The location of the meeting is scheduled for the Board Room at the Carver County Government Center

LOWER MINNESOTA RIVER WATERSHED DISTRICT

Lower Minnesota River Watershed District

7:00 PM

Wednesday, June 13, 2018

County Board Room, Carver County Government Center, 2nd Floor

602 East 4th Street, Chaska, MN 55318

Agenda Item	Discussion
1. Call to order	A. Roll Call
2. Approval of agenda	
3. Citizen Forum	*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.*
4. Consent Agenda	*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.* A. Approve Minutes for May 16, 2018 Regular Meeting B. Receive and file Financial Reports C. Approval of Invoices for payment i. Barr Engineering - No-rise evaluation and model ii. Burns & McDonnell - March 2018 engineering services iii. Culligan Bottled Water - Bottled Water for Chaska office iv. Time Saver Offsite Secretarial - Preparation of March & April Board meeting minutes v. US Bank Equipment Finance - June 2018 copier rental vi. Friends of the Minnesota Valley - 2017 Education & Outreach at County Fairs in Minnesota River Basin vii. Pace Analytical Services, LLC - Chloride testing of Ike's Creek water samples viii. Rinke Noonan - for April 2018 legal services ix. Scott County SWCD - 1st quarter 2018 monitoring services x. Star Tribune - Publication of public hearing legal notice xi. Steinkraus Development LLC - for June office rent

	xii. Dakota County SWCD - 1st quarter 2018 monitoring services xiii. Naiad Consulting, LLC - for March 2018 admin services & expenses D. LMRWD/Dakota County Agreement addendum for Technical Assistance Services
5. New Business/ Presentations	A. Presentation of 2017 Audit report
6. Old Business	A. Hennepin County Landslide Inventory B. MAWD Summer Tour C. Dredge Management i. Funding for dredge material management ii. Vernon Avenue Dredge Material Management site iii. Private Dredge Material Placement D. Watershed Management Plan E. 2018 Legislative Action F. Education & Outreach - no new information to report since last update G. LMRWD Projects i. Eden Prairie Area #3 Stabilization ii. Riley Creek Cooperative project Hennepin County Flying Cloud Drive/CSAH 61 reconstruction project iii. Floodplain Lake Coring Project with Freshwater Society iv. Seminary Fen ravine stabilization project v. Analysis of Dakota County Monitoring vi. East Chaska Creek - CSAH 61 & TH 41 Transportation improvements H. Project/Plan Reviews i. City of Bloomington - MN Valley State Trail ii. Scott County WMO - 2019–2026 Comprehensive Water Resources Management Plan Review iii. Draft Dakota County Comprehensive Plan Review iv. Burnsville Comprehensive Plan Review v. City of Burnsville - Dodge of Burnsville vi. City of Chaska - MCES L-71 lift station project vii. City of Eden Prairie - Abra Auto Body I. MPCA Soil Reference Values - No new information since last update
7. 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 Wednesday, July 18, 2018

Upcoming meetings/Events

- LMRWD Minnesota River Boat Tour - 5:00pm - 8:30/9:00pm, Wednesday, June 20, Depart from CHS, 6200 State Highway 13, Savage

- MAWD Summer Tour - Wednesday, June 20 through Friday June 22 - Country inn & Suites, Chanhassen
-

For Information Only

- WCA Notices
  - None received
- DNR Public Waters Work permits
  - None received
- DNR Water Appropriation permits
  - City of Chaska - MCES; Veit Companies, construction dewatering, Chaska L71 Lift Station
  - City of Eden Prairie - Hennepin County, construction dewatering, Flying Cloud Drive/Riley Creek

Future Manager Agenda Items list

- 2019 Budget
- Dredge management funding
- Report of water quality testing of Minnesota River from MPCA
- Report on Flying Cloud Landfill
- Record retention policy
- AIS Policy
- Riverbank stabilization policy

Future TAC Agenda Items List

- LMRWD monitoring plan

Lower Minnesota River Watershed District
General Fund Financial Report
Fiscal Year: January 1, 2018 through December 31, 2018
Meeting Date: June 13, 2018

(UNAUDITED)

Item 4.B.
LMRWD 6-13-18

BEGINNING BALANCE	**30-Apr-18**				**$ 1,154,096.66**
ADD:					
General Fund Revenue:					
Met Council WOMP station monitoring			$ 4,500.00		
Total Revenue and Transfers In					**$ 4,500.00**
DEDUCT:					
Warrants:					
406708	Barr Engineering	No-rise evaluation & model	$ 505.50		
406711	Burns & McDonnell	May 2018 engineering services	$ 18,008.86		
406717	Culligan Bottled Water	Bottled Water for Chaska office	$ 20.50		
406753	Time Saver Offsite Secretarial	March meeting minutes preparation	$ 142.00		
406756	US Bank Equipment Finance	June 2018 copier rental payment	$ 231.91		
407074	Friends of the Minnesota Valley	Payment for 2017 E & O project	$ 9,093.98		
407107	Pace Analytical	testing of Ike's Creek water samples	$ 100.00		
407115	Rinke Noonan Attorneys at Law	April 2018 Legal Services	$ 2,445.50		
407123	Scott County SWCD	1st quarter monitoring services	$ 6,919.92		
407131	Star Tribune	Public Hearing legal notice pub.	$ 828.80		
407133	Steinkraus Development	June 2018 office rent	$ 650.00		
100005593	Dakota County SWCD	1st quarter monitoring services	$ 1,040.00		
100005375	Naiad Consulting LLC	March 2018 admin service & exp.	$ 10,330.70		
100005732	Time Saver Offsite Secretarial	April meeting minutes preparation	$ 211.00		
Total Warrants/Reductions					**$ 50,528.67**
ENDING BALANCE	**31-May-18**				**$ 1,108,067.99**

Lower Minnesota River Watershed District
General Fund Financial Report
Fiscal Year: January 1, 2018 through December 31, 2018
Meeting Date: June 13, 2018

FY 2018

EXPENDITURES	2018 Budget	April Actual	YTD 2018	Over (Under) Budget
Administrative expenses	$ 250,000.00	$ 15,415.76	$ 71,597.76	$ (178,402.24)
Cooperative Projects				
Gully Erosion Contingency Fund	$ -	$ -	$ -	$ -
Ravine Stabilization at Seminary Fen in Chaska	$ -	$ -	$ -	$ -
Eden Prairie Bank Stabilization Area #3	$ -	$ -	$ -	$ -
Eagle Creek	$ -	$ -	$ -	$ -
USGS Sediment & Flow Monitoring	$ 18,500.00	$ -	$ -	$ (18,500.00)
509 Plan Budget				
Resource Plan Implementation				
Sustainable Lakes Management Plan (Trout Lakes)	$ 50,000.00	$ -	$ -	$ (50,000.00)
Geomorphic Assessments (Trout Streams)	$ 50,000.00	$ -	$ -	$ (50,000.00)
Paleolimnology Study (Floodplain Lakes)	$ 50,000.00	$ -	$ -	$ (50,000.00)
Fen Stewardship Program	$ 75,000.00	$ -	$ -	$ (75,000.00)
District Boundary Modification	$ 10,000.00	$ -	$ -	$ (10,000.00)
East Chaska Creek Treatment Wetland Project	$ 10,000.00	$ -	$ -	$ (10,000.00)
Minnesota River Sediment Reduction Strategy	$ 25,000.00	$ -	$ -	$ (25,000.00)
Seminary Fen - gap analysis	$ -	$ -	$ -	$ -
Data Assessments and Program Review	$ -	$ -	$ -	$ -
Dakota County groundwater modeiling	$ -	$ -	$ -	$ -
Riley Creek Cooperatice Project	$ 50,000.00	$ -	$ -	$ (50,000.00)
Local Water Management Plan reviews	$ 12,000.00	$ 37.40	$ -	$ (12,000.00)
Project Reviews	$ 16,000.00	$ 996.88	$ 1,478.13	$ (14,521.87)
Monitoring	$ 65,000.00	$ 8,059.92	$ 8,419.92	$ (56,580.08)
Monitoring Data Analysis				$ -
Technical Assistance				$ -
Watershed Management Plan				$ -
Plan Amendment	$ 50,000.00	$ 15,829.49	$ 40,437.90	$ (9,562.10)
Vegetation Management Standard/Plan	$ -	$ -	$ -	$ -
Public Education/CAC/Outreach Program	$ 30,000.00	$ 9,093.98	$ 13,543.98	$ (16,456.02)
Cost Share Program	$ 20,000.00	$ -	$ -	$ (20,000.00)
Savage Fen/Dakota Ave. Ravine Stabilization Project	$ -	$ -	$ -	$ -
Nine Foot Channel	$ 50,000.00	$ -	$ -	$ (50,000.00)
Dredge Site Improvements	$ 240,000.00	$ 1,095.24	$ 3,152.74	$ (236,847.26)
Total:	$ 1,071,500.00	$ 50,528.67	$ 138,630.43	

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, June 13, 2018

Agenda Item
Item 4. D. - LMRWD/Dakota County Agreement addendum for Technical Assistance Services

Prepared By
Linda Loomis, Administrator

Summary
After the LMRWD received applications for cost share from Dakota County, Dakota County SWCD and LMRWD staff discussed adding additional services to the agreement we already have for monitoring services. Similar agreements are in place in Carver and Scott Counties. Dakota SWCD provided a scope of services and cost estimate. Services will be billed as provided and the total is a not to exceed number. Since the year is half over we do not anticipate that this will have much of an impact on the 2018 budget. These services will be included in future years budgets.

Attachments
2018 Education & Community Engagement and Technical Assistance SWCD Work Plan and Budget

Recommended Action
Motion to approve Education & Community Engagement and Technical Assistance SWCD Work Plan and Budget

Exhibit 3

2018 Education & Community Engagement and

Technical Assistance SWCD Work Plan and Budget

Prepared for the

Lower Minnesota River Watershed District

TASK – EDUCATION AND COMMUNITY ENGAGEMENT	**COST ESTIMATE**
Landscaping for Clean Water Workshops • Conduct 1 Landscaping for Clean Water Introduction Presentation (one evening). **(Already held in 2018)** • Conduct 1 Landscaping for Clean Water Design Workshop (two evenings). **(Already held in 2018)**	Introduction Presentation = $0 Design Workshop = $0
• Create promotional materials for classes in partnership with Dakota County Cities and Watershed Orgs, organize course materials, coordinate with partners. • Push social media posts to promote classes, attend community events to promote classes.	Not to exceed = $960 Billed at $80 per hour
Subtotal	**$960**

TASK - TECHNICAL ASSISTANCE & PROJECT IMPLEMENTATION	**COST ESTIMATE**
Cost Share Program – Landscaping for Clean Water • SWCD staff time for technical assistance for participants • Provide cost share to landowners for up to 6 Landscaping for Clean Water projects including raingardens, native plantings and shoreline stabilization projects consistent with SWCD cost share policies.	Technical Assistance = $3,000 Landowner Incentives: $250/project x 6 projects = $1,500
Technical Assistance As Requested • SWCD staff time for technical assistance for projects as requested by Lower Minnesota River WD staff	Not to exceed = $10,000 Billed at $80 per hour
Subtotal	**$14,500**

TOTAL AGREEMENT NOT TO EXCEED $15,460

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, June 13, 2018

Agenda Item
Item 5. A. - Presentation of 2017 Audit Report

Prepared By
Linda Loomis, Administrator

Summary
Peggy Moeller of Redpath and Company will be at the meeting to present the findings of the audit of the LMRWD 2017 finances. Ms. Moeller will answer questions from the Managers.

Attachments
2017 Audit Report is available as a separate document on the LMRWD website

Recommended Action
Motion to receive and file the 2017 Audit Report

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, June 13, 2018

Agenda Item
Item 6. A. - Hennepin County Landslide Inventory

Prepared By
Linda Loomis, Administrator

Summary
Enough have signed on to this project so work will be starting on the project. There are still a few variables to be tied up. Confirmed participation has been received from LMRWD, Nine Mile Creek WD, Mississippi WMO, RPBCWD, Hennepin County and US Fish & Wildlife Service (permission for access)

RPBCWD is still determining whether or not to go ahead with estimates for Carver County and other add-ons. Mississippi WMO is weighing the estimate for Anoka County add-on. Minnehaha Creek WD has not yet confirmed, because the item got bumped from the meeting agenda and they will need more time.

Steve Woods, Freshwater Society, thinks this will "be a great product that everyone will be able to utilize to connect with people, highlight avoidable risks and demonstrate yet another way local governments work together (WD, WMO, City and County) for their citizens".

Freshwater will catch up with Minnehaha Creek and update all parties again. They will then either invoice individual organizations or develop a contract. A formal proposal (with tasks and costs) will be forthcoming.

There was a landslide on Highway 13, May 31st. Here is a link to the article in the Star Tribune in case you missed it. http://www.startribune.com/mudslide-closes-portion-of-hwy-13-in-lilydale/484173471/. This slide was not in the District.

Attachments
No attachments

Recommended Action
No action recommended

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, June 13, 2018

Agenda Item
Item 6. B. - MAWD Summer Tour

Prepared By
Linda Loomis, Administrator

Summary
MAWD Summer Tour will be attending the LMRWD MN River Boat Tour. We were not able to get a barge at this time of year, so we will be aboard the Betsy Northrup. Between the LMRWD, MAWD and the RPBCWD over 400 invitations were sent out. Reservations have come in slowly, but we may at about 100 so far. The Betsy Northrup can accommodate 300.

Box lunches will be served and a cash bar will be available. Speakers will be Carrie Jennings, Freshwater Society; Rylee Main, Lake Pepin Legacy Alliance; Gerry Shimek, US Fish & Wildlife Service; Clint Gergen, CHS; Joe Brinkman, Chart Industries. We will begin loading at 5:00 and depart CHS terminal at 5:30. President Shirk has agreed to greet everyone and I will speak to the group about the dredging. Buses will return everyone to either CHS or Country Inn & Suite in Chanhassen for those that are part of the MAWD tour.

We have agreed that the LMRWD will invoice MAWD for its portion of the cost incurred.

Attachments
Flyer sent to Local leaders

Recommended Action
No Action recommended

SOUTHWEST METRO

Local Leaders Water Institute *JUNE 20-22, 2018*

Come explore the Minnesota River, and its watersheds. Join other local leaders in learning about diverse aspects of managing rural & urban watersheds.

Registration required: http://bit.ly/LocalLeaders2018
Questions: Claire Bleser, cbleser@rpbcwd.org

Schedule:

Wednesday
5:00 - 8:30 pm

Discover the Minnesota River by boat

CHS Field Terminal, Savage, 6200 State HWY 13.
Managing a big river requires a multi-faceted approach, engaging partners and stakeholders at different scales. Guest speakers to include representatives from the agricultural, government, and non-profit sectors.

Thursday
8:30 am -3:30 pm

Tour projects in CCWMO & RPBCWD

Country Inn and Suites, Chanhassen, 591 W 78th St.
Board a bus for a tour of exciting projects ranging from a community stormwater reuse system, an urban area retrofit, and managing lakes both rural and urban.

Friday
8:30 - 11:30 am

Gain technical skills

RPBCWD Office, Chanhassen, 18681 Lake Drive East
A day to develop your skills. In this session we'll learn a process for creek restoration: from assessing creek health and identifying solutions, to monitoring results. This session will be partly outdoors, please dress appropriately.

(Dinner provided on the boat tour, lunch provided on the bus)

Cost: FREE

thanks to the support and financial contributions of:

Carver County Water Management Organization
LOWER MINNESOTA RIVER WATERSHED DISTRICT
CARVER SOIL & WATER CONSERVATION DISTRICT
RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT
9 MILE CREEK WATERSHED DISTRICT

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, June 13, 2018

Agenda Item
Item 6. C. - Dredge Management

Prepared By
Linda Loomis, Administrator

Summary

i. **Funding for Dredge Material Management**
The Managers authorized making dredge material management a permanent capital project. Staff prepared a plan for the ongoing capital project and has submitted it to the MNDNR and BWSR as required by state law. The District is awaiting comments. The proposal was also set to the city of Savage.

ii. **Vernon Avenue Dredge Material Management site**
The no-rise evaluation is being finalized. Rachel Contracting will be removing approximately 20,000 CY of material. The material is going to a project in Savage that is a Voluntary Investigation & Cleanup site (VIC). The project where the material is going is Valley Oil on Highway 13. Legal Counsel is preparing a purchase agreement for the material and Rachel has agreed to pay $2/CY.

iii. **Private Dredge Material Placement**
Material from private terminals that was place on the LMRWD site in 2017 was removed from the site in May. New material from 2018 dredging is being place on the site.

Attachments
No attachments

Recommended Action
No action recommended

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, June 13, 2018

Agenda Item
Item 6. D. - Watershed Management Plan

Prepared By
Linda Loomis, Administrator

Summary
Since October 2016, the LMRWD has been working on an amendment to its Watershed Management Plan (Plan) that will take the place of an update. This amendment was in response to a request from the Technical Advisory Committee. The Amendment is now ready for the Board to approve the draft and authorize staff to submit the plan to the Board of Water and Soil Resources for the 90-day agency review.

The draft Plan Amendment can be found on the District's website through this link http://lowermnriverwd.org/news/district-working-major-plan-amendment%20.

Major focus of the Plan Amendment has been on the District's standards which can be found in Appendix K. The draft Implementation Program and the SONAR (Statement of Need and Reasonableness) can also be found on through that link. Section 4 of the plan will be updated once the Board approves the implementation plan. The Board should inform staff of any additional changes to the plan they want to make, so those changes can be incorporated into the plan before submission to BWSR.

Attachments
No attachments - all documents can be found on LMRWD website

Recommended Action
Motion to approve draft Plan Amendment and authorize submission of Plan Amendment to BWSR for final 90-day agency review.

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, June 13, 2018

Agenda Item
Item 6. E. - 2018 Legislative Action

Prepared By
Linda Loomis, Administrator

Summary
A final report from MAWD on outcomes from the 2018 legislative session is attached. The LMRWD did not have a special ask this year from the legislature. Lisa Frenette and I met with a number of legislators to keep our issue in front of legislators friendly to the District. Lisa and I are planning to meet before the end of June to begin working on a legislative agenda for the 2019 session.

Attachments
MAWD May 24, 2018 Legislative update

Recommended Action
No action recommended

MINNESOTA ASSOCIATION OF WATERSHED DISTRICTS, INC
Land and Water Shall Be Preserved

MN Association of Watershed Districts
18681 Lake Drive East
Chanhassen MN 55317
(612) 790-0700
www.mnwatershed.org
Executive Director Emily Javens
exec.mawd@gmail.com

MN Association of Watershed Districts
LEGISLATIVE UPDATE: May 24, 2018

The 2018 legislative session came to an end late Sunday night and the Governor, less than 3 days later, vetoed two out of the three main bills passed during the session. The bonding bill is still pending but there were no veto threats or promises on that bill. The Governor did indicate in presenting his veto messages that he will not call a special session this year.

Because the policy legislation within both the supplemental finance bill and taxes bill will be resurrected in either a special session if one is called or in the 2019 session… not all is lost. At this point we need to consider the approved legislative language a blue print for the future.

With that in mind, we outline below what survived and what didn't make the cut in the bills presented or passed by the legislature. (Green checks = made it to the Governor, red Xs = did not make it to his desk.)

Certainly the legislative majority took a big gamble that the governor would accept all provisions in a large, multiple subject bill that he disagreed with and sign the bill. But, by placing all finance and policy issues into one large omnibus bill (largest bill in the history of the state) it takes only one policy provision the Governor disagrees with to bring down the entire bill. While the legislature did remove many provisions (71 out of 117) that he asked them to remove, it was not enough.

The Governor does have the latitude to line-item veto spending provisions, but not policy provisions unless they are attached to the vetoed funding.

With these vetoes, we, along with many others, are left holding a large empty bag for all our work during the session. We are attaching a copy of one of the Governor's veto messages since it so clearly illustrates the impact partisan politics had on everything this year.

Lastly, we are including a list of the legislation that was proposed by others that we were tracking and at times acting on. These bills did not make it to the Governor's desk.

SF 3656, Chapter 201 Legislative Provisions (Vetoed 5-23-18)

Watershed Planning and Management. We introduced a bill that would significantly reduce the duplicative efforts between the Total Maximum Daily Load (TMDL) studies, the Watershed Restoration and Protection Strategy (WRAPS) reports and One Watershed One Plan (1W1P) efforts. This was a joint effort with the Association of MN Counties (AMC), the MN Association of Soil and Water Conservation Districts (MASWCD), the Board of Water and Soil Resources (BWSR) and the MN Pollution Control Agency (MPCA). We also worked closely with several environmental groups to address concerns they had along the way.

✓ **COORDINATED WATERSHED MANAGEMENT (HF 3908 / SF 3647)**
MAWD Resolution 2017-01: Advocate for coordination and integration of state watershed programs with local watershed implementation. Included in the supplemental finance bill.
PASSED → SENT to GOVERNOR (but vetoed)

103E Drainage. On behalf of the drainage work group, we worked on five statutory changes that would remove impediments standing in the way of getting buffers established on public ditches. This was a joint effort with AMC and BWSR. We also worked with the MN Department of Agriculture on the Agricultural Best Management Practices (Ag BMP) Loan Program provisions. These recommendations came from a report from the drainage work group sent to the legislature (report) dated February 1, 2018 entitled "Recommendations for Accelerating Public Drainage System Acquisition and Establishment of Buffer Strips and Alternative Practices."

DWG RECOMMENDATIONS FOR ACCELERATING DITCH BUFFER ESTABLISHMENT

MAWD Board Direction: Promote consensus legislation put forth by the Drainage Work Group.

✓ **Recommendation S1.** Add a temporary legislative provision to allow, with landowner consent, a drainage authority to seed and establish ditch buffer strips in advance of drainage law proceedings to determine damages and acquire a permanent easement. **PASSED → SENT to GOVERNOR (but vetoed)**

✓ **Recommendation S2.** Clarify Section 103E.021, Subd. 6, to expressly state that, upon findings and an order, the drainage authority is vested with jurisdiction over property rights acquired for 16.5-ft. ditch buffer strips. **PASSED → SENT to GOVERNOR (but vetoed)**

✓ **Recommendation S3.** Revise Section 103E.351 Redetermination of Benefits and Damages to enable 26 percent of benefited landowners, or owners of 26 percent of the benefited lands, to petition for a redetermination of benefits in order to update benefited area(s) and benefits on record and more equitably apportion drainage system costs, including for ditch buffer strips. NOTE: Currently landowners can only petition to correct an error. **PASSED as AMENDED (50 percent required, not 26 percent) → SENT to GOVERNOR (but vetoed)**

✓ **Recommendation S6.** Clarify Section 103E.071 County Attorney, to make it clear that drainage authorities, including counties, may hire outside legal counsel per Section 388.09, Subd. 1. **PASSED → SENT to GOVERNOR (but vetoed)**

✓ **Recommendation P4.** For a ditch system that does not have adequate cash flow capability, modify an existing or create a new loan program for buffer strip acquisition and establishment. **Provisions to modify the Ag BMP Loan Program to allow drainage authorities to borrow money on behalf of multiple landowners was PASSED → SENT to GOVERNOR (but vetoed)**

Note: The Ag BMP Loan Program provisions were also placed in the Ag Policy Bill (Chapter 190, HF4133) and sent to the governor. The legislation was promptly vetoed (May 21) by the governor because of other provisions in the legislation that he disagreed with.

Legacy Appropriations. In an unusual turn of events, $26M dollars went unspent from the Clean Water Fund. This money became available because there was more revenue from sales tax than was expected and the legislature returned $22M from the general fund as promised in last year's legislation IF there was a surplus. The House had a bill that outlined how to spend the money, but unfortunately the Senate wasn't interested in spending it. The senate position to not spend the money this year was unfortunate, but it will be available next year. NOTE: The Lessard-Sams Outdoor Heritage Council appropriations passed in a standalone bill with projects in several watershed districts. The Governor has not acted on this bill yet.

CLEAN WATER FUND (HF 4269)

✗ This bill specified how the nearly $26M extra Clean Water Funds were to be spent in FY 2019. There was $4.3M for additional One Watershed One Plan implementation grants, $3.5M for competitive grants, $5M for buffer cost share, $10M for CREP, and a few other items. **DID NOT PASS THE LEGISLATURE**

OUTDOOR HERITAGE FUND (HF 3423)
Description: This bill specifies how $113.9M will be spent in FY 2019 with projects identified in the Shell Rock River, Buffalo-Red River, and Minnehaha Creek WDs. **PASSED AS A STAND-ALONE BILL → SENT to GOVERNOR (he has not signed or vetoed this bill yet)**

- $1.421M for Shell Rock River Watershed Habitat Restoration Program - Phase VII
- $1.195M for Buffalo River Watershed Stream Habitat Program
- $0.567M for Six Mile Creek – Halsted Bay Habitat Restoration

Water Resource Issues. Unfortunately, the legislation providing limited liability protection to certified commercial salt applicators did not make it to Governor's desk.

LIMITED LIABILITY FOR COMMERCIAL SALT APPLICATION (HF 3577 / SF 3199)
MAWD Resolution 2017-04: Support limited liability protections for certified commercial salt applicators. **REMOVED FROM FINAL OMNIBUS BILL**

Bonding Bill HF 4425, Chapter 214 (No Action by Governor Yet)

Bonding: This legislation passed after being rejected by the full senate. Also included in this $1.56 billion-dollar bill was $98M funded by dollars from the Environmental Trust Fund. In addition to the $10M in CREP funding and $6.7M in Wetland Road Replacement funds, the good news for bonding is that the flood hazard mitigation money did not have any earmarks ensuring projects ready to build will be funded and provides more flexibility within the program to provide maximum funding for those projects on the DNR's funding list.

FLOOD HAZARD PROGRAMS / BONDING (miscellaneous bills)
MAWD Resolution 2017-06: Support stable funding for the DNR's Flood Damage Reduction Grant Program. Support bonding requests from watershed districts for the Flood Hazard Mitigation Program (2016)

- $20.0M for Flood Hazard Mitigation (with no earmarks) **PASSED → SENT to GOVERNOR (he has not signed or vetoed this bill yet)**

Tax Bill HF 947, Chapter 205 (Vetoed 5-23-18)

Levy Authorities. Although there was little interest from legislators this year to sponsor a bill that would increase the general levy, we had movement on improving the flexibility of how our project tax levy authority can be used to match more types of grants, such as from the Clean Water Fund. Currently the statute (MN Statute 103D.905 subd. 9) only allows a levy for a project being funded by a Clean Water Partnership grant or loan. This legislation made it into the original Senate tax bill but was not included in the final omnibus tax bill that emerged after the conference committee met.

PROJECT LEVY STATUTE MODIFICATION (HF 2456/SF3077)
2016 MAWD Resolution: Advocate for a statutory clarification to allow broader use of levy funds with new state sources of project funding. **INCLUDED IN SENATE TAX BILL, BUT NOT INCLUDED IN THE FINAL OMNIBUS TAX BILL**

DRAINAGE LIEN PRINCIPAL INTEREST RATE MODIFICATION (HF 3512 / SF 3097)
MAWD Board Direction: Monitor and act on any changes to the 103E.
Description: This bill would increase the interest rate minimum cap set by the state court to 6%. MAWD was neutral on this issue.

Efforts that MAWD will Continue Administratively (Non-Legislatively)

HF 3834 / SF 3499 ELECTRONIC MEETING ATTENDANCE

2016 MAWD Resolution: Amend the Open Meeting Law to allow electronic meeting participation by WD managers & outside of WD boundaries.

Next Steps: MAWD will meet with various stakeholders on this issue and get clarification on various legal interpretations.

Legislation Proposed by Others – DID NOT PASS

HF 2989 / SF 3407 METRO "SLOW THE FLOW"

MAWD Board Direction: Monitor and act on proposed changes to 103B.
Description: This bill