ten years or so, the DNR, Metropolitan Council, and other stakeholders have convened a workgroup focused on protecting the Seminary Fen. The appears to have stalled, but the *Fen Sustainability Gaps Analysis* completed by the District should be used to reignite the workgroup to complete the management plan. The work would consist of facilitating workgroup discussions focused on reviewing the outcomes of the *Fen Sustainability Gaps Analysis*, the pending *Trout Streams Study*, and participating in the value engineering workshop to develop a comprehensive management plan for the fen.

*Timeline for completion:* twelve months

*Deliverables:* agendas, meeting summaries, and the draft and final management plan

*Estimated budget:* \$45,000–\$53,000

*Task 3-2. Complete Vegetation Study (Relevé).* The DNR has identified five locations within the Seminary Fen relevé plots to be completed. For these relevés, as with the ones being completed on Gun Club Lake and the Nicols Meadow fens, the DNR recommends that the studies are completed with two separate field visits—one in June or early July and the other in August or early September. The dual survey ensures all species are visible and identifiable during one of the two visits.

*Timeline for completion:* five months

*Deliverables:* floristic quality assessment and summary observations

*Estimated budget:* \$20,000–\$25,000

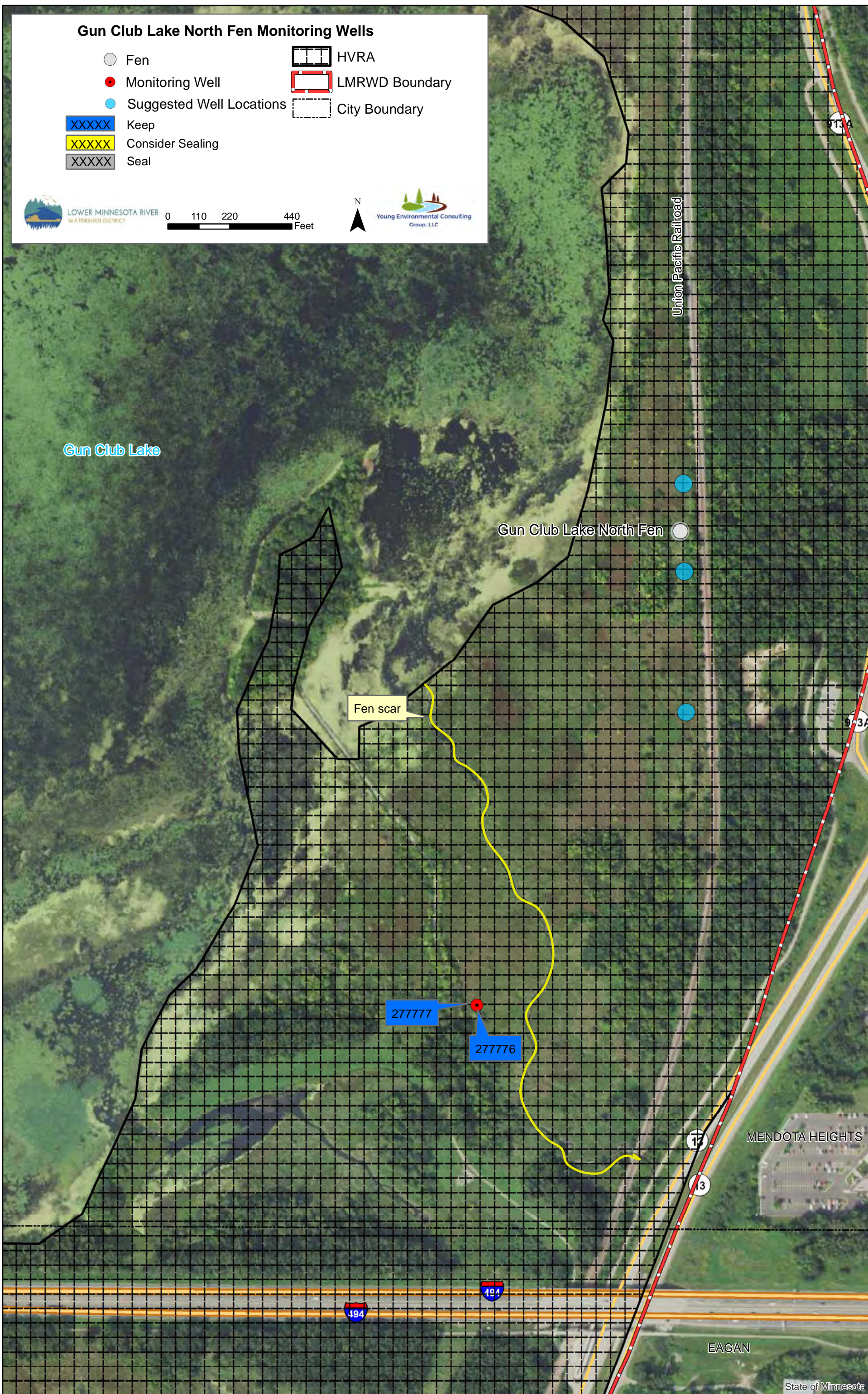
### Gun Club Lake North Fen Monitoring Wells

- Fen
- Monitoring Well
- Suggested Well Locations
- XXXXX Keep
- XXXXX Consider Sealing
- XXXXX Seal
- ▭ HVRA
- ▭ LMRWD Boundary
- ▭ City Boundary



LOWER MINNESOTA RIVER  
WATERSHED DISTRICT

0 110 220 440  
Feet



## LOWER MINNESOTA RIVER WATERSHED DISTRICT

### Assumption Creek Hydrology Assessment

WORK PLAN—August 10, 2020

#### **Summary**

<i>Outcome:</i>	Assumption Creek Hydrology Assessment, to be used as a supplemental report for the Trout Streams Gaps Analysis and Seminary Fen Management Plans. Building off the 2019 <i>Trout Streams Geomorphology Study</i> and the 2020 <i>Fens Suitability Gaps Analysis</i> , this assessment will focus on the hydrogeology of the system and the contributing stormwater inflows.
<i>Project partners:</i>	Minnesota Department of Natural Resources (MNDNR), US Army Corps of Engineers (USACE), Carver County, and City of Chaska
<i>Timeline for completion of project:</i>	September–December 2020
<i>Total project budget:</i>	\$27,200–\$30,000

#### **Objective 1. Project Management**

*Task 1-1: Project plan development and project management.* Finalize the workplan; assign project tasks; determine whether additional resources are needed; set dates for deliverables; generate and maintain project schedule and Gantt chart.

*Deliverables:* invoices and project updates

*Estimated budget:* \$2,500–\$3,000

#### **Objective 2. Data Collection and Review**

*Task 2-1: Gather the available information.* Collect background resource information from previous District efforts, including the *Strategic Resources Evaluation Plan*, *Geomorphic and Habitat Assessments of Trout Streams in the Lower Minnesota River Watershed District*, and *LMRWD Fen Sustainability Plan* as well as from public resources, including the City of Chaska, Minnesota Department of Natural Resources, and US Army Corps of Engineers. Together, with the current Trout Streams Strategic Management Plan project, develop a standardized e-mail for LMRWD to send to project partners notifying them about the project and advising that they may be contacted by Young Environmental staff.

*Task 2-2: Desktop analysis.* From the information collected in Task 2–1, perform a historic aerial photo analysis of the Assumption Creek watershed and develop a comprehensive list of past land uses and activities that may have altered the surface water and groundwater hydrology near Assumption Creek. Review soils data to identify areas of potential groundwater recharge in the watershed and review land-use changes from the historic aerial photo analysis. A simple hydrology model may also be developed to determine the potential surface water runoff contribution to the creek and downstream Seminary Fen.

*Timeline for completion:* September 2020

*Deliverables:* Standardized e-mail to project partners, desktop analysis, project partner meeting agendas, and summaries.

*Estimated budget:* \$5,400–\$5,800

#### **Objective 3. Field Work**



*Task 3-1: Complete gaps analysis for Assumption Creek.* Evaluate the data collected in Objective 2 for any gaps that would be necessary to restore the hydrology and groundwater connection for Assumption Creek. Review the data for evidence of channel instability, including the presence of mid-channel bars in the east reach. Additionally, this task will include coordination with Barr to reevaluate the 2019 recommendations and others to aid in closing these gaps.

*Task 3-2: Collect field data.* Visit the locations south of Flying Cloud Drive on Assumption Creek that were inaccessible during the 2019 field work because of flooding on the Minnesota River, and perform geomorphology and habitat assessments following the same methodology and procedures used in 2019. The 2019 report completed by Barr Engineering included recommendations for additional field work: 1) Collect additional flow measurements upstream and downstream of Seminary Fen to quantify baseflow conditions; and 2) If site conditions allow, assess the portion of Assumption Creek downstream of Flying Cloud Drive with the same methodology and procedures used in 2019.

*Timeline for completion:* September–October 2020

*Deliverables:* gaps analysis and field data collection

*Estimated budget:* \$6,900–\$7,600

#### **Objective 4. Documentation**

*Task 4-1: Generate draft outline.* Generate a draft annotated outline that documents the findings and recommendations of Objectives 2 and 3 and that outlines opportunities that may exist to restore the groundwater hydrology.

*Task 4-2: Develop the draft report.* Build on the annotated outline and develop the draft report documenting the methods, assumptions, procedures, results, and recommendations. Submit the draft report to the District and project partners for consideration and written feedback.

*Task 4-3: Present approach and preliminary recommendations.* Present the approach and preliminary recommendations to the project partners and the District’s managers.

*Task 4-4: Finalize the report.* Finalize the draft report and incorporate project partners’, district administrators’, and managers’ written feedback.

*Timeline for completion:* October–December 2020

*Deliverables:* annotated outline, draft report, preliminary plan presentation, and final report

*Estimated budget:* \$12,400–\$13,600

## LOWER MINNESOTA RIVER WATERSHED DISTRICT

### Lower Minnesota River Floodplain Development Procedures and Model Action Plan

WORK PLAN—August 9, 2020

#### **Summary**

<i>Outcome:</i>	Floodplain Regulation Procedures and Model Action Plan
<i>Project partners:</i>	Minnesota Department of Natural Resources (MNDNR), US Army Corps of Engineers (USACE), Dakota County, Carver County, Scott County, Hennepin County, and the fourteen LMRWD Partner Cities
<i>Timeline for completion:</i>	August through December 2020
<i>Total project budget:</i>	\$27,000–\$30,000

#### **Objective 1. Project Management**

*Task 1-1: Project plan development and project management.* Finalize the work plan, assign project tasks, determine whether additional resources are needed, set dates for deliverables, generate and maintain project schedule/Gantt chart.

*Deliverables:* Invoices, project updates

*Estimated budget:* \$2,500–\$3,000

#### **Objective 2. Data Collection and Review**

*Task 2-1: Gather available information.* Collect background resource information from previous District permits as well as from public resources, including existing modeling data from the MnDNR, Letter of Map Changes from FEMA, and direct requests LMRWD partner cities listed above. Develop standardized email for LMRWD to send to project partners notifying them about the project and advising that they may be contacted by Young Environmental staff.

*Task 2-2: Desktop analysis.* From the information collected in Task 2-1, develop a comprehensive list of items needed to regulate floodplain development effectively and fairly within the District. This task will also develop a comprehensive list of available stormwater and floodplain models in the District, including date last updated and software platform used.

*Timeline for completion:* August through October 2020

*Deliverables:* Standardized email to project partners, draft floodplain development procedures criteria, available models

*Estimated budget:* \$5,500–\$6,000

#### **Objective 3. Project Partner Coordination**

*Task 3-1: Solicit input from project partners.* Reach out to all project partners to solicit input on floodplain development regulation, current floodplain permitting procedures, available floodplain models, and interest in cooperatively working with the District to develop a regional floodplain model. This task will begin following LMRWD notification to project partners in Objective 2.

*Task 3-2: Assess project partner input.* We will assess project partner responses from Task 3-1 to refine the floodplain development procedures developed in Objective 2 and look for opportunities to develop a regional LMRWD floodplain model. This task will outline opportunities and constraints related to developing a regional LMRWD model, including modeling platforms, data needs, and recommendations.

*Timeline for completion:* September through October 2020

*Deliverables:* Project partner meeting agendas and summaries, refinements to floodplain development procedures criteria, available model outline

*Estimated budget:* \$6,200–\$7,000

#### **Objective 4. Documentation**

*Task 4-1: Generate draft outline.* Generate a draft annotated outline that documents the findings and recommendations of Objectives 2 and 3 and build the foundation for a LMRWD Model Action Plan.

*Task 4-2: Develop the draft report.* Build on the annotated outline; develop the draft LMRWD Model Action Plan documenting methods, assumptions, procedures, results, and recommendations. Submit draft report to the District and project partners for consideration and written feedback.

*Task 4-3: Finalize the report.* Finalize LMRWD Model Action Plan, incorporating project partners', district administrator's, and managers' written feedback.

*Timeline for completion:* October through December 2020

*Deliverables:* Annotated outline, draft plan, preliminary plan presentation, final plan

*Estimated budget:* \$12,800–\$14,000

## LOWER MINNESOTA RIVER WATERSHED DISTRICT

### **GULLY 2: SOUTH SIDE OF THE MINNESOTA RIVER DESKTOP ASSESSMENT AND FIELD INVENTORY AND CONDITION ASSESSMENT**

WORK PLAN—July 31, 2020

*Using the Minnesota River as a focal point, this project will examine issues facing the river's complex natural system, which is a shared resource and a place where varied interests and other systems converge. This work will build upon the 2020 Gully Inventory and Condition Assessment report by identifying potential gullies that were not inspected or assessed in the original 2007 Gully Inventory. Using GIS software and supplemental fieldwork, this work will identify potential gullies that are contributing to the flow and sediment accumulation of the Minnesota River from the cities of Burnsville, Eagan, Savage, and Shakopee as well as develop recommendations for future field work to assess the condition of these gullies.*

#### **Summary**

*Outcome:* Identify and make recommendations for future field work and condition assessments of gullies located in the cities of Burnsville, Eagan, Savage, and Shakopee within the Lower Minnesota River Watershed District.

*Timeline for completion:* January 2021–September 2021

*Project partners:* Minnesota Department of Natural Resources (MnDNR), US Fish and Wildlife Service (USFWS), Trout Unlimited, City of Burnsville, City of Eagan, City of Savage, City of Shakopee, Dakota County, and Scott County

*Audience (For whom this plan is intended):* Cities and counties within the Lower Minnesota River Watershed District (LMRWD) and resource and land use professionals

*Total project budget:* \$67,600–\$74,900

#### **Objective 1. Project Management**

*Task 1-1: Project plan development and project management.* Finalize the workplan, assign project tasks, determine if additional resources are needed, set dates for deliverables, and generate and maintain project schedule/Gantt chart.

*Timeline for completion:* 5–12 months

*Estimated budget:* \$3,300–\$4,000

#### **Objective 2. Desktop Analysis**

*Task 2-1: Review background information.* As part of the 2020 Gully Inventory and Assessment Project, the Young Environmental staff collected information from public resources for all cities within the District. Information was extracted for only the sites visited as part of the 2007 Inventory, and the south side of the District was not reviewed as part of that scope. The compiled information will be reviewed, and municipalities within this study area may be contacted for additional information and to determine areas of concern, proposed projects, and completed projects that may affect future field work and surveys. In addition, this task will include coordination with the USFWS and Minnesota Department of Natural Resources to gain permission to perform survey work on their land.

*Task 2-2: Gully erosion susceptibility analysis.* From the information collected and reviewed in Task 2-1, we will identify and map potential gullies as well as proposed and completed municipal projects that may address gully erosion. Contact partners (identified above) for additional information as needed. Develop a Gully Erosion Susceptibility Analysis and map using geospatial data to estimate which areas within the southern LMRWD

watershed may be susceptible to gully erosion. The analysis will include MnDNR LiDAR data, soil types, land use and land cover, and surficial geology.

*Task 2-3: Fieldwork prioritization.* From the map of potential and unassessed sites developed in Task 2-2, we will identify additional data that may be needed to complete future field work. We will work with project partners as needed, including coordinating meetings with the municipalities to discuss draft findings and incorporating their input into the final technical memorandum recommendations.

*Task 2-4: Technical memo.* Develop a list of recommendations to guide future field work assessments. The methodology developed for the desktop analysis will be documented and results and recommendations presented in a technical memorandum to be appended to the final 2020 Gully Inventory Report as a supplemental appendix.

*Timeline for completion:* 4–6 weeks

*Estimated budget:* \$5,500–\$6,200

### **Objective 3. Field Work**

*Task 3-1: Collect new gully waypoints and field condition assessments.* Following the same methodology developed for the *2020 Gully Inventory and Condition Assessment*, conduct site visits to each of the identified gullies from objective 2. As before, Young Environmental will use interns to collect photographs, waypoint locations, and notes detailing the condition of each of the gullies using the same field data collection sheets developed as part of the 2020 Gully Inventory and Assessment Project.

*Task 3-2: Collect drone survey bids.* Following the completion of the 2020 field season, a final list will be compiled of the sites that were inaccessible because of steep slopes or other safety concerns. We will have local drone experts assess the final list and create mapping to determine if a drone survey is feasible. If a drone survey is determined to be feasible, a separate scope of work will be developed to complete it.

*Task 3-3: Gully ranking.* Based on the gully condition assessment, Young Environmental will rate the identified and assessed gullies in the LMRWD using the same methodology developed in the *2020 Gully Inventory and Assessment* report. Criteria to be used will include the potential for sediment loading into the Minnesota River, proximity to HVRA or 303-listed impaired waterbody, and interest by project partners.

*Timeline for completion:* 8–12 weeks, dependent on weather

*Estimated budget:* \$52,100–\$57,400

### **Objective 4. Documentation**

*Task 4-1: Draft technical memorandum.* Develop a technical memorandum that presents the methods, results, and recommendations from the 2020–21 fieldwork and append to the final *2020 Gully Inventory and Condition Assessment* report. The draft memorandum will be provided to the district and partners for comment.

*Task 4-2: Finalize technical memorandum and append to final 2020 Gully Inventory and Condition Assessment Report.* Submit the final technical memorandum and findings to the District and project partners. Append final technical memorandum to the final report for documentation.

*Timeline for completion:* 4 weeks

*Estimated budget:* \$6,600–\$7,300

## LOWER MINNESOTA RIVER WATERSHED DISTRICT

### Minnesota River Corridor (MRC) Plan

WORK PLAN—August 3, 2020

*Using the Minnesota River as a focal point, this project will examine issues that face the river's complex natural system, which is a shared resource and a place where varied interests converge. The result of this project will be a multipurpose corridor plan that will serve as a guiding document for all the political jurisdictions and agencies. It will seek to create a new foundation for cooperation and strategic financial investment that can provide multiple benefits.*

*The plan will examine the pressures on the river from inside the watershed and will expand to consider areas upland of the watershed, given that the river is itself a complex natural system and a shared resource where varied interests such as recreation and commerce converge. The outcome will be the development of a shared vision for maximizing public benefits, including the following: (1) creating greater understanding of the Lower Minnesota River Corridor and its landscape, (2) describing a desired future for the river and discussing how change in the surrounding landscape can help attain this future, (3) suggesting a structure or framework by which the vision can be implemented, and (4) identifying shared public values that form the basis of the project.*

*Potential management strategies will also be identified as part of the process to improve water quality, integrate wildlife habitat and outdoor recreation, and create a framework for more sustainable economic development within the watershed. The plan will also recognize the role of private land ownership in the development of the watershed and will provide landowners with the tools and opportunities to become more involved and implement best practices.*

#### **Summary**

<i>Outcome:</i>	Minnesota River Corridor (MRC) Plan
<i>Project partners:</i>	Residents and business owners of LMRWD, Minnesota Board of Water and Soil Resources (BWSR), Minnesota Department of Natural Resources (DNR), US Army Corps of Engineers (USACE), US Coast Guard, US Fish and Wildlife Service (USFWS), Friends of the Mississippi, Minnesota Valley Refuge Friends, stakeholder organizations, and other partner agencies
<i>Timeline for completion:</i>	September 2020 through July 2021
<i>Total project budget:</i>	\$86,100–\$100,000

#### **Objective 1. Project Management**

*Task 1-1: Project plan development and project management.* Finalize the workplan; assign project tasks; determine if additional resources are needed; set dates for deliverables; generate and maintain the project schedule and Gantt chart.

*Timeline for completion:* September 2020 through July 2021

*Deliverables:* Invoices and project updates

*Estimated budget:* \$8,200–\$9,800

#### **Objective 2. Collect and Review Data**

*Task 2-1: Review and build on past efforts.* Gather previous plans and studies from partners' websites, past LMRWD studies and projects, and available online data sources. Review to develop a comprehensive list of

resources that exist within or near the District that address water quality, habitat and natural resources, land use and community plans, recreational opportunities, and infrastructure or other intersecting systems.

*Task 2-2: Preliminary issue identification and qualitative analysis.* Using the information collected in Task 2-1, review the data to identify key concerns, shared values or goals, and projected growth within the watershed. Develop a list of the priority sites and issues as a starting point for public engagement activities.

*Task 2-3: GIS mapping.* Develop watershed mapping to characterize the Lower Minnesota River Corridor by water quality, habitat and natural resources, land use and community plans, recreational opportunities, and infrastructure or other intersecting systems. Maps will be developed to document the current conditions across the corridor as well as to map the needs related to the Corridor Plan goals.

*Timeline for completion:* September through November 2020

*Deliverables:* Development of data matrix and identification of key issues within the watershed from previous studies, preliminary mapping of existing watershed conditions

*Estimated budget:* \$14,400–\$17,300

### **Objective 3. Partnering and Public Engagement**

*Task 3-1: Contact potential project partners and outreach.* Reach out to project partners, including municipal partners, county partners, DNR, USFWS, BWSR, landowners (business, agricultural, and residential), recreation and stewardship agencies, and other partner agencies with an introductory email and request a point of contact for those interested in participating in the MRC and technical advisory group process. These points of contact will be asked to participate in future discussions with the District to help identify major issues.

*Task 3-2: Focus groups.* Three information gathering sessions will be held with randomly selected residential, business, and agricultural landowners located within the watershed and with stewardship and recreation organizations. Participants will be asked to provide their insights into how they value the river, how the river has changed over time, what regulatory issues they have encountered, and what they hope the plan will accomplish. These meetings will be held virtually. Another information gathering session will be held with local watershed organizations that may also be contacted for advice about advertising for public workshops and identifying problems, particularly any lessons-learned from the COVID19 pandemic. Such organizations may include Friends of the Mississippi River and the Vermillion River Watershed District.

*Task 3-3: Partner workshops.* Review the proposed process and objectives with partners for their endorsement; solicit feedback and learn how their expertise and knowledge of the resource can lend itself to the project. Facilitate a virtual open house to characterize the partners' perspectives of the watershed and the key issues identified in Objective 2. Three workshops will be held virtually and are generally discussed below:

#### *Workshop 1: A River Worth Protecting*

The goal of the first workshop is to introduce attendees to the MRC Plan and identify priorities for water quality, habitat, appropriate recreation, and future growth opportunities. The workshop will be broken into regional sessions, by county.

#### *Workshop 2: Working Together*

The second workshop will offer participants the opportunity to review and refine the draft concepts for the full corridor plan.

#### *Workshop 3: Putting the Plan into Action*

The third workshop will allow the participants to refine the corridor concepts that constitute the Corridor Plan vision. Input will be sought into how the plan will be coordinated and implemented.

*Task 3-4: Open house.* The draft Minnesota River Corridor Plan will be released for public review and presented at an open house during the public review and comment period. The session will be unstructured to allow project

team members to answer questions and engage participants in discussion about the draft plan. A summary of the received comments will be provided and incorporated into the final document.

*Task 3-5: Surveys.* Develop an online survey to be incorporated to the LMRWD website to solicit feedback from residents, businesses, and those with an interest in the LMRWD. This survey will be used to determine what the public believes are the key issues facing the District.

*Task 3-6: Regulation review.* With the adoption of the District Rules in February 2020, we propose to set aside some time in the MRC to check in with partners on the permitting process. While the substance of the rules is not new, the regulatory process is, and there may be room to improve the implementation of the rules and permits as well as reduce costs for the District. Part of this task will include a review of the LMRWD processes compared to other metro watershed districts and state-level water regulation.

*Task 3-7: Issue identification and qualitative analysis update.* We will update the preliminary issue identification and qualitative analysis based on the feedback from our public outreach activities.

*Timeline for completion:* October 2020–June 2021

*Deliverables:* Agendas, facilitation, and summaries for all meetings, workshops, and open houses specified above

*Estimated budget:* \$18,400–\$25,800

#### **Objective 4. Corridor Plan**

*Task 4-1: Generate draft outline.* Generate a draft of an annotated outline for the MRC Plan, with the following goals cited from the LMRWD’s 2018 Watershed Management Plan:

- *G1. Create greater understanding of the Lower Minnesota River Corridor and its landscape*
- *G2. Describe the desired future of the river and discuss how change in the surrounding landscape can help attain this future*
- *G3. Suggest a structure or framework by which the vision can be implemented*
- *G4. Identify shared public values that form the basis of the project.*

*Task 4-3: Draft the Lower Minnesota River Corridor Plan.* Utilize information gathered from local resources, partners, previous LMRWD projects, goals, and objectives or strategies to draft the plan. Circulate the draft among project partners for written feedback and allow for a two-week review period. A single page handout will that summarizes the draft report will also be completed for the project partner review.

*Task 4-3: Draft plan for public comment and review.* Incorporate project partner feedback, finalize the draft plan, and make it available for a 30-day public comment period.

*Task 4-4: Final plan.* After incorporating comments received during the public comment period, the final report will be updated, finalized, and presented to the board for acceptance.

*Timeline for completion:* December 2020–July 2021

*Deliverables:* A draft report for internal review, a public draft report for public comment, and a final report

*Estimated budget:* \$45,100–\$47,100



## LOWER MINNESOTA RIVER WATERSHED DISTRICT

### 2020–21 Public Education and Outreach Plan

WORK PLAN—August 10, 2020

#### **Summary**

<i>Outcome:</i>	2020–22 Public Education and Outreach Plan
<i>Project partners:</i>	City partners, residents, and businesses of the District; US Fish and Wildlife Service (USFWS); US Army Corps of Engineers (USACE); and non-governmental organizations (NGOs)
<i>Timeline for completion of project:</i>	August 2020–December 2021
<i>Total project budget:</i>	2020: \$27,625 – \$34,575 2021: \$61,275 – \$73,325

#### **Objective 1. 60th Anniversary**

*Task 1-1: Commemorative 60th anniversary YouTube video.* This year signifies the District’s 60th year of operation. To commemorate the milestone, a YouTube video will be developed, integrating the historical significance of the organization, its current realities as managers strive to protect high-value resources (calcareous fens, trout waters, and the beautiful Minnesota River Bluffs), and the District’s future. The video will include interviews from past and current board managers and partners.

*Task 1-2: Newspaper article.* As a companion piece to Task 2-1, an article will be developed for the website. The article will include infographics and a historical timeline. In addition, the team will contact environmental reporters at NPR and the *Star Tribune* to publish pieces on the District.

*Timeline for Completion:* August 2020–December 2020

*Deliverables:* YouTube video, newsletter, and articles on NPR and in the *Star Tribune*

*Estimated budget:* \$18,900–\$23,500

#### **Objective 2. Citizen Advisory Committee (CAC)**

*Task 2.1: Organize a CAC of five members or more.* The District has been without a CAC, an integral part of its mission, since 2009. This has been due in large part to the boundaries of the District, which largely contains commercial and natural areas. Over the past four to five years, the District has sponsored the Freshwater Society’s Master Water Stewards program. The hope is some of those sponsored stewards would volunteer to serve on the CAC. Nevertheless, there will be an intensive search to find CAC members using social media, municipal partners, and other groups within the District for assistance.

*Task 2.2: Plan and facilitate the CAC inaugural meeting.* Young Environmental will develop the agenda and draft a committee membership agreement and responsibilities list, as well as a tentative meetings schedule. At the meeting, members will review and revise the information and develop a vision statement. One of the potential tasks for the CAC would be to review and evaluate the website through the citizen’s lens.

*Task 2.3: Monitor and assist the CAC.* Young Environmental will coordinate the development of the meeting agenda and meeting summary/notes with the secretary, provide technical information, and support and host the virtual meetings.

*Timeline for completion:* September 2020–December 2021

*Deliverables:* CAC membership roster, inaugural meeting agenda, summary, membership agreement, and tentative meeting schedule

*Estimated budget:* \$22,900–\$28,300

### **Objective 3. Website**

*Task 3.1: Website review and updates.* Young Environmental will contact three education and outreach professionals from other watershed management organizations to review the look, functionality, and presentation of information for public consumption. Additionally, the CAC will be asked to review the website and provide comments. The comments generated will be presented to the administrator and managers for consideration. Once approved, the website will be revised accordingly. Because the website must be dynamic, the CAC will be asked to review the website annually.

*Timeline for completion:* September 2020–January 2021

*Deliverables:* Letter to three WMOs requesting assistance and outlining the assignment and timeline; CAC assignment and timeline; collation of the information and recommendations for the administrator and managers

*Estimated budget:* \$4,000–\$5,700

### **Objective 4. Articles**

*Task 4.1: Publish four articles annually.* Produce and publish an article per quarter about District projects, initiatives, sponsored water stewards and their projects, and other issues. The articles will be used to help residents, stakeholders, and partners “see” the District and what it engages in. Initial articles will be on the Dredge and the East Chaska Creek Projects.

*Timeline for completion:* January – December 2021

*Deliverables:* Quarterly articles published on the District’s website and shared with stakeholders and partners

*Estimated budget:* \$8,600–\$9,600

### **Objective 5. District Signage**

*Task 6.1: Signage.* Identify sign locations for LMRWD projects and other District resources. Make recommendations to the administrator for proposed sign locations, such as Minnesota River crossings, calcareous fens, trout streams, and high-value resource areas. Develop mock-up examples, and provide an estimate for the cost of five priority sites, including design and fabrication.

*Timeline for completion:* January–March 2021

*Deliverables:* Recommendations for District sign locations and fabrication cost memorandum

*Estimated budget:* \$5,300–\$5,800

### **Objective 6. Schools and NGOs Engagement**

*Task 7-1: Partnership assessment.* Complete an assessment of the LMRWD boundary to find potential partners in local schools, nonprofits, and NGOs. Evaluate existing and established education or sustainability programs and partners (USFWS, Ft. Snelling, National Wildlife Refuge, Cargill, Minnesota Valley Refuge Friends, Minnesota Valley Trust Board, Partner Schools Program, 3 Rivers Fishing Adventures, etc.).

*Task 6-2: Education strategy.* Develop an education strategy to explore the opportunity to partner with schools and what the partnership might look like. Present findings to the board and open to discussion. Consider after-

school programs as a strategy. An education strategy plan will be developed with a list of recommended partners and activities for the 2021–22 academic year. This plan will be presented to the board for approval.

*Task 6-3: Strategy implementation.* TBD, pending approval of the education strategy plan in Task 3-2.

*Timeline for completion:* March 2021–August 2021

*Deliverables:* Education strategy plan and presentation to the board

*Estimated budget:* \$29,200–\$35,000

Lower Minnesota River Watershed District  
Apportioned levies 2013-2021

	Carver	Dakota	Hennepin	Scott	Total
2013	\$ 20,534.32	\$ 65,100.00	\$ 235,855.20	\$ 203,510.48	\$ 525,000.00
2014	\$ 24,611.25	\$ 78,943.75	\$ 288,367.50	\$ 233,077.50	\$ 625,000.00
2015	\$ 25,454.10	\$ 77,726.92	\$ 279,574.12	\$ 237,244.86	\$ 620,000.00
2016	\$ 37,520.63	\$ 76,003.75	\$ 269,638.75	\$ 241,836.87	\$ 625,000.00
2017	\$ 43,158.53	\$ 79,570.93	\$ 325,266.18	\$ 277,004.38	\$ 725,000.02
2018	\$ 42,113.08	\$ 73,373.63	\$ 316,479.90	\$ 293,033.40	\$ 725,000.01
2019	\$ 48,442.33	\$ 76,001.75	\$ 276,570.10	\$ 323,985.83	\$ 725,000.01
2020	\$ 42,833.00	\$ 70,735.35	\$ 321,491.83	\$ 289,939.83	\$ 725,000.01
2021	\$ 42,871.43	\$ 72,959.65	\$ 318,293.13	\$ 290,875.80	\$ 725,000.01



# LOWER MINNESOTA RIVER WATERSHED DISTRICT

## Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting

Wednesday, August 19, 2020

### **Agenda Item**

#### **Item 6. A. - Report on Gully Inventory and Condition Assessment**

### **Prepared By**

Linda Loomis, Administrator

### **Summary**

The interns that have been inspecting gullies and assessing the condition, Philip Margarit and Katherine Tomaska, will join the meeting to present the results of their work.

### **Attachments**

None

### **Recommended Action**

No action recommended



# LOWER MINNESOTA RIVER WATERSHED DISTRICT

## Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting  
Wednesday, August 19, 2020

### Agenda Item

#### Item 7. A. - 2020 Metro Children's Water Festival

### Prepared By

Linda Loomis, Administrator

### Summary

This item was on the July 2020 agenda and was tabled by the Board. The Board wanted additional information regarding the expected cost to make a virtual event. Below is a table with a rough estimate of anticipated expenses. Since this is the first time they have moved ahead with a virtual event the costs are somewhat unknown. The cost of a virtual event is estimated to be slightly higher than an in-person event. They are hoping to be able to reduce the videographer costs.

### Budget Information. We need as much information as you can provide.

List all expenses by category. Categories may include such things as operational costs (postage, printing, student travel, meals and lodging), or direct costs (in a scholarship project, this would be the costs of the scholarships).

Presenters	\$7,000
Professional videographer services	\$20,000
Metro Conservation District's Admin fees	\$4,000
Total	\$31,000

The 2020 Budget included \$1,650 for this event.

Information that was attached to the July 2020 Executive Summary for this item is attached this month.

### Attachments

2020 Metro Children's Water Festival Sponsorship Letter  
2020 Metro Children's Water Festival Sponsor form

### Recommended Action

Motion to authorize sponsorship of the Virtual Metro Children's Water Festival

June 2020

Dear Metro Area Children's Water Festival Partner,

The **Metro Area Children's Water Festival (CWF)** planning committee decided to cancel the 2020 in-person festival due to the COVID-19 pandemic and deliver the 23<sup>rd</sup> festival via online platforms – providing the ability the opportunity to educate even more 4<sup>th</sup> graders about our water resources!

We hope that you will join us by being a sponsor for this unusual year. Since 1998, this festival has educated and inspired nearly 30,000 students and over 1,000 teachers. We are proud to continue this education collaboration to celebrate and protect our most precious resource—water.

### **What is the Children's Water Festival?**

Traditionally, the CWF takes place each September at the Minnesota State Fair Grounds and provides engaging, hands-on water education to about 1,800 fourth grade students free of charge. With scores of stations, students learn about many aspects of water: measuring water quality, where the water goes when the toilet gets flushed, how tiny bugs serve as indicators of water quality, the importance of wetlands, and basic water science and much more. The Children's Water Festival strives to not only increase knowledge about our essential water resources, but also to connect youth to water, and inspire them to take action in conserving and protecting water. In 2020, we hope to offer the same engaging presentations in September, but the delivery will be online. Many presenters are interested in delivering their learning station in one or more format: live on the festival day (September 30), video, lesson plan, or other creative delivery method.

### **Why sponsor the Children's Water Festival**

- Help educate metro-area (and beyond) 4<sup>th</sup> graders on water resources
- Inspire students (and teachers) to increase their water literacy and protect water for the future
- Assist schools in meeting state science standards with fun and engaging content
- Be part of the largest and longest-running water education program in Minnesota
- Be recognized as an entity that supports water and environmental learning. Sponsors will be recognized at the online festival, in the festival booklet, on [www.metrocwf.org](http://www.metrocwf.org), and through press releases and promotion. Sponsors will also receive a certificate of sponsorship and can use the CWF logo on their website.

### **How will funds be used?**

Funds are needed to create virtual content and general program expenses, such as the CWF website. We hope to keep the cost to a minimum, but we want to offer a high-quality virtual festival to engage students. Any unused funds will be carried over to the 2021 event.

### **How to sponsor**

Please fill out and return the enclosed sponsor form. Thank you for supporting this event that gives so much to the children of Minnesota and identifies the metro area as a national leader in environmental stewardship.

Thank you for your consideration,

Ann White Eagle

Metro Children's Water Festival

651-266-7271 or [ann.whiteeagle@ramseycounty.us](mailto:ann.whiteeagle@ramseycounty.us)

# Metropolitan Conservation Districts



## 2020 METRO CHILDREN'S WATER FESTIVAL SPONSOR FORM

Sponsors will be recognized on the website, in promotional materials and will receive a certificate of sponsorship.

\_\_\_\_\_ We would like to be a Festival sponsor by funding educational materials, presenters and facility rental: *(Please circle one.)*

\$250

\$500

\$1000

\$2000

Other \$\_\_\_\_\_

If you have any questions about the Children's Water Festival, or where your contribution may best fit, please call: Ann White Eagle (651-266-7271)

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**Please make check payable to: Metro Conservation Districts**

CONTACT NAME \_\_\_\_\_ DATE \_\_\_\_\_

COMPANY \_\_\_\_\_  
(Please print this exactly as you wish it to appear in the program.)

ADDRESS \_\_\_\_\_  
(Street, City or Town, Zip)

PHONE \_\_\_\_\_ FAX \_\_\_\_\_

E-MAIL \_\_\_\_\_

PLEASE RETURN TO:

Ann White Eagle  
Ramsey County Parks & Recreation  
2015 Van Dyke Street  
Maplewood, MN 55109

*"Water Connects Everyone  
and Everything on Earth!"*



[www.metrocwf.org](http://www.metrocwf.org)





# LOWER MINNESOTA RIVER WATERSHED DISTRICT

## Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting

Wednesday, August 19, 2020

### **Agenda Item**

#### **Item 7. B. - City of Carver Levee**

### **Prepared By**

Linda Loomis, Administrator

### **Summary**

Mayor Johnson from the City of Carver has reached out to Manager Salvato. Staff is planning to set up a meeting with Mayor Johnson, Brent Mareck, Carver City Manager, Manager Salvato, Della Young and me, to discuss how to proceed with this project.

In 2015, the LMRWD was contacted by Stantec Engineering on behalf of the City regarding a bank failure of the Minnesota River in Riverplace Park. At that time the LMRWD planned to contribute \$50,000 to repair and stabilize the river bank. The City did not pursue participation with the LMRWD, so the funding was reallocated to a project on Bluff Creek that was a partnership with Riley Purgatory Bluff Creek Watershed District (RPBCWD). That project was never completed, because RPBCWD was unable to obtain easements necessary to complete the project and lost a Clean Water Fund Grant was critical to completion of the project. RPBCWD is no longer pursuing that project. That funding could be allocated to the Carver Levee.

The justifications the City of Carver gave to the LMRWD as reasons for its participation did not mention the sediment contribution that would be made to the Minnesota River if the current levee should fail. A large portion of this levee is composed of riprap and appears to have had previous failures. Staff believes we need to talk to the City about past failures and also the need for a no-rise evaluation.

Mayor Johnson, indicated that this project is a long term project and that actual construction is years out. The City appears to have some sense of urgency with this project and LMRWD staff would like to know what is driving that. LMRWD staff has talked about the District contributing funds to this project over a period of time. The City has asked for a contribution in the range of \$100,000, which could be funded over several years at \$25,000 per year. If the LMRWD used the \$50,000 that was planned to contribute to Carver in 2015 (for the river bank repair), an additional \$25,000 over 2 years would add up to the \$100,000.

### **Attachments**

None

### **Recommended Action**

No action recommended



# LOWER MINNESOTA RIVER WATERSHED DISTRICT

## Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting  
Wednesday, August 19, 2020

### Agenda Item

#### Item 7. D. - Dredge Management

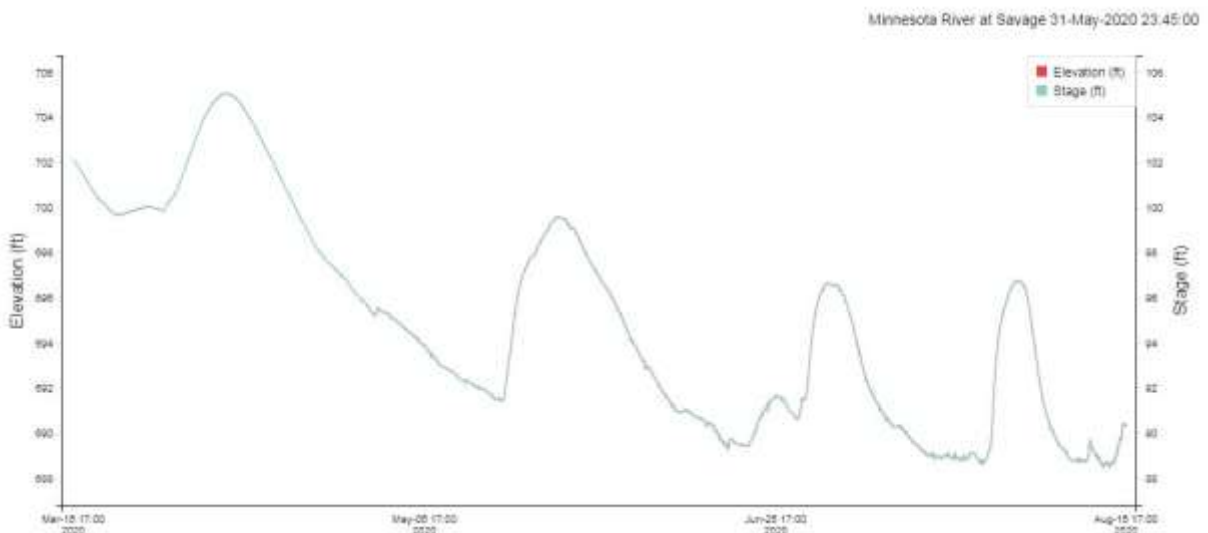
#### Prepared By

Linda Loomis, Administrator

#### Summary

##### i. Vernon Avenue Dredge Material Management site

Weather has cooperated and the level of the River should allow construction to proceed as planned. Even though there have been some significant rain events, the overall trend this summer has been downward.



The Corps of Engineers' has completed dredging the channel. Staff will be meeting with the Contractor this month.

##### ii. Private Dredge Material Placement

Cargill informed the District that they will need to dredge their barge slip again this year. They will plan to wait until the LMRWD project is complete. Private material has begun to be removed from the site.

#### Attachments

None

#### Recommended Action

No action recommended



# LOWER MINNESOTA RIVER WATERSHED DISTRICT

## Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting

Wednesday, August 19, 2020

### Agenda Item

#### Item 7. E. - Watershed Management Plan

#### Prepared By

Linda Loomis, Administrator

#### Summary

The cities with property within the LMRWD were given until September 1, 2020 to bring their official controls into conformance with the LMRWD Watershed Management Plan. September 1, is fast approaching and the LMRWD has received only one application for a municipal permit - from the City of Eagan. LMRWD technical staff has reviewed the proposal by the City of Eagan and recommends the LMRWD issue a municipal permit to the City Eagan once the draft ordinance has been adopted by the City, subject to review by LMRWD legal counsel. A technical memorandum prepared by staff is attached for the Board's information.

LMRWD staff has been informed by at least one city (Chaska), that they are intending to not make any changes to its official controls and assumes the LMRWD will continue to permit projects within the LMRWD. LMRWD staff has had several discussions about how the LMRWD should proceed in these cases. Staff is planning to meet between now and the September meeting of the Board of Managers to prepare a recommendation as to how to proceed for the Board to consider.

The work plans for the Spring Creek Hydrology and Hydraulic Study, the Calcareous Fens, the Assumption Creek Hydrology Assessment, the Minnesota River Floodplain Model Feasibility Study, the Gully Inventory and Assessment (South Side) and the Minnesota River Corridor Management Project were included with the document for the 2021 Budget because they all have implications for the 2021 Budget. They are included again here for the Board to approve and authorize implementation.

#### Attachments

- Spring Creek Hydrology and Hydraulic Study work plan
- Calcareous Fens work plan
- Assumption Creek Hydrology Assessment work plan
- Minnesota River Floodplain Model Feasibility Study work plan
- Gully Inventory and Assessment (South Side) work plan
- Minnesota River Corridor Management Project work plan

#### Recommended Action

Motion to approve work plans and authorize implementation

## LOWER MINNESOTA RIVER WATERSHED DISTRICT

### Spring Creek Hydrology and Hydraulics Study

WORK PLAN – August 3, 2020

#### **Summary**

<i>Outcome:</i>	Spring Creek hydrology and hydraulics study to validate the proposed 2019 stabilization designs for 112 5 <sup>th</sup> Street West and 404 Broadway Street in Carver, MN.
<i>Project Partners:</i>	Minnesota Department of Natural Resources (MNDNR), U.S. Army Corps of Engineers (USACE), Carver County, and City of Carver
<i>Timeline for Completion of Project:</i>	September through December 2020
<i>Total Project Budget:</i>	\$20,900–\$26,200

#### **Objective 1. Project Management**

*Task 1-1: Project plan development and project management.* Finalize the workplan; assign project tasks; determine whether additional resources are needed; set dates for deliverables; generate and maintain project schedule/Gantt chart.

*Timeline for Completion:* September 2020

*Deliverables:* Invoices and project updates

*Estimated Budget:* \$2,500–\$3,000

#### **Objective 2. Data Collection and Review**

*Task 2-1: Gather available information.* Collect available background resource information and modeling data from public resources including the City of Carver, the Minnesota Department of Natural Resources, and the U.S. Army Corps of Engineers. Hydrology information from the USGS StreamStats website also will be reviewed to determine if it is appropriate for this project in lieu of developing a separate hydrology model. Any available soils data also will be collected to evaluate the potential for scour and sediment transport. The data collected and used will be summarized in a technical memorandum in Objective 5.

*Timeline for Completion:* September 2020

*Estimated Budget:* \$2,600–\$2,900

#### **Objective 3. Hydrology Model**

*Task 3-1: Develop a hydrology dataset for the hydraulic modeling.* Evaluate the StreamStats data collected in Objective 2 and determine if it is appropriate to use these flows for the hydraulic modeling. If the error associated with the StreamStats data is determined to be too high or uncharacteristic of the flows occurring in Spring Creek, then develop a preliminary HEC-HMS model to determine design flows for the Spring Creek watershed. Flows to be determined include bankfull (approximately 1- to 2-year event), 10-year, 50-year, 100-year, and 500-year flood events, consistent with FEMA requirements for floodplain submittals.

*Task 3-2: Evaluate changes in hydrology and watershed.* The 2019 Spring Creek Assessment Summary conducted by Barr included recommendations to evaluate changes in hydrology from the larger Spring Creek watershed to determine what the area may experience in the future and aid in the design of stabilization measures. Using the LMRWD “Climate Assessment” memorandum developed as part of the 2020 LMRWD “Fens

Sustainability Gaps Analysis,” we also will estimate future hydrologic conditions as influenced by climate change and future land use changes in the City of Carver.

*Timeline for Completion:* September through October 2020

*Deliverable:* Design flows for existing conditions as well as predicted conditions

*Estimated Budget:* \$2,300–\$5,400

#### **Objective 4. Hydraulic Model**

*Task 4-1: Develop preliminary model:* Using HEC-RAS, we will develop a 1D model of the lower Spring Creek existing conditions, from the confluence with the Minnesota River to approximately 6<sup>th</sup> Street West in the City of Carver, consistent with current FEMA floodplain standards. Using the design flows developed in Objective 3, the existing conditions and future hydrologic conditions will be evaluated and water surface elevations, velocities, and stream power within the channel will be determined. Preliminary results will be presented in tabular and graphical form for review.

*Task 4-2: Quality control and review:* Barr Engineering will provide a review of the hydrology and hydraulic models and results developed in Tasks 3 and 4 to ensure compatibility with regional and federal floodplain standards and to confirm that best engineering practices have been applied. Barr Engineering will provide Young Environmental with a summary of specific comments that should be addressed in Task 4-3.

*Task 4-3: Finalize models:* Based on the comments received by Barr Engineering in Task 4-2, Young Environmental will update the hydrologic and hydraulic models and revise the result tables and figures.

*Task 4-4: Evaluate 2019 proposed designs:* The 2019 Barr report included the Carver SWCD conceptual plans for two residences along Spring Creek (112 5<sup>th</sup> Street West and 404 Broadway Street). Those proposed designs will be reevaluated based on the updated channel flows and velocities determined in Task 4-3. Recommendations will be made to improve the resilience of the proposed stabilization measures for long-term success.

*Timeline for Completion:* October through November 2020

*Deliverables:* HEC-RAS modeling, results, and maps; design recommendations

*Estimated Budget:* \$5,700–\$6,300

#### **Objective 5. Documentation**

*Task 5-1: Develop a draft technical memorandum:* Develop a draft technical memorandum that will document the data collected, methods and software used, and results from the hydrologic and hydraulic models. Based on the results from the hydraulic modeling, the proposed stabilization designs will be evaluated, and any proposed revisions will be presented. The draft memo will be submitted to the District and city partners for consideration and written feedback.

*Task 5-2: Finalize the Report:* Finalize draft report and incorporate project partners, district administrator, and managers’ written feedback.

*Timeline for Completion:* November–December 2020

*Deliverables:* Draft and final memo and results

*Estimated Budget:* \$7,800–\$8,600

## LOWER MINNESOTA RIVER WATERSHED DISTRICT

### Calcareous Fens

WORK PLAN—August 3, 2020

*During 2019–2020, the District completed a comprehensive review of the calcareous fens within its jurisdiction, and the review is documented in the 2020 Fen Sustainability Gaps Analysis for Carver, Dakota, and Scott Counties Minnesota report (Report). The fens are Gun Club Lake North and South Fens, Nicols Meadow Fen and Black Dog Fen in Dakota County, Seminary Fen in Carver County, and Savage Fen in Scott County. The report recommends a number of activities necessary to protect and preserve these high value resources. The recommendations for priority action are presented below and are based on partner interest and the available information.*

#### **Summary**

<i>Outcome:</i>	various reports and analysis
<i>Project partners:</i>	Minnesota Department of Natural Resources (DNR), US Fish and Wildlife Service (USFWS), stakeholder organizations, other partner agencies
<i>Timeline for completion of project:</i>	October 2020–December 2021
<i>Total project budget:</i>	\$87,000–\$109,250

#### **Objective 1. Groundwater Recharge Value Engineering Workshop**

*Task 1-1: Value Engineering Workshop.* Over the past few years, the District has considered numerous methods of understanding the sustainability of calcareous fens within its jurisdiction, including modeling and predicting the effects of permitted pumping and climate on the system as well as monitoring and tracking both dynamic and static water levels of the fens. Through a facilitated two- to three-hour workshop, we will bring groundwater professionals together to review the available information on the fens and the District’s goals to develop the best approach for understanding fen groundwater management sustainability.

*Timeline for completion:* two months

*Deliverables:* invitational e-mail, agenda, review package, and instructions and outcomes summary

*Estimated objective 1 budget:* \$5,000–\$7,500

#### **Objective 2. Gun Club Fen Stormwater Intrusion Study**

*Task 2-1: Stormwater Intrusion Study.* During spring 2020, the DNR approached the District about investigating a scar that has formed within the Gun Club North Fen (see the attached map). This study will investigate the sources of the stormwater channeled toward the fen and will generate concept plans to mitigate the flow upstream and/or diffuse it when it enters the fen to correct the scar.

*Timeline for completion:* three months

*Deliverables:* draft and final feasibility study

*Estimated objective 2 budget:* \$17,000–23,750

### **Objective 3: Seminary Fen Management Plan**

*Task 3-1. Complete the Fen Management Plan.* Over the past ten years or so, the DNR, Metropolitan Council, and other stakeholders have convened a workgroup focused on protecting the Seminary Fen. The appears to have stalled, but the *Fen Sustainability Gaps Analysis* completed by the District should be used to reignite the workgroup to complete the management plan. The work would consist of facilitating workgroup discussions focused on reviewing the outcomes of the *Fen Sustainability Gaps Analysis*, the pending *Trout Streams Study*, and participating in the value engineering workshop to develop a comprehensive management plan for the fen.

*Timeline for completion:* twelve months

*Deliverables:* agendas, meeting summaries, and the draft and final management plan

*Estimated budget:* \$45,000–\$53,000

*Task 3-2. Complete Vegetation Study (Relevé).* The DNR has identified five locations within the Seminary Fen relevé plots to be completed. For these relevés, as with the ones being completed on Gun Club Lake and the Nicols Meadow fens, the DNR recommends that the studies are completed with two separate field visits—one in June or early July and the other in August or early September. The dual survey ensures all species are visible and identifiable during one of the two visits.

*Timeline for completion:* five months

*Deliverables:* floristic quality assessment and summary observations

*Estimated budget:* \$20,000–\$25,000

## LOWER MINNESOTA RIVER WATERSHED DISTRICT

### Assumption Creek Hydrology Assessment

WORK PLAN—August 10, 2020

#### **Summary**

<i>Outcome:</i>	Assumption Creek Hydrology Assessment, to be used as a supplemental report for the Trout Streams Gaps Analysis and Seminary Fen Management Plans. Building off the 2019 <i>Trout Streams Geomorphology Study</i> and the 2020 <i>Fens Suitability Gaps Analysis</i> , this assessment will focus on the hydrogeology of the system and the contributing stormwater inflows.
<i>Project partners:</i>	Minnesota Department of Natural Resources (MNDNR), US Army Corps of Engineers (USACE), Carver County, and City of Chaska
<i>Timeline for completion of project:</i>	September–December 2020
<i>Total project budget:</i>	\$27,200–\$30,000

#### **Objective 1. Project Management**

*Task 1-1: Project plan development and project management.* Finalize the workplan; assign project tasks; determine whether additional resources are needed; set dates for deliverables; generate and maintain project schedule and Gantt chart.

*Deliverables:* invoices and project updates

*Estimated budget:* \$2,500–\$3,000

#### **Objective 2. Data Collection and Review**

*Task 2-1: Gather the available information.* Collect background resource information from previous District efforts, including the *Strategic Resources Evaluation Plan*, *Geomorphic and Habitat Assessments of Trout Streams in the Lower Minnesota River Watershed District*, and *LMRWD Fen Sustainability Plan* as well as from public resources, including the City of Chaska, Minnesota Department of Natural Resources, and US Army Corps of Engineers. Together, with the current Trout Streams Strategic Management Plan project, develop a standardized e-mail for LMRWD to send to project partners notifying them about the project and advising that they may be contacted by Young Environmental staff.

*Task 2-2: Desktop analysis.* From the information collected in Task 2–1, perform a historic aerial photo analysis of the Assumption Creek watershed and develop a comprehensive list of past land uses and activities that may have altered the surface water and groundwater hydrology near Assumption Creek. Review soils data to identify areas of potential groundwater recharge in the watershed and review land-use changes from the historic aerial photo analysis. A simple hydrology model may also be developed to determine the potential surface water runoff contribution to the creek and downstream Seminary Fen.

*Timeline for completion:* September 2020

*Deliverables:* Standardized e-mail to project partners, desktop analysis, project partner meeting agendas, and summaries.

*Estimated budget:* \$5,400–\$5,800

#### **Objective 3. Field Work**



*Task 3-1: Complete gaps analysis for Assumption Creek.* Evaluate the data collected in Objective 2 for any gaps that would be necessary to restore the hydrology and groundwater connection for Assumption Creek. Review the data for evidence of channel instability, including the presence of mid-channel bars in the east reach. Additionally, this task will include coordination with Barr to reevaluate the 2019 recommendations and others to aid in closing these gaps.

*Task 3-2: Collect field data.* Visit the locations south of Flying Cloud Drive on Assumption Creek that were inaccessible during the 2019 field work because of flooding on the Minnesota River, and perform geomorphology and habitat assessments following the same methodology and procedures used in 2019. The 2019 report completed by Barr Engineering included recommendations for additional field work: 1) Collect additional flow measurements upstream and downstream of Seminary Fen to quantify baseflow conditions; and 2) If site conditions allow, assess the portion of Assumption Creek downstream of Flying Cloud Drive with the same methodology and procedures used in 2019.

*Timeline for completion:* September–October 2020

*Deliverables:* gaps analysis and field data collection

*Estimated budget:* \$6,900–\$7,600

#### **Objective 4. Documentation**

*Task 4-1: Generate draft outline.* Generate a draft annotated outline that documents the findings and recommendations of Objectives 2 and 3 and that outlines opportunities that may exist to restore the groundwater hydrology.

*Task 4-2: Develop the draft report.* Build on the annotated outline and develop the draft report documenting the methods, assumptions, procedures, results, and recommendations. Submit the draft report to the District and project partners for consideration and written feedback.

*Task 4-3: Present approach and preliminary recommendations.* Present the approach and preliminary recommendations to the project partners and the District’s managers.

*Task 4-4: Finalize the report.* Finalize the draft report and incorporate project partners’, district administrators’, and managers’ written feedback.

*Timeline for completion:* October–December 2020

*Deliverables:* annotated outline, draft report, preliminary plan presentation, and final report

*Estimated budget:* \$12,400–\$13,600

## LOWER MINNESOTA RIVER WATERSHED DISTRICT

### Lower Minnesota River Floodplain Development Procedures and Model Action Plan

WORK PLAN—August 9, 2020

#### **Summary**

<i>Outcome:</i>	Floodplain Regulation Procedures and Model Action Plan
<i>Project partners:</i>	Minnesota Department of Natural Resources (MNDNR), US Army Corps of Engineers (USACE), Dakota County, Carver County, Scott County, Hennepin County, and the fourteen LMRWD Partner Cities
<i>Timeline for completion:</i>	August through December 2020
<i>Total project budget:</i>	\$27,000–\$30,000

#### **Objective 1. Project Management**

*Task 1-1: Project plan development and project management.* Finalize the work plan, assign project tasks, determine whether additional resources are needed, set dates for deliverables, generate and maintain project schedule/Gantt chart.

*Deliverables:* Invoices, project updates

*Estimated budget:* \$2,500–\$3,000

#### **Objective 2. Data Collection and Review**

*Task 2-1: Gather available information.* Collect background resource information from previous District permits as well as from public resources, including existing modeling data from the MnDNR, Letter of Map Changes from FEMA, and direct requests LMRWD partner cities listed above. Develop standardized email for LMRWD to send to project partners notifying them about the project and advising that they may be contacted by Young Environmental staff.

*Task 2-2: Desktop analysis.* From the information collected in Task 2-1, develop a comprehensive list of items needed to regulate floodplain development effectively and fairly within the District. This task will also develop a comprehensive list of available stormwater and floodplain models in the District, including date last updated and software platform used.

*Timeline for completion:* August through October 2020

*Deliverables:* Standardized email to project partners, draft floodplain development procedures criteria, available models

*Estimated budget:* \$5,500–\$6,000

#### **Objective 3. Project Partner Coordination**

*Task 3-1: Solicit input from project partners.* Reach out to all project partners to solicit input on floodplain development regulation, current floodplain permitting procedures, available floodplain models, and interest in cooperatively working with the District to develop a regional floodplain model. This task will begin following LMRWD notification to project partners in Objective 2.

*Task 3-2: Assess project partner input.* We will assess project partner responses from Task 3-1 to refine the floodplain development procedures developed in Objective 2 and look for opportunities to develop a regional LMRWD floodplain model. This task will outline opportunities and constraints related to developing a regional LMRWD model, including modeling platforms, data needs, and recommendations.

*Timeline for completion:* September through October 2020

*Deliverables:* Project partner meeting agendas and summaries, refinements to floodplain development procedures criteria, available model outline

*Estimated budget:* \$6,200–\$7,000

#### **Objective 4. Documentation**

*Task 4-1: Generate draft outline.* Generate a draft annotated outline that documents the findings and recommendations of Objectives 2 and 3 and build the foundation for a LMRWD Model Action Plan.

*Task 4-2: Develop the draft report.* Build on the annotated outline; develop the draft LMRWD Model Action Plan documenting methods, assumptions, procedures, results, and recommendations. Submit draft report to the District and project partners for consideration and written feedback.

*Task 4-3: Finalize the report.* Finalize LMRWD Model Action Plan, incorporating project partners', district administrator's, and managers' written feedback.

*Timeline for completion:* October through December 2020

*Deliverables:* Annotated outline, draft plan, preliminary plan presentation, final plan

*Estimated budget:* \$12,800–\$14,000

## LOWER MINNESOTA RIVER WATERSHED DISTRICT

### **GULLY 2: SOUTH SIDE OF THE MINNESOTA RIVER DESKTOP ASSESSMENT AND FIELD INVENTORY AND CONDITION ASSESSMENT**

WORK PLAN—July 31, 2020

*Using the Minnesota River as a focal point, this project will examine issues facing the river's complex natural system, which is a shared resource and a place where varied interests and other systems converge. This work will build upon the 2020 Gully Inventory and Condition Assessment report by identifying potential gullies that were not inspected or assessed in the original 2007 Gully Inventory. Using GIS software and supplemental fieldwork, this work will identify potential gullies that are contributing to the flow and sediment accumulation of the Minnesota River from the cities of Burnsville, Eagan, Savage, and Shakopee as well as develop recommendations for future field work to assess the condition of these gullies.*

#### **Summary**

*Outcome:* Identify and make recommendations for future field work and condition assessments of gullies located in the cities of Burnsville, Eagan, Savage, and Shakopee within the Lower Minnesota River Watershed District.

*Timeline for completion:* January 2021–September 2021

*Project partners:* Minnesota Department of Natural Resources (MnDNR), US Fish and Wildlife Service (USFWS), Trout Unlimited, City of Burnsville, City of Eagan, City of Savage, City of Shakopee, Dakota County, and Scott County

*Audience (For whom this plan is intended):* Cities and counties within the Lower Minnesota River Watershed District (LMRWD) and resource and land use professionals

*Total project budget:* \$67,600–\$74,900

#### **Objective 1. Project Management**

*Task 1-1: Project plan development and project management.* Finalize the workplan, assign project tasks, determine if additional resources are needed, set dates for deliverables, and generate and maintain project schedule/Gantt chart.

*Timeline for completion:* 5–12 months

*Estimated budget:* \$3,300–\$4,000

#### **Objective 2. Desktop Analysis**

*Task 2-1: Review background information.* As part of the 2020 Gully Inventory and Assessment Project, the Young Environmental staff collected information from public resources for all cities within the District. Information was extracted for only the sites visited as part of the 2007 Inventory, and the south side of the District was not reviewed as part of that scope. The compiled information will be reviewed, and municipalities within this study area may be contacted for additional information and to determine areas of concern, proposed projects, and completed projects that may affect future field work and surveys. In addition, this task will include coordination with the USFWS and Minnesota Department of Natural Resources to gain permission to perform survey work on their land.

*Task 2-2: Gully erosion susceptibility analysis.* From the information collected and reviewed in Task 2-1, we will identify and map potential gullies as well as proposed and completed municipal projects that may address gully erosion. Contact partners (identified above) for additional information as needed. Develop a Gully Erosion Susceptibility Analysis and map using geospatial data to estimate which areas within the southern LMRWD

watershed may be susceptible to gully erosion. The analysis will include MnDNR LiDAR data, soil types, land use and land cover, and surficial geology.

*Task 2-3: Fieldwork prioritization.* From the map of potential and unassessed sites developed in Task 2-2, we will identify additional data that may be needed to complete future field work. We will work with project partners as needed, including coordinating meetings with the municipalities to discuss draft findings and incorporating their input into the final technical memorandum recommendations.

*Task 2-4: Technical memo.* Develop a list of recommendations to guide future field work assessments. The methodology developed for the desktop analysis will be documented and results and recommendations presented in a technical memorandum to be appended to the final 2020 Gully Inventory Report as a supplemental appendix.

*Timeline for completion:* 4–6 weeks

*Estimated budget:* \$5,500–\$6,200

### **Objective 3. Field Work**

*Task 3-1: Collect new gully waypoints and field condition assessments.* Following the same methodology developed for the *2020 Gully Inventory and Condition Assessment*, conduct site visits to each of the identified gullies from objective 2. As before, Young Environmental will use interns to collect photographs, waypoint locations, and notes detailing the condition of each of the gullies using the same field data collection sheets developed as part of the 2020 Gully Inventory and Assessment Project.

*Task 3-2: Collect drone survey bids.* Following the completion of the 2020 field season, a final list will be compiled of the sites that were inaccessible because of steep slopes or other safety concerns. We will have local drone experts assess the final list and create mapping to determine if a drone survey is feasible. If a drone survey is determined to be feasible, a separate scope of work will be developed to complete it.

*Task 3-3: Gully ranking.* Based on the gully condition assessment, Young Environmental will rate the identified and assessed gullies in the LMRWD using the same methodology developed in the *2020 Gully Inventory and Assessment* report. Criteria to be used will include the potential for sediment loading into the Minnesota River, proximity to HVRA or 303-listed impaired waterbody, and interest by project partners.

*Timeline for completion:* 8–12 weeks, dependent on weather

*Estimated budget:* \$52,100–\$57,400

### **Objective 4. Documentation**

*Task 4-1: Draft technical memorandum.* Develop a technical memorandum that presents the methods, results, and recommendations from the 2020–21 fieldwork and append to the final *2020 Gully Inventory and Condition Assessment* report. The draft memorandum will be provided to the district and partners for comment.

*Task 4-2: Finalize technical memorandum and append to final 2020 Gully Inventory and Condition Assessment Report.* Submit the final technical memorandum and findings to the District and project partners. Append final technical memorandum to the final report for documentation.

*Timeline for completion:* 4 weeks

*Estimated budget:* \$6,600–\$7,300

## LOWER MINNESOTA RIVER WATERSHED DISTRICT

### Minnesota River Corridor (MRC) Plan

WORK PLAN—August 3, 2020

*Using the Minnesota River as a focal point, this project will examine issues that face the river's complex natural system, which is a shared resource and a place where varied interests converge. The result of this project will be a multipurpose corridor plan that will serve as a guiding document for all the political jurisdictions and agencies. It will seek to create a new foundation for cooperation and strategic financial investment that can provide multiple benefits.*

*The plan will examine the pressures on the river from inside the watershed and will expand to consider areas upland of the watershed, given that the river is itself a complex natural system and a shared resource where varied interests such as recreation and commerce converge. The outcome will be the development of a shared vision for maximizing public benefits, including the following: (1) creating greater understanding of the Lower Minnesota River Corridor and its landscape, (2) describing a desired future for the river and discussing how change in the surrounding landscape can help attain this future, (3) suggesting a structure or framework by which the vision can be implemented, and (4) identifying shared public values that form the basis of the project.*

*Potential management strategies will also be identified as part of the process to improve water quality, integrate wildlife habitat and outdoor recreation, and create a framework for more sustainable economic development within the watershed. The plan will also recognize the role of private land ownership in the development of the watershed and will provide landowners with the tools and opportunities to become more involved and implement best practices.*

#### **Summary**

<i>Outcome:</i>	Minnesota River Corridor (MRC) Plan
<i>Project partners:</i>	Residents and business owners of LMRWD, Minnesota Board of Water and Soil Resources (BWSR), Minnesota Department of Natural Resources (DNR), US Army Corps of Engineers (USACE), US Coast Guard, US Fish and Wildlife Service (USFWS), Friends of the Mississippi, Minnesota Valley Refuge Friends, stakeholder organizations, and other partner agencies
<i>Timeline for completion:</i>	September 2020 through July 2021
<i>Total project budget:</i>	\$86,100–\$100,000

#### **Objective 1. Project Management**

*Task 1-1: Project plan development and project management.* Finalize the workplan; assign project tasks; determine if additional resources are needed; set dates for deliverables; generate and maintain the project schedule and Gantt chart.

*Timeline for completion:* September 2020 through July 2021

*Deliverables:* Invoices and project updates

*Estimated budget:* \$8,200–\$9,800

#### **Objective 2. Collect and Review Data**

*Task 2-1: Review and build on past efforts.* Gather previous plans and studies from partners' websites, past LMRWD studies and projects, and available online data sources. Review to develop a comprehensive list of

resources that exist within or near the District that address water quality, habitat and natural resources, land use and community plans, recreational opportunities, and infrastructure or other intersecting systems.

*Task 2-2: Preliminary issue identification and qualitative analysis.* Using the information collected in Task 2-1, review the data to identify key concerns, shared values or goals, and projected growth within the watershed. Develop a list of the priority sites and issues as a starting point for public engagement activities.

*Task 2-3: GIS mapping.* Develop watershed mapping to characterize the Lower Minnesota River Corridor by water quality, habitat and natural resources, land use and community plans, recreational opportunities, and infrastructure or other intersecting systems. Maps will be developed to document the current conditions across the corridor as well as to map the needs related to the Corridor Plan goals.

*Timeline for completion:* September through November 2020

*Deliverables:* Development of data matrix and identification of key issues within the watershed from previous studies, preliminary mapping of existing watershed conditions

*Estimated budget:* \$14,400–\$17,300

### **Objective 3. Partnering and Public Engagement**

*Task 3-1: Contact potential project partners and outreach.* Reach out to project partners, including municipal partners, county partners, DNR, USFWS, BWSR, landowners (business, agricultural, and residential), recreation and stewardship agencies, and other partner agencies with an introductory email and request a point of contact for those interested in participating in the MRC and technical advisory group process. These points of contact will be asked to participate in future discussions with the District to help identify major issues.

*Task 3-2: Focus groups.* Three information gathering sessions will be held with randomly selected residential, business, and agricultural landowners located within the watershed and with stewardship and recreation organizations. Participants will be asked to provide their insights into how they value the river, how the river has changed over time, what regulatory issues they have encountered, and what they hope the plan will accomplish. These meetings will be held virtually. Another information gathering session will be held with local watershed organizations that may also be contacted for advice about advertising for public workshops and identifying problems, particularly any lessons-learned from the COVID19 pandemic. Such organizations may include Friends of the Mississippi River and the Vermillion River Watershed District.

*Task 3-3: Partner workshops.* Review the proposed process and objectives with partners for their endorsement; solicit feedback and learn how their expertise and knowledge of the resource can lend itself to the project. Facilitate a virtual open house to characterize the partners' perspectives of the watershed and the key issues identified in Objective 2. Three workshops will be held virtually and are generally discussed below:

#### *Workshop 1: A River Worth Protecting*

The goal of the first workshop is to introduce attendees to the MRC Plan and identify priorities for water quality, habitat, appropriate recreation, and future growth opportunities. The workshop will be broken into regional sessions, by county.

#### *Workshop 2: Working Together*

The second workshop will offer participants the opportunity to review and refine the draft concepts for the full corridor plan.

#### *Workshop 3: Putting the Plan into Action*

The third workshop will allow the participants to refine the corridor concepts that constitute the Corridor Plan vision. Input will be sought into how the plan will be coordinated and implemented.

*Task 3-4: Open house.* The draft Minnesota River Corridor Plan will be released for public review and presented at an open house during the public review and comment period. The session will be unstructured to allow project

team members to answer questions and engage participants in discussion about the draft plan. A summary of the received comments will be provided and incorporated into the final document.

*Task 3-5: Surveys.* Develop an online survey to be incorporated to the LMRWD website to solicit feedback from residents, businesses, and those with an interest in the LMRWD. This survey will be used to determine what the public believes are the key issues facing the District.

*Task 3-6: Regulation review.* With the adoption of the District Rules in February 2020, we propose to set aside some time in the MRC to check in with partners on the permitting process. While the substance of the rules is not new, the regulatory process is, and there may be room to improve the implementation of the rules and permits as well as reduce costs for the District. Part of this task will include a review of the LMRWD processes compared to other metro watershed districts and state-level water regulation.

*Task 3-7: Issue identification and qualitative analysis update.* We will update the preliminary issue identification and qualitative analysis based on the feedback from our public outreach activities.

*Timeline for completion:* October 2020–June 2021

*Deliverables:* Agendas, facilitation, and summaries for all meetings, workshops, and open houses specified above

*Estimated budget:* \$18,400–\$25,800

#### **Objective 4. Corridor Plan**

*Task 4-1: Generate draft outline.* Generate a draft of an annotated outline for the MRC Plan, with the following goals cited from the LMRWD's 2018 Watershed Management Plan:

- *G1. Create greater understanding of the Lower Minnesota River Corridor and its landscape*
- *G2. Describe the desired future of the river and discuss how change in the surrounding landscape can help attain this future*
- *G3. Suggest a structure or framework by which the vision can be implemented*
- *G4. Identify shared public values that form the basis of the project.*

*Task 4-3: Draft the Lower Minnesota River Corridor Plan.* Utilize information gathered from local resources, partners, previous LMRWD projects, goals, and objectives or strategies to draft the plan. Circulate the draft among project partners for written feedback and allow for a two-week review period. A single page handout will that summarizes the draft report will also be completed for the project partner review.

*Task 4-3: Draft plan for public comment and review.* Incorporate project partner feedback, finalize the draft plan, and make it available for a 30-day public comment period.

*Task 4-4: Final plan.* After incorporating comments received during the public comment period, the final report will be updated, finalized, and presented to the board for acceptance.

*Timeline for completion:* December 2020–July 2021

*Deliverables:* A draft report for internal review, a public draft report for public comment, and a final report

*Estimated budget:* \$45,100–\$47,100





# LOWER MINNESOTA RIVER WATERSHED DISTRICT

## Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting  
Wednesday, August 19, 2020

### **Agenda Item**

**Item 7. F. - 2020 Legislative Action**

### **Prepared By**

Linda Loomis, Administrator

### **Summary**

Another special session began Wednesday, August 12, 2020. It seems like the same thing will happen this session as in the past sessions. The Governor's executive powers will be extended and nothing else will get passed. Lisa Frenette will join the meeting to update the Board.

### **Attachments**

None

### **Recommended Action**

No action recommende



# LOWER MINNESOTA RIVER WATERSHED DISTRICT

## Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting  
Wednesday, August 19, 2020

### **Agenda Item**

#### **Item 7. G. - Education & Outreach**

### **Prepared By**

Linda Loomis, Administrator

### **Summary**

The Education and Outreach work plan was included in the Budget presentation, because there are costs associated with the plan above what was budgeted. It is included here for the Board to consider for approval and to authorize implementation.

### **Attachments**

Education and Outreach work plan

### **Recommended Action**

Motion to approve Education and Outreach work plan and authorize implementation

## LOWER MINNESOTA RIVER WATERSHED DISTRICT

### 2020–21 Public Education and Outreach Plan

WORK PLAN—August 10, 2020

#### **Summary**

<i>Outcome:</i>	2020–22 Public Education and Outreach Plan
<i>Project partners:</i>	City partners, residents, and businesses of the District; US Fish and Wildlife Service (USFWS); US Army Corps of Engineers (USACE); and non-governmental organizations (NGOs)
<i>Timeline for completion of project:</i>	August 2020–December 2021
<i>Total project budget:</i>	2020: \$27,625 – \$34,575 2021: \$61,275 – \$73,325

#### **Objective 1. 60th Anniversary**

*Task 1-1: Commemorative 60th anniversary YouTube video.* This year signifies the District’s 60th year of operation. To commemorate the milestone, a YouTube video will be developed, integrating the historical significance of the organization, its current realities as managers strive to protect high-value resources (calcareous fens, trout waters, and the beautiful Minnesota River Bluffs), and the District’s future. The video will include interviews from past and current board managers and partners.

*Task 1-2: Newspaper article.* As a companion piece to Task 2-1, an article will be developed for the website. The article will include infographics and a historical timeline. In addition, the team will contact environmental reporters at NPR and the *Star Tribune* to publish pieces on the District.

*Timeline for Completion:* August 2020–December 2020

*Deliverables:* YouTube video, newsletter, and articles on NPR and in the *Star Tribune*

*Estimated budget:* \$18,900–\$23,500

#### **Objective 2. Citizen Advisory Committee (CAC)**

*Task 2.1: Organize a CAC of five members or more.* The District has been without a CAC, an integral part of its mission, since 2009. This has been due in large part to the boundaries of the District, which largely contains commercial and natural areas. Over the past four to five years, the District has sponsored the Freshwater Society’s Master Water Stewards program. The hope is some of those sponsored stewards would volunteer to serve on the CAC. Nevertheless, there will be an intensive search to find CAC members using social media, municipal partners, and other groups within the District for assistance.

*Task 2.2: Plan and facilitate the CAC inaugural meeting.* Young Environmental will develop the agenda and draft a committee membership agreement and responsibilities list, as well as a tentative meetings schedule. At the meeting, members will review and revise the information and develop a vision statement. One of the potential tasks for the CAC would be to review and evaluate the website through the citizen’s lens.

*Task 2.3: Monitor and assist the CAC.* Young Environmental will coordinate the development of the meeting agenda and meeting summary/notes with the secretary, provide technical information, and support and host the virtual meetings.

*Timeline for completion:* September 2020–December 2021

*Deliverables:* CAC membership roster, inaugural meeting agenda, summary, membership agreement, and tentative meeting schedule

*Estimated budget:* \$22,900–\$28,300

### **Objective 3. Website**

*Task 3.1: Website review and updates.* Young Environmental will contact three education and outreach professionals from other watershed management organizations to review the look, functionality, and presentation of information for public consumption. Additionally, the CAC will be asked to review the website and provide comments. The comments generated will be presented to the administrator and managers for consideration. Once approved, the website will be revised accordingly. Because the website must be dynamic, the CAC will be asked to review the website annually.

*Timeline for completion:* September 2020–January 2021

*Deliverables:* Letter to three WMOs requesting assistance and outlining the assignment and timeline; CAC assignment and timeline; collation of the information and recommendations for the administrator and managers

*Estimated budget:* \$4,000–\$5,700

### **Objective 4. Articles**

*Task 4.1: Publish four articles annually.* Produce and publish an article per quarter about District projects, initiatives, sponsored water stewards and their projects, and other issues. The articles will be used to help residents, stakeholders, and partners “see” the District and what it engages in. Initial articles will be on the Dredge and the East Chaska Creek Projects.

*Timeline for completion:* January – December 2021

*Deliverables:* Quarterly articles published on the District’s website and shared with stakeholders and partners

*Estimated budget:* \$8,600–\$9,600

### **Objective 5. District Signage**

*Task 6.1: Signage.* Identify sign locations for LMRWD projects and other District resources. Make recommendations to the administrator for proposed sign locations, such as Minnesota River crossings, calcareous fens, trout streams, and high-value resource areas. Develop mock-up examples, and provide an estimate for the cost of five priority sites, including design and fabrication.

*Timeline for completion:* January–March 2021

*Deliverables:* Recommendations for District sign locations and fabrication cost memorandum

*Estimated budget:* \$5,300–\$5,800

### **Objective 6. Schools and NGOs Engagement**

*Task 7-1: Partnership assessment.* Complete an assessment of the LMRWD boundary to find potential partners in local schools, nonprofits, and NGOs. Evaluate existing and established education or sustainability programs and partners (USFWS, Ft. Snelling, National Wildlife Refuge, Cargill, Minnesota Valley Refuge Friends, Minnesota Valley Trust Board, Partner Schools Program, 3 Rivers Fishing Adventures, etc.).

*Task 6-2: Education strategy.* Develop an education strategy to explore the opportunity to partner with schools and what the partnership might look like. Present findings to the board and open to discussion. Consider after-

school programs as a strategy. An education strategy plan will be developed with a list of recommended partners and activities for the 2021–22 academic year. This plan will be presented to the board for approval.

*Task 6-3: Strategy implementation.* TBD, pending approval of the education strategy plan in Task 3-2.

*Timeline for completion:* March 2021–August 2021

*Deliverables:* Education strategy plan and presentation to the board

*Estimated budget:* \$29,200–\$35,000



# LOWER MINNESOTA RIVER WATERSHED DISTRICT

## Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting  
Wednesday, August 19, 2020

### Agenda Item

#### Item 7. H. - LMRWD Projects

### Prepared By

Linda Loomis, Administrator

### Summary

#### i. Eden Prairie Study Area #3 Stabilization

The LMRWD applied to Hennepin County for an Opportunity Grant. Staff was informed that the grant application was not approved. The reason it was not approved is that the source of funding to complete the project was uncertain. The County liked the project and encouraged the District to firm up the funding sources and apply again next year.

No action is required on this project, this item is on the agenda for the Board's information.

### Attachments

None

### Recommended Action

No action recommended



# LOWER MINNESOTA RIVER WATERSHED DISTRICT

## Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting  
Wednesday, August 19, 2020

### Agenda Item

#### Item 7. I. - Project Reviews

#### Prepared By

Linda Loomis, Administrator

#### Summary

##### i. Freeway Dump and Landfill

LMRWD staff has been meeting with the MPCA and Barr Engineering, consultants for the MPCA about remediation of the Freeway Dump and Landfill in Burnsville. The City of Burnsville does not have an approved municipal permit from the LMRWD. Therefore an Individual Project Permit will be required.

The reason this item is on the agenda has to do with LMRWD definition of impervious service. It is likely the LMRWD will need to issue a variance to the project. Staff is concerned that issuing a variance will set a precedent and is therefore recommending that the District consider revising the definition and clarify the overall intent of the stormwater rule for future projects.

LMRWD staff also communicated with the DNR regarding impacts to the floodplain from this project. It was determined that the LMRWD would take the review lead of the no-rise application because the LMRWD is more strict than the DNR when it comes to impacts to properties in the flood fringe. The DNR will review the project for short-term impacts (a temporary berm will be required during the construction) that may require flowage easements and notification of property owners

#### Attachments

Technical Memorandum dated July 27, 2020 Re: Freeway Landfill and Dump (Permit No. 2020-105)

#### Recommended Action

Provide direction to staff

##### ii. Fort Snelling

This project plans to redevelop housing at the Upper Post of Fort Snelling. Staff has reviewed the proposed plans and is recommending the Board approve an Individual Project Permit subject to receipt of an NPDES permit for the project and approval of the maintenance agreement by LMRWD legal counsel.

#### Attachments

Technical Memorandum dated August 12, 2020 Re: Fort Snelling Redevelopment (Permit No. 2020-113)

#### Recommended Action

Motion to approve Permit No. 2020-113 subject to receipt of NPDES Permit and approval of maintenance agreement by LMRWD legal counsel

**iii. Prairie Heights**

This Project was conditionally approved by the Board of Managers at the June 2020 Board meeting. The item is on the agenda to update the Board. The LMRWD has received notification that the project was approved by Riley Purgatory. However, there were conditions and the LMRWD will not issue a permit until all the conditions have been met. The LMRWD has reached out to Riley Purgatory Bluff Creek WD and asked to be copied on all correspondence on the project.

**Attachments**

Technical Memorandum dated August 11, 2020 Re: Prairie Heights Update (Permit No. 2020-103)

**Recommended Action**

No action recommended



# Technical Memorandum

**To:** Linda Loomis, Administrator  
Lower Minnesota River Watershed District

**From:** Katy Thompson, PE, CFM  
Della Schall Young, CPESC, PMP

**Date:** July 27, 2020

**Re:** Freeway Landfill and Dump Remediation – Project Update (Permit No. 2020-105)

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The Minnesota Pollution Control Agency (MPCA) recently concluded the public comment period on the proposed remediation options for the Freeway Landfill and Dump site in the City of Burnsville. In 2019, Barr Engineering Co. (Barr) completed a focused feasibility study to evaluate potential remediation options and, at the time, the Lower Minnesota River Watershed District (District) requested that Young Environmental conduct a review to determine which District standards would be triggered by the proposed options. The MPCA and Barr have since developed two design options that the MPCA intends to release for bidding in early 2021. Young Environmental provided the District with a preliminary review of the proposed designs and permit requirements on June 10, 2020 (attached), which was then submitted to the MPCA as part of the public comment period.

On June 18, 2020, the District Administrator, Young Environmental, and Barr met online to discuss the project and the District's preliminary review (meeting notes attached). As part of the discussion, the project team and District staff walked through each of the District rules to determine applicability.

## **June 18, 2020: Meeting Summary**

### **Rule A – Administrative and Procedural Requirements**

The District confirmed that because the City of Burnsville does not have an approved municipal permit, an Individual Project Permit will be required for the project.

Rule B – Erosion and Sediment Control

The project team concurred with LMRWD that Rule B applies to the project and acknowledged the District's concern that concentrated discharges could enter the surrounding fen complex, causing scour and erosion.

Rule C – Floodplain and Drainage Alteration

The project team concurred with LRMWD that Rule C applies to the project and confirmed that it is working with Suzanne Jiwani at the Minnesota Department of Natural Resources (MnDNR) to obtain a no-rise certificate. The team also confirmed that the City of Burnsville has required a no-rise certificate for its floodplain records but no additional approval or permits.

Young Environmental contacted the MnDNR to confirm floodplain permitting requirements. A meeting was held on July 21, 2020 to discuss the floodplain review process for the MnDNR and District. During the meeting, it was decided that the District will take the review lead of the no-rise application because the District rules are more stringent than the MnDNR and FEMA requirements for the flood fringe impacts. The MnDNR will review short-term temporary impacts of the temporary construction berm in the floodway.

Rule D – Stormwater Management

The final stormwater management for the site remains a point of disagreement between the project team and the District. Our initial review was based on the determination that the proposed landfill liner and cap should be treated as a constructed impervious surface and be subject to District rules and definitions. The rules define an impervious surface as “a constructed hard surface that either prevents or retards the entry of water into the soil and causes water to runoff the surface in greater quantities and at an increased rate of flow than before development.” The inherent purpose of the landfill final cover is to prevent surface and groundwater intrusions into the waste layers.

Barr's position is that the proposed landfill liner and cap should be considered pervious because the landfill design proposes a two-foot vegetated soil cover on top of the liner.

During the meeting, we discussed the District's willingness to consider a variance from the stormwater management requirement, specifically the peak rate control, given the MPCA's robust operation and maintenance requirement for capped landfills.

**Additional Stormwater Considerations**

Following the June 18 meeting, the District Administrator directed Young Environmental to research landfill permitting requirements, specifically stormwater regulations. The

proposed landfill remediation project would change the landscape of the area, and that change would alter the area's hydrology. Of the two options, the Dig and Line option is the most concerning for stormwater management due to the height of the proposed landfill and the proposed liner and cover system. For this option the MPCA is proposing stormwater detention ponds. However, the ponds were not sized with the assumption that the entire cap is impervious. Instead, they appear to have been sized to retain the additional runoff caused by the increased slopes and internal landfill stormwater mitigation system.

Given the disagreement over whether the cap is pervious or impervious, we contacted other metro watershed districts to determine if they have permitted similar projects. We found that there is wide latitude in the definition of "impervious surface" but general agreement that, while the proposed landfill cap is not a traditional impervious surface, neither is it a traditional pervious surface. One recommendation we received was to consider applying the methodology for permitting artificial turf because artificial turf systems also typically have a liner and underdrain system, similar to the proposed landfill.

#### Artificial Turf Hydrology Options

The proposed landfill cap and liner system is somewhat similar to an artificial turf system. Both systems provide an upper media layer that can filter or infiltrate stormwater, but both are limited by a lower impervious layer. In addition, water that filters through the upper media is collected in a drainage system and discharged elsewhere to prevent its infiltrating the underlying aquifer.

Rather than considering the proposed landfill cap and liner entirely impervious or entirely pervious, we propose three alternative methods for determining the final hydrology for the site:

1. Using a modified SCS curve number that accounts for the maximum water retention available within the final cover system (if the cover soil's moisture-storage capacity and other necessary soil properties are known) as well as the final landfill slopes.
2. Modeling the final cover system and drainage layer in a method consistent with artificial turf methodology.<sup>1</sup>
3. Utilizing the Hydrologic Evaluation of Landfill Performance (HELP) program<sup>2</sup> to evaluate the evapotranspiration, infiltration, and filtration of the final cover

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<sup>1</sup> <https://www.hydrocad.net/curvenumber.htm>

<sup>2</sup> <https://www.epa.gov/land-research/hydrologic-evaluation-landfill-performance-help-model>

system.

## **Recommendations**

We applaud the MCPA for tackling this project, and we recognize the need to segregate the landfill waste from surface water and groundwater. We also want to protect the downstream resources from increased runoff or erosion due to the proposed project.

We recommend that the MPCA more closely examine the hydrology of the proposed Dig and Line options to ensure that no adverse impacts would result. In an effort to work with the MPCA on this complicated project, we also recommend considering the final landfill cover system as a quasi-impervious layer that may have the same effects as an impervious layer, unless the MPCA can prove otherwise.

Finally, due to the various definitions of an impervious surface that we encountered in the metro area, we recommend that the District consider revising the definition and clarify the overall intent of the stormwater rule for future projects.

### Attachments:

June 10, 2020 – Freeway Landfill and Dump Preliminary Project Review

June 18, 2020 – Barr Meeting Notes

# Technical Memorandum

**To:** Linda Loomis, Administrator  
Lower Minnesota River Watershed District

**From:** Katy Thompson, PE, CFM  
Della Schall Young, CPESC, PMP

**Date:** June 10, 2020

**Re:** Freeway Landfill and Dump Remediation Preliminary Project Review  
(Permit No. 2020\_105)

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The Minnesota Pollution Control Agency (MPCA) is in the process of soliciting stakeholder design input on the proposed remediation options for the Freeway Landfill and Dump site in the City of Burnsville. In 2019, Barr Engineering Co. (Barr) completed a focused feasibility study to evaluate potential remediation options, and at the time, the Lower Minnesota River Watershed District (District) requested that Young Environmental conduct a review to determine which District standards the proposed options would trigger. The MPCA and Barr have since developed two design options that the MPCA intends to release for bidding in early 2021. The following is a more detailed review of the two options and the District requirements for the MPCA public comment period ending June 12, 2020.

## Summary

Project Name: Freeway Landfill and Dump Remediation

Purpose: Remediation of two closed, but unlined, solid waste facilities

Project Size: Approximately 175 acres of disturbance,

Location: 11937 Interstate 35W and 1020 W. Black Dog Rd,  
Burnsville, MN

Applicable LMRWD Rules: Rule A – Administrative and Procedural Requirements  
Rule B – Erosion and Sediment Control  
Rule C – Floodplain and Drainage Alteration  
Rule D – Stormwater Management

Recommended Board Action: Information only, no Board action at this time

## Discussion

The MPCA is proposing to remediate the waste currently stored at the Freeway Landfill and Dump because the waste disposal occurred without the needed protections required by modern landfills to manage landfill leachate and landfill gas. The MPCA has proposed two options:

1. **Dig and Line:** Build a new modern landfill on the property (three variations of this option have been provided).
2. **Dig and Haul:** Move the waste from the landfill and dump off the property to another modern landfill.

As part of the MPCA's stakeholder outreach, the District was provided with the following documents for review:

- Freeway Remediation Presentation by Barr, dated May 6, 2020
- Freeway Remediation Preliminary Drainage Figures by Barr, dated May 6, 2020
- Focused Feasibility Study Report for the Freeway Landfill and Freeway Dump by Barr, dated October 2019

### Rule A – Administrative and Procedural Requirements

The proposed project is located within the City of Burnsville and would normally be subject to municipal review; however, the City of Burnsville does not have an approved Municipal Permit with the District, and as such, the MPCA must receive a District Individual Project Permit prior to construction.

### Rule B – Erosion and Sediment Control

The District regulates land-disturbing activities that affect one acre or more outside the High Value Resource Area (HVRA) Overlay District under Rule B. The proposed project disturbs 174 acres and will trigger the requirements under Rule B.

In addition, Option 1 should also address long-term erosion control concerns due to the long and steep flow paths from the top of the proposed landfill down to the stormwater management ponds to prevent damage to the underlying landfill cap and reduce erosion

at the toe of the slope and future sedimentation in the stormwater ponds and downstream waterbodies.

Based on the preliminary information provided, the proposed grading at the Freeway Dump site appears acceptable. However, it should be noted that the proposed grading will discharge into the Black Dog Lake Fen complex (**Figure 1**), and care should be taken during final design to ensure no adverse impacts would result to the fen from any concentrated stormwater runoff or outfalls.

#### Rule C – Floodplain and Drainage Alteration

The portions of the proposed project are located in the 100-year FEMA floodplain, and a District permit is required for land alteration or placement of fill below the floodplain. The City of Burnsville will be requiring a No Rise Certificate indicating that the proposed remediation will not cause an increase in water surface elevations of more than 0.00 ft. The District requests a copy of the No Rise documentation as well as calculations that demonstrate no net loss of flood conveyance capacity.

#### Rule D – Stormwater Management

The District requires stormwater management for projects that propose to create more than one acre of new impervious surface and more than 10,000 square feet in the HVRA. While neither remediation option currently includes the creation of traditional impervious surfaces (such as concrete or asphalt) as part of the design, we recommend considering the impermeable landfill cap an impervious surface because it may contribute to increased runoff rates from the final landfill when compared to existing conditions.

The District Rules define an impervious surface as “a constructed hard surface that either prevents or retards the entry of water into the soil and causes water to runoff the surface in greater quantities and at an increased rate of flow than before development.” The inherent purpose of a landfill final cover is to be impervious to surface and groundwater intrusions and to separate waste and byproducts from rain and groundwater infiltration, and the proposed remediation plans for Option 1 includes 60 to 80 acres of impervious liner and cover.

Further discussion of Rule D is broken below into three categories: rate control, volume reduction, and water quality.

##### Rate Control

The District clearly states one of the underlying policies in Rule D is to “require property owners control the rate and volume of stormwater runoff originating from their property so that surface water and groundwater quantity and quality is

protected or improved, soil erosion is minimized, and flooding potential is reduced.” The current Freeway Landfill and Dump sites, for better or worse, are unlined and do allow for some rainfall infiltration, which affects the overall stormwater runoff from the site.

Under Option 1 (Dig and Line), the project proposes to line and cover the landfill waste with an impervious liner under the waste and an impervious cap on top of the waste (Figure 1). Installing an impervious cover, even with roughly two feet of pervious cover vegetation and topsoil on top, may increase the amount of stormwater runoff generated from the landfill site, particularly with the proposed height and slopes of the final landfill. If Option 1 is selected as the final design, the District will require hydrologic calculations to demonstrate that the proposed stormwater runoff rates from the site do not exceed the existing rates.

As presented, Option 2 (Dig and Haul) does not propose any new impervious surface, either traditional hard surfaces or an impenetrable cover layer, and would not trigger the rate control requirements of Rule D. However, as noted in Rule B, runoff from the Freeway Dump will be entering the Black Dog Lake Fen HVRA, and care must be taken during final design to ensure no adverse impacts would result due to concentrated stormwater discharges into the fen.

#### Volume Reduction

Section 4.4.2 of Rule D requires volume reduction for post-construction stormwater runoff volume for projects that create more than one acre of impervious surface or redevelopment of more than 10,000 square feet in the HVRA. The District does not allow infiltration practices in areas that may mobilize high levels of contaminants in soil or groundwater; however, filtration technologies are an acceptable method in lieu of infiltration.

#### Water Quality

Section 4.4.3 of Rule D requires projects that create more than one acre of new impervious surface to provide evidence that no net increase in total phosphorus (TP) or total suspended solids (TSS) in the receiving waters will result from the project.

Stormwater ponds are currently proposed as part of the design; the District will require the applicant to develop and adhere to a stormwater maintenance plan for the project, including the acquisition of any necessary easements.



## Recommendations

We applaud the MPCA for tackling this project and recognize the need to segregate the landfill waste from surface and groundwater. The following summarizes the comments from the District to the MPCA:

- The MPCA should apply for and receive a District Individual Project Permit prior to construction.
- The proposed project will trigger *Rule B – Erosion and Sediment Control* and require an Erosion and Sediment Control Plan, SWPPP, and NPDES Construction Stormwater Permit.
- The Freeway Dump portion of the project is located within the High Value Resource Area for Black Dog Lake Fen, and care should be taken during design to avoid concentrated stormwater discharges into the fen during and after construction.
- Portions of the project are located within the 100-year FEMA floodplain and floodway and *Rule C – Floodplain and Drainage Alteration*. The District will require a no-rise certification by a professional engineer and calculations demonstrating no loss of floodplain storage would result from the project.
- The District considers the landfill cap an impervious surface, and *Rule D – Stormwater Management* will apply to the project.
- The District does not allow infiltration practices in areas that may mobilize high levels of contaminants in soil or groundwater; however, filtration technologies are an acceptable method in lieu of infiltration.
- All stormwater BMPs will require a maintenance agreement with the District.

### Attachments:

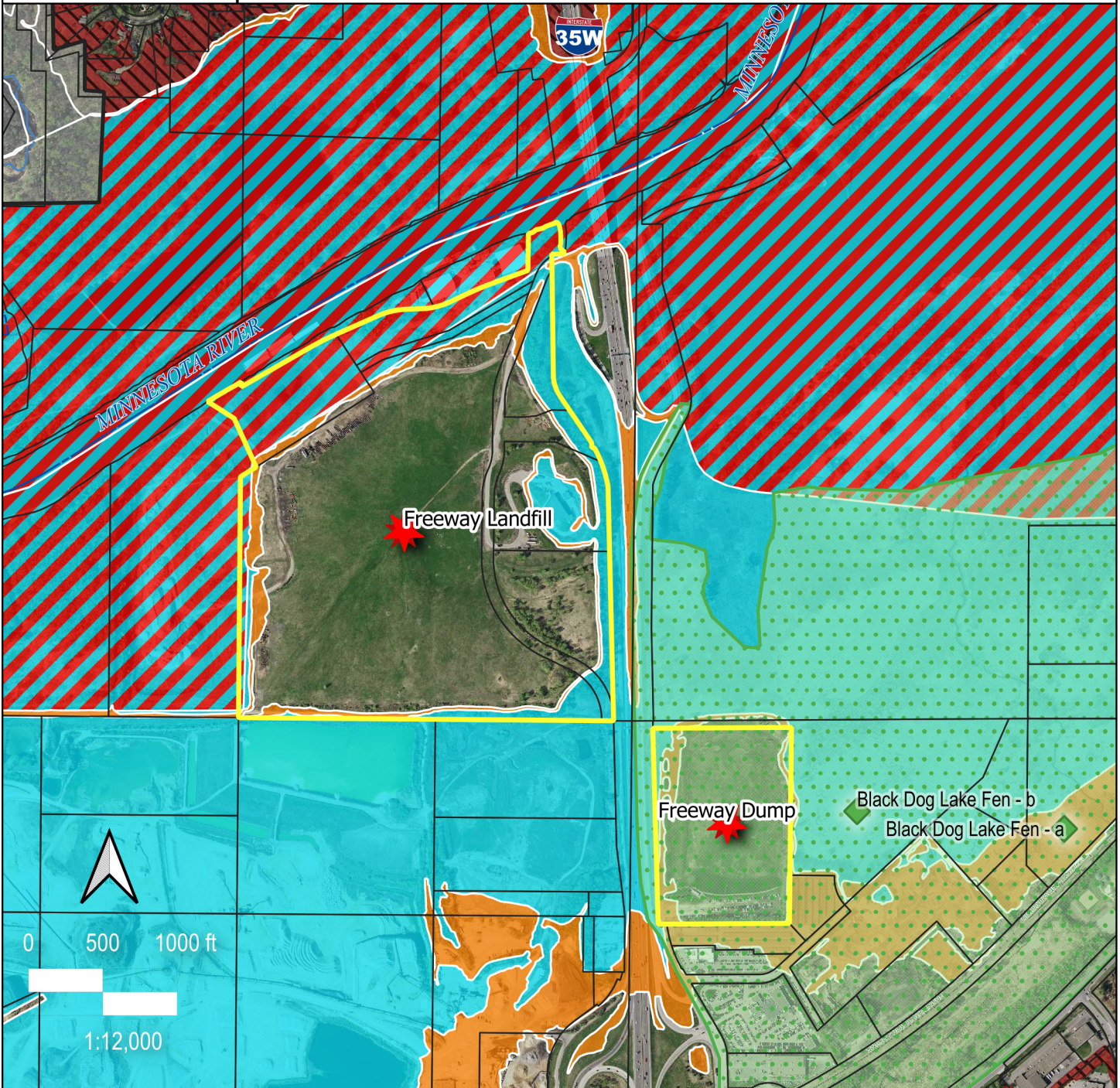
Figure 1—Proposed Freeway Landfill and Dump Location Map

LMRWD Permit Review Checklist



LOWER MINNESOTA RIVER  
WATERSHED DISTRICT

# Figure 1: Freeway Landfill and Dump Preliminary Review, City of Burnsville, MN 09-June-2020



## LEGEND

- |                       |                       |                               |
|-----------------------|-----------------------|-------------------------------|
| LMRWD Boundary        | Dakota Co. Floodplain | Steep Slopes Overlay District |
| Proposed Project Area | 100-yr Floodplain     | Calcareous Fen Locations      |
| Dakota Co. Parcels    | Floodway              | HVRA Overlay District         |
|                       | 500-yr Floodplain     |                               |



Young Environmental Consulting  
Group, LLC



# LOWER MINNESOTA RIVER WATERSHED DISTRICT PROJECT REVIEW

Project ID	<input type="text" value="2020_0105"/>	Authorization Agent	<input type="text"/>
Project Name	<input type="text" value="Freeway Landfill and Freeway Dump"/>	Email Address	<input type="text"/>
Organization	<input type="text" value="Minnesota Pollution Control Agency"/>	Phone Number	<input type="text" value="5555555555"/>
Notes	<input type="text" value="1/21/2020 - Review of preliminary plan documents and feedback"/>		

## *Project Summary*

Anticipated start date	<input type="text" value="1/1/2021"/>	Date received	<input type="text"/>
Project location	<input type="text" value="Burnsville, MN"/>	Project map included?	<input checked="" type="checkbox"/>
Project acres	<input type="text" value="174"/>	Is the project in an unincorporated area?	<input type="checkbox"/>
Total disturbed acres	<input type="text" value="174"/>	Is it located in a High Value Resource Area	<input checked="" type="checkbox"/>
New impervious acres	<input type="text" value="0"/>	Is it located in a Steep Slope Overlay District	<input type="checkbox"/>
Local Partners	<input type="text" value="City of Burnsville"/>	Other Sensitive Area	<input type="text" value="Black Dog Lake Fen Complex"/>

## Project Description

The MPCA has determined additional waste management efforts are needed for the closed Freeway Landfill and Freeway Dump sites to prevent pollutants from further release of landfill gases and leachate into groundwater and the Minnesota River, particularly with the cessation of quarry pumping operations at nearby Kramer Quarry. The project proposed two options:

1. Dig & Line - excavate the waste from both sites and construct a modern landfill within the Landfill footprint
2. Dig & Haul - excavate the waste from both sites and haul to an existing landfill.

The MPCA is currently soliciting stakeholder feedback on the preliminary design through a public comment period that ends on June 12, 2020.

## Additional Notes

### Review Status

Is this a preliminary review?

Is this a permit review?

Does this project require a technical review?

### Project Status

Project is pending

Project is active

Project has been archived

## *Erosion and Sediment Control*

This project triggers one or more thresholds for this rule.

<u>Triggers</u>		<u>Criteria</u>	
Disturbs one acre plus	<input checked="" type="checkbox"/>	Erosion and Sediment Control Plan	<input type="checkbox"/>
Located within the HVRA Overlay District	<input checked="" type="checkbox"/>	Inspection and maintenance addressed	<input type="checkbox"/>
Meets the HVRA threshold	<input checked="" type="checkbox"/>	NPDES/SDS General Construction Permit documentation	<input type="checkbox"/>

The documentation requirements for this rule have not been met. A review cannot be completed until all required documentation has been submitted.

### Additional Notes

6/7/2020 - Based on the feasibility study and 5/6/2020 LMRWD presentation, the proposed project will disturb approximately 174 acres, including portions within the HVRA near Black Dog Lake Fen Complex. The District will require and erosion & sediment control plan, SWPPP, and a maintenance agreement for any permanent stormwater BMPs.

## *Floodplain Drainage Alteration*

This project triggers one or more thresholds for this rule.

<u>Triggers</u>			
Changes in water surface elevation of floodplain	<input checked="" type="checkbox"/>	Calculations by a professional engineer demonstrating no decrease to conveyance	<input type="checkbox"/>
<i>If yes,</i> Compensatory storage equal or greater than volume of fill	<input type="checkbox"/>	Conveyance capacity decrease below 100yr high water elevation	<input type="checkbox"/>
<i>If no,</i> No-rise certification by a professional engineer	<input type="checkbox"/>	Temporary placement of fill	<input type="checkbox"/>
<u>Criteria</u>		Adverse impacts to water quality, habitat, or fisheries	<input type="checkbox"/>
Net decrease of storage capacity OR increase in 100yr elevation	<input type="checkbox"/>	New structures have 2ft+ between lowest enclosed area's floor and 100yr high water elevation	<input type="checkbox"/>
Will floodplain storage be created	<input type="checkbox"/>		

The documentation requirements for this rule have not been met. A review cannot be completed until all required documentation has been submitted.

### Additional Notes

6/5/2020 - The proposed project is located within the 1% Special Flood Hazard Area for the Minnesota River. At this time it is not known if the project will reduce the flood storage capacity of the floodplain or not, but the potential impact should be con

## Stormwater Managment

This project triggers one or more thresholds for this rule.

Type of project Development

### Triggers

One acre or more of impervious surface



Are trout streams protected



### **HVRA Overlay District**

Located within the HVRA Overlay District



Rate control exceeded for 1, 2, 10, and 100yr 24-hour event



*If yes,*

Meets the HVRA threshold



Projects with 1+ acres of new impervious: are MPCA's Construction General Permit



### Criteria

Post-construction runoff rates exceed existing rates for 1, 2, 10, and 100yr 24-hour events?



Net increase of TP



Net increase of TSS



Is maintenance adequately addresse



New Development: the post-construction runoff volume retained onsite equal 1.1 inches of runoff from impervious surfaces



Project will result in a net decrease of TP and TSS



Redevelopment: the project will capture and retain onsite 1.1 inches from new/fully reconstructed impervious surface



Volume control requirements sufficiently addressed



Linear: the site will capture and retain (a) 0.55 inches of runoff from new/fully reconstructed impervious, or (b) 1.1 inches of runoff from the net increase in impervious area



The documentation requirements for this rule have not been met. A review cannot be completed until all required documentation has been submitted.

Alternative Infiltration Measures

Additional Notes

6/5/2020 - Option 1 (Dig & Line) proposes to dig up the existing landfill waste and construct an

impermeable liner under the waste, replace the waste, then cap with an impermeable cover over the waste per current regulatory standards. The purpose of a landfill liner and cap are to provide a permanent separation between the landfill waste and surface and groundwater, as such, the cap and liner should be considered impervious surface and would trigger the District's Rule D - Stormwater Management.

Option 2 (Dig & Haul) would remove the waste from both sites and presumably replace the waste with clean fill and pervious surface. In which case, Rule D would not be triggered.

### *Steep Slopes*

This rule does not apply.

#### Triggers

Is the project in the Steep Slopes Overlay District

Excavation of 50 cubic yards+ of earth

Displacement of 5,000 sq. ft+ of earth

Vegetation removal or displacement

Activities that require LGU permits

#### Criteria

Has the project been certified by a professional engineer

Adverse impact to waterbodies

Unstable slope conditions

Degradation of water quality

Preservation of existing hydrology

New discharge points along slope

Additional Notes

## Meeting Notes

### Freeway Landfill and Dump Closure – LMRWD

June 18, 2020

3:00pm – 4:00pm

**Attendees:** LMRWD: Linda Loomis, Della Schall Young, Katy Thompson  
Barr: Jim Herbert, Eric Lund, Bryan Pitterle

#### 1. Introductions and Meeting Objectives

- Jim Herbert kicked off the meeting, thanked everyone for joining, and provided a brief overview of the agenda and meeting objectives

#### 2. LMRWD Rules

- Rule A: Administrative and Procedural Requirements
  - Burnsville does not have an approved Municipal Permit with LMRWD
  - LMRWD confirmed an Individual Project Permit is requested
- Rule B: Erosion and Sediment Control
  - LMRWD and Barr confirmed applicability of rule
  - Bryan clarified that the side slopes of the landfill will be at 5H:1V and have downslope drainage collection berms/ditches at 200' maximum spacing. Water that is collected off the landfill top or within the downslope drainage collection berms/ditches is routed to downslope inlets and then pipes that flow to energy dissipators at the toe of slope.
  - Katy Thompson requested considerations be made for runoff or outfalls to the fen complex surrounding the dump site, especially if any concentrated stormwater becomes a part of the project.
- Rule C: Floodplain and Drainage Alteration
  - LMRWD and Barr confirmed applicability of rule
  - Della Schall Young inquired about who MPCA and Barr were working with from the city and MN DNR regarding the floodplain. Eric Lund indicated the primary DNR contact has been Suzanne Jiwani and the city contacts are Ryan Peterson and Jenni Faulkner. Eric stated the city has requested a no-rise certificate but has confirmed no approval or permit is required from the city.
- Rule D: Stormwater Management
  - Barr's position is that the proposed landfill cover should be defined as pervious because the liner is two feet deep and the surface soils do not impede entry of water into the soils.
  - LMRWD considers the proposed landfill cover as impervious due to the liner system and to ensure consistency with its review of future projects.
  - LMRWD indicated a willingness to work with the MPCA for a variance to its Rate Control requirement given that the MPCA will have an O & M plan and the cover soil materials will provide some filtration.
  - LMRWD and Barr concurred that if the proposed cap is considered as an impervious surface then the existing cap should also be considered as an impervious surface (to the extent documentation supports an existing clay cap).

- Operations & Maintenance (O & M)
  - LMRWD emphasized the importance of continued O & M at the site. Barr indicated the MPCA has a program for maintaining its sites that will be described in the final application.

### 3. Schedule

- Eric Lund described that the currently assumed schedule is as follows
  - July 2020 - selected variation of dig-and-line option
  - November 2020 – bid both dig-and-line and dig-and-haul options
  - Early 2021 – legislature selects which option receives funding
  - Summer 2021 – construction begins

### 4. Action Items

- Eric Lund to reach out to Ryan Peterson (City) and Jenni Faulkner (City) to see if it is OK to forward an email regarding city coordination and permitting. [Post meeting note – task completed and email forwarded]
- Della Schall Young to reach out to Suzanne Jiwani with the MN DNR to coordinate floodplain and flood conveyance alterations.
- Barr to begin preparing documentation that would support request for variance for rate control requirements as part of Rule D. Additional correspondence with LMRWD prior to submittal may be requested.



# Technical Memorandum

**To:** Linda Loomis, Administrator  
Lower Minnesota River Watershed District

**From:** Katy Thompson, PE, CFM  
Della Schall Young, CPESC, PMP

**Date:** August 12, 2020

**Re:** Fort Snelling Redevelopment Permit Review (LMRWD No. 2020-113)

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Loucks has applied for an Individual Project Permit from the Lower Minnesota River Watershed District (LMRWD or District). Together with Dominion (the project owner), they are proposing to redevelop a portion of Fort Snelling, located east of the intersection of Colville Avenue and Taylor Avenue, in Hennepin County, Minnesota ([Figure 1](#)). The project proposes to renovate historic buildings to provide multifamily housing and construction of associated roads, surface parking, garages, utilities, and stormwater management systems.

Because the proposed project is located in Fort Snelling and subject to LMRWD permitting review, the applicant must receive a District permit for triggering the District's Rule B—Erosion and Sediment Control and Rule D—Stormwater Management. The project is not located within the FEMA floodplain or the District's Steep Slopes or High Value Resources overlay districts.

An initial review of the proposed project was completed on July 30, 2020, and the applicant was contacted to clarify several minor concerns on August 5, 2020, including proposed land uses and modification to the proposed conditions HydroCAD modeling. The applicant provided supporting documents on August 7, 2020, and the project review has been revised following review of the new information.

## Project Summary

<u>Project Name:</u>	Fort Snelling Redevelopment
<u>Purpose:</u>	Residential
<u>Project Size:</u>	46.8 acres, 23.40 acres disturbed, 12.43 acres of existing impervious, 16.68 acres of proposed impervious, and 4.25 acres of new impervious created
<u>Location:</u>	6409 Taylor Avenue, St. Paul, MN 55111
<u>Applicable LMRWD Rules:</u>	Rule B—Erosion and Sediment Control Rule D—Stormwater Management
<u>Recommended Board Action:</u>	Conditional approval, see recommendations

## Discussion

The District has received the following documents for review:

- LMRWD Individual Permit Application by Loucks, dated July 17, 2020
- LMRWD Individual Permit Fee of \$1,500 (Check No. 169016), received July 20, 2020
- 11x17 Full Civil Plan Set by Loucks, dated July 20, 2020
- Stormwater Management Plan by Loucks, dated September 10, 2019, revised July 20, 2020
- Draft Stormwater Maintenance Agreement, received July 20, 2020
- SWPPP Narrative by Loucks, dated July 20, 2020
- Watershed Response Memo by Loucks, dated August 7, 2020
- Landscape Plans by Loucks, dated April 10, 2020, revised June 17, 2020, and July 24, 2020
- Revised Proposed HydroCAD Report by Loucks, dated August 5, 2020

The documents provided include the information necessary for review.

### Rule B—Erosion and Sediment Control

The District regulates land-disturbing activities that affect one acre or more under Rule B. The proposed project would disturb approximately 47 acres within the LMRWD boundary, including the creation of 4.25 acres of new impervious surfaces. The applicant has provided an erosion and sediment control plan and Stormwater Pollution Prevention Plan (SWPPP). Minor discrepancies exist between the areas proposed in

the SWPPP and other project documentation.

A NPDES permit is required for a District permit as well as an executed maintenance agreement with the District. The applicant has provided a draft maintenance agreement, which has been submitted to the District counsel for review.

#### Rule D—Stormwater Management

The District requires stormwater management for projects that propose to create one acre or more of new impervious area. The provided information demonstrates that the project will create an additional 4.25 acres of impervious surfaces.

The project will connect to the existing storm sewer near or within the MnDOT right-of-way at several locations (**Figure 1**). A summary of the proposed outfalls is provided below:

- **1R:** Overland flow to the golf course; no BMP treatment provided
- **2R:** Overland flow to the baseball fields; no BMP treatment provided
- **3R:** Connection to existing MnDOT storm sewer, stormwater treatment provided by an underground infiltration gallery (1P) and an infiltration basin (2P)
- **4R:** Connection to existing MnDOT storm sewer and a new outfall to MnDOT right-of-way; no BMP treatment provided
- **5R:** Connection to existing MnDOT storm sewer; no BMP treatment provided

The following is a discussion of the District's stormwater requirements.

#### Rate Control

Section 4.4.1 of Rule D requires that applicants demonstrate no increase in proposed runoff rates when compared with existing conditions. The Fort Snelling Redevelopment project would discharge at four locations, three east to MnDOT storm sewers or right-of-way (3R, 4R, and 5R) and one northwest to the baseball fields (2R). The project proposes to redirect flow away from the existing 1R outfall to the 3R system. A summary of the provided HydroCAD modeling appears in **Tables 1** through **6** below.

Table 1. HydroCAD Drainage Area and Impervious Summary

OUTFALL	EXISTING CONDITIONS		PROPOSED CONDITIONS		CHANGE	
	Drainage Area (ac)	Impervious Area (ac)	Drainage Area (ac)	Impervious Area (ac)	Drainage Area (ac)	Impervious Area (ac)
1R	4.856	1.439	0	0	-4.856	-1.439
2R	2.776	1.061	2.637	0.425	-0.139	-0.636
3R	24.328	6.121	28.108	9.495	+3.78	+3.374
4R	5.662	0.42	7.474	2.081	+1.812	+1.661
5R	9.161	3.387	8.579	3.896	-0.582	+0.509
<b>TOTAL</b>	<b>46.783</b>	<b>12.428</b>	<b>46.798</b>	<b>15.897</b>	<b>+0.015</b>	<b>+3.469</b>

Table 2. Peak Runoff Rates at Discharge Point 1R from HydroCAD Models

EVENT	EXISTING (CFS)	PROPOSED (CFS)	CHANGE (CFS)
1-YR / 24-HR	3.61	0	-3.61
2-YR / 24-HR	4.97	0	-4.97
10-YR / 24-HR	10.64	0	-10.64
100-YR / 24-HR	24.47	0	-24.47

Table 3. Peak Runoff Rates at Discharge Point 2R from HydroCAD Models

EVENT	EXISTING (CFS)	PROPOSED (CFS)	CHANGE (CFS)
1-YR / 24-HR	3.31	2.3	-1.01
2-YR / 24-HR	4.28	3.13	-1.15
10-YR / 24-HR	8.09	6.55	-1.54
100-YR / 24-HR	16.8	14.8	-2

Table 4. Peak Runoff Rates at Discharge Point 3R from HydroCAD Models

EVENT	EXISTING (CFS)	PROPOSED (CFS)	CHANGE (CFS)
1-YR / 24-HR	12.22	1.72	-10.5
2-YR / 24-HR	16.67	2.55	-14.12
10-YR / 24-HR	28.11	17.08	-11.03
100-YR / 24-HR	55.72	54.32	-1.40

*Table 5. Peak Runoff Rates at Discharge Point 4R from HydroCAD Models*

EVENT	EXISTING (CFS)	PROPOSED (CFS)	CHANGE (CFS)
1-YR / 24-HR	4.49	3.46	-1.03
2-YR / 24-HR	6	4.75	-1.25
10-YR / 24-HR	12.12	10.37	-1.75
100-YR / 24-HR	26.66	25.19	-1.47

*Table 6. Peak Runoff Rates at Discharge Point 5R from HydroCAD Models*

EVENT	EXISTING (CFS)	PROPOSED (CFS)	CHANGE (CFS)
1-YR / 24-HR	8.28	6.48	-1.8
2-YR / 24-HR	10.82	8.89	-1.93
10-YR / 24-HR	20.86	18.93	-1.93
100-YR / 24-HR	44.22	43.72	-0.5

There are minor discrepancies between the results reported in the Stormwater Management Plan and the provided HydroCAD modeling; however, both show a reduction in runoff rates at all locations.

The proposed conditions HydroCAD model uses slightly different curve numbers for the open space areas (grass cover, woods, and woods/grass combination) that indicate potential restoration activities may occur as part of this project. The provided landscape plans indicate the applicant intends to remove existing invasive vegetation and replant with native short grass prairie species, which justifies the lower curve numbers.

#### Volume Reduction

Section 4.4.2 of Rule D requires volume reduction for post-construction stormwater runoff volume for projects that create more than one acre of impervious surface. The applicant proposes to treat the new 4.25 acres of impervious surface with two infiltration BMPs to meet the District requirement of one inch of rainfall over the new impervious surfaces or 15,442 cubic feet (CF) of volume reduction.

The proposed underground infiltration gallery (1P) consists of four rows of 37 chambers made from 60-inch perforated corrugated metal pipe (CMP) on top of a six-inch aggregate base that provides approximately 21,480 cubic feet (CF) of infiltration potential. The applicant provided soil boring information with the stormwater management plan. Soil boring ST-21 is located within the footprint of the underground infiltration gallery and indicates that the underlying soils may be a sandy clay that may not provide the assumed level of infiltration used in the

supporting HydroCAD modeling. The soil boring did not go deep enough to confirm adequate separation exists between the bottom of the infiltration zone and seasonally high groundwater or other infiltration-limiting features. The applicant provided additional information on August 7, 2020, in the “Watershed Response Memo” that demonstrated the seasonally high groundwater elevation at BMP 1P is 797.50 and that the groundwater separation requirement of three feet is met.

The proposed infiltration basin (2P), however, does have adequate separation from groundwater (the boring log at ST-10 showed no signs of groundwater to a depth of 801.4) and suitable underlying soils to provide the design infiltration capacity of 4,827 CF. A summary of the proposed infiltration BMPs is provided in **Table 7** below.

*Table 7. Infiltration BMP Design Summary*

BMP	BOTTOM ELEVATION	OUTLET ELEVATION	MAX. DEPTH (FT)	PROVIDED STORAGE (CF)	DESIGN HIGH WATER LEVEL	EMERGENCY OVERFLOW ELEV.
1P	800.50	802.20	1.7	21,480	805.51	n/a
2P	808.00	809.20	1.2	4,827	812.34	814.10

Water Quality

Section 4.4.3 of Rule D requires projects that create more than one acre of impervious surface to provide evidence that no net increase in total phosphorus (TP) or total suspended solids (TSS) in the receiving waters would result from the project. The overall project will create 4.25 acres of new impervious surface, and the two infiltration BMPs have been proposed to meet the District’s water quality requirements. The proposed BMPs provide an overall reduction for both TP and TSS (**Table 8**), meeting the District’s water quality requirements.

*Table 8. MIDS Water Quality Summary*

	Total Area (ac)	Impervious Area (ac)	Area Routed to Proposed BMPs (ac)	TP Annual Load (lbs)	TSS Annual Load (lbs)
Existing	46.783	12.428	0	31.029	5,636.8
Proposed	46.798	16.689	20.613	24.729	4,373.8
			<b>Change</b>	<b>-6.3</b>	<b>-1,263.0</b>

## Recommendations

Overall, the project as proposed appears to meet the requirements laid out in the District Rules, and we recommend conditional approval of the project by the Board. The following are required to satisfy the conditions:

- Copy of the NPDES permit
- Any modifications to the stormwater maintenance agreement if determined necessary by the District's legal counsel

## Attachments:

- Figure 1. Proposed Fort Snelling Redevelopment Project Location Map

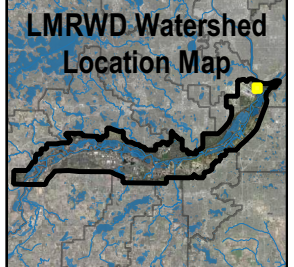


**Figure 1: Fort Snelling Redevelopment Project Location**



**LEGEND**

- |                            |                               |                         |
|----------------------------|-------------------------------|-------------------------|
| Project Location           | Public Waterbodies            | Hennepin Co. Floodplain |
| Proposed Outfall Locations | Steep Slopes Overlay District | 100-yr Floodplain       |
| Infiltration Basin (2P)    | Hennepin Co. Parcel Data      | 500-yr Floodplain       |
| Infiltration Gallery (1P)  | Streets                       | Floodway                |





# Technical Memorandum

**To:** Linda Loomis, Administrator  
Lower Minnesota River Watershed District

**From:** Katy Thompson, PE, CFM  
Della Schall Young, CPESC, PMP

**Date:** June 11, 2020

**Re:** Prairie Heights Preliminary Review (Permit No. 2020-103)

---

Norton Homes has applied for an Individual Project Permit with the Lower Minnesota River Watershed District (District or LMRWD) for Prairie Heights, a 24-lot, single-family home subdivision in Eden Prairie, Minnesota. The proposed project is not in the High Value Resource Area overlay district or in the Steep Slope overlay district. The applicant has also applied for a preliminary plat approval from the City of Eden Prairie and provided these documents to the District for review.

The Prairie Heights project spans the boundary between the District and the Riley-Purgatory-Bluff Creek Watershed District (RPBCWD). The extension of Surrey Street and construction of six single-family homes comprise the extent of the proposed improvements within the District. The portion of the Prairie Heights project within the District flows into RPBCWD under both existing and proposed conditions, and all proposed stormwater best management practices (BMPs) are located within the RPBCWD boundary ([Figure 1](#)).

## Summary

<u>Project Name:</u>	Prairie Heights
<u>Purpose:</u>	Construction of a 24-lot, single-family, detached home subdivision by Norton Homes
<u>Project Size:</u>	10.71 acres platted, 9.63 acres of disturbance (2.48

acres in the District), 0.38 acres of existing impervious, and 2.78 acres of new impervious surface (1.1 acres in the District)

Location: Southwest of Pioneer Trail and Yorkshire Lane, Eden Prairie, MN (Parcel IDs 2711622140035 and 2611622230005)

Applicable LMRWD Rules: Rule B—Erosion and Sediment Control  
Rule D—Stormwater Management

Recommended Board Action: Conditional approval, pending approval by RPBCWD

## Discussion

Norton Homes is proposing to construct a new subdivision comprising 24 single-family detached home lots southwest of the intersection of Pioneer Trail and Yorkshire Lane in Eden Prairie, Minnesota (Hennepin County Parcel IDs: 2711622140035 in LMRWD and 2611622230005 in RPBCWD). The District was provided with the following documents for review:

- Storm Water Management Plan for Prairie Heights Preliminary Plat, dated May 18, 2020, by Alliant Engineering, Inc.
- Preliminary Plat Plans, dated May 18, 2020, by Alliant Engineering, Inc.

The proposed project is located in the City of Eden Prairie and would normally be subject to municipal review; however, the City of Eden Prairie does not have an approved Municipal Permit with the District, and as such, the applicant must receive a District permit prior to construction.

### Rule B—Erosion and Sediment Control

The District regulates land-disturbing activities that affect one acre or more outside the High Value Resource Area Overlay District under Rule B. The proposed project disturbs a total of 9.63 acres, which includes 2.48 acres and approximately 1 acre of new impervious surfaces within the District boundary. Norton Homes has provided a preliminary erosion and sediment control plan and a Stormwater Pollution Prevention Plan with the preliminary plat submittal. The Storm Water Management Plan states that there will not be a homeowners association. The applicant may need to enter into a stormwater maintenance agreement with the City of Eden Prairie and/or the RPBCWD to ensure proper long-term maintenance of the proposed stormwater facilities.

Rule D—Stormwater Management

The District requires stormwater management for projects that propose to create more than one acre of new impervious surface. Although the project is proposing approximately 1.1 acres of impervious area within the District boundaries, it will be treated in stormwater basins located with the RPBCWD.

Rate Control

Section 4.4.1 of Rule D requires that applicants demonstrate no increase in proposed runoff rates when compared to existing conditions. Although the proposed impervious within the District is treated outside the District limits in Basin A, the rate control requirement for the proposed development is met. A summary of the provided results appears in **Table 1** below.

*Table 1. Prairie Heights West Outlet (Basin A) Rate Control Summary*

<b>EVENT</b>	<b>EXISTING (CFS)</b>	<b>PROPOSED (CFS)</b>	<b>Δ (CFS)</b>
2-YR 24-HR	3.52	2.39	-1.13
10-YR 24-HR	10.49	10.04	-0.45
100-YR 24-HR	31.5	22.75	-8.75
100-YR 10-DAY (SNOW)	7.5	5.6	-1.9

Volume Reduction

Section 4.4.2 of Rule D requires volume reduction for post-construction stormwater runoff volume for projects that create more than one acre of impervious surface. Based on the Storm Water Management Plan provided, Norton Homes proposes to excavate in situ soils and backfill with amended soils due to clay soils and filtrate rather than infiltrate to meet the volume reduction/abstraction credit for the District and RPBCWD. The applicant is proposing to filter the stormwater runoff in excess of the 1.1-inch requirement imposed by RPBCWD.

Water Quality

Section 4.4.3 of Rule D requires projects that create more than one acre of impervious surface to provide evidence that no net increase in total phosphorus (TP) or total suspended solids (TSS) in the receiving waters will result from the project.

The applicant has provided P8 modeling to demonstrate an overall reduction in TP and TSS, exceeding the District requirements.

## Recommendations

Although the project is located in both the Lower Minnesota River Watershed District and RPBCWD, the applicant has proposed a design that attempts to meet both districts' requirements. From our review of the preliminary plat submittal, the project as presented meets the Lower Minnesota River Watershed District criteria for both Rules B and D. We recommend it be conditionally approved, pending the following:

- Approval of the project by the Riley-Purgatory-Bluff Creek Watershed District
- Revision of the narrative and a final review of final plans should changes be made at the request of the Riley-Purgatory-Bluff Creek Watershed District
- Submission of a copy of the NPDES permit
- Submission of a copy of the final RPBCWD permit and executed maintenance agreement with the RPBCWD permit

### Attachments:

Figure 1. Proposed Prairie Heights Project Location Map

LMRWD Permit Review Checklist



LOWER MINNESOTA RIVER  
WATERSHED DISTRICT













# Figure 1: Prairie Heights Preliminary Review

## Eden Prairie, MN

09-June-2020



### LEGEND

-  LMRWD Boundary
-  Proposed Project Area
-  Proposed Impervious
-  Proposed Stormwater Basins
-  Hennepin Co. Parcels
-  Hennepin Co. Floodplain
-  100-yr Floodplain
-  Floodway
-  500-yr Floodplain
-  Calcareous Fen Locations
-  HVRA Overlay District
-  Steep Slopes Overlay District



Young Environmental Consulting  
Group, LLC



## LOWER MINNESOTA RIVER WATERSHED DISTRICT PROJECT REVIEW

Project ID	<input type="text" value="2020_0103"/>	Authorization Agent	<input type="text" value="Patrick Hiller"/>
Project Name	<input type="text" value="Prairie Heights Development"/>	Email Address	<input type="text" value="path@nortonhomes.com"/>
Organization	<input type="text" value="Norton Homes"/>	Phone Number	<input type="text" value="7635592991"/>
Notes	<input type="text" value="5/27/2020 - Rcvd application"/>		

### *Project Summary*

Anticipated start date	<input type="text" value="7/13/2020"/>	Date received	<input type="text" value="5/27/2020"/>
Project location	<input type="text" value="12701 Pioneer Tr"/>	Project map included?	<input checked="" type="checkbox"/>
Project acres	<input type="text" value="9.63"/>	Is the project in an unincorporated area?	<input type="checkbox"/>
Total disturbed acres	<input type="text" value="9.63"/>	Is it located in a High Value Resource Area	<input type="checkbox"/>
New impervious acres	<input type="text" value="2.78"/>	Is it located in a Steep Slope Overlay Distric	<input type="checkbox"/>
Local Partners	<input type="text" value="n/a"/>	Other Sensitive Area	<input type="text" value="Th proposed project straddles the LMRWD and Riley-Purgatory-Bluff Creek Watershed District boundary"/>

### Project Description

### Additional Notes

#### Review Status

- Is this a preliminary review?
- Is this a permit review?
- Does this project require a technical review?

#### Project Status

- Project is pending
- Project is active
- Project has been archived

## *Erosion and Sediment Control*

This project triggers one or more thresholds for this rule.

<u>Triggers</u>		<u>Criteria</u>	
Disturbs one acre plus	<input checked="" type="checkbox"/>	Erosion and Sediment Control Plan	<input checked="" type="checkbox"/>
Located within the HVRA Overlay District	<input type="checkbox"/>	Inspection and maintenance addressed	<input type="checkbox"/>
Meets the HVRA threshold	<input type="checkbox"/>	NPDES/SDS General Construction Permit documentation	<input type="checkbox"/>

The documentation requirements for this rule have not been met. A review cannot be completed until all required documentation has been submitted.

Additional Notes

6/8/20 - Prelim SWPPP and ESC provided

## *Floodplain Drainage Alteration*

This rule does not apply.

<u>Triggers</u>			
Changes in water surface elevation of floodplain	<input type="checkbox"/>	Calculations by a professional engineer demonstrating no decrease to conveyance	<input type="checkbox"/>
<i>If yes,</i> Compensatory storage equal or greater than volume of fill	<input type="checkbox"/>	Conveyance capacity decrease below 100yr high water elevation	<input type="checkbox"/>
<i>If no,</i> No-rise certification by a professional engineer	<input type="checkbox"/>	Temporary placement of fill	<input type="checkbox"/>
<u>Criteria</u>		Adverse impacts to water quality, habitat, or fisheries	<input type="checkbox"/>
Net decrease of storage capacity OR increase in 100yr elevation	<input type="checkbox"/>	New structures have 2ft+ between lowest enclosed area's floor and 100yr high water elevation	<input type="checkbox"/>
Will floodplain storage be created	<input type="checkbox"/>		

Additional Notes

## Stormwater Management

This project triggers one or more thresholds for this rule.

Type of project Development

### Triggers

One acre or more of impervious surface

Are trout streams protected

### **HVRA Overlay District**

Located within the HVRA Overlay District

Rate control exceeded for 1, 2, 10, and 100yr 24-hour event

*If yes,* Meets the HVRA threshold

Projects with 1+ acres of new impervious: are MPCA's Construction General Permit

### Criteria

Post-construction runoff rates exceed existing rates for 1, 2, 10, and 100yr 24-hour events?

Net increase of TP

Net increase of TSS

New Development: the post-construction runoff volume retained onsite equal 1.1 inches of runoff from impervious surfaces

Is maintenance adequately addressed

Redevelopment: the project will capture and retain onsite 1.1 inches from new/fully reconstructed impervious surface

Project will result in a net decrease of TP and TSS

Linear: the site will capture and retain (a) 0.55 inches of runoff from new/fully reconstructed impervious, or (b) 1.1 inches of runoff from the net increase in impervious area

Volume control requirements sufficiently addressed

The documentation requirements for this rule have not been met. A review cannot be completed until all required documentation has been submitted.

### Alternative Infiltration Measures

Infiltration not possible at all basins due to poor soils, filtering stormwater per RPBCWD standards instead.

### Additional Notes

6/10/20 - Stormwater runoff to be treated by three infiltration basins located within RPBCWD.



## *Steep Slopes*

This rule does not apply.

### Triggers

Is the project in the Steep Slopes Overlay District

Excavation of 50 cubic yards+ of earth

Displacement of 5,000 sq. ft+ of earth

Vegetation removal or displacement

Activities that require LGU permits

### Criteria

Has the project been certified by a professional engineer

Adverse impact to waterbodies

Unstable slope conditions

Degradation of water quality

Preservation of existing hydrology

New discharge points along slope

Additional Notes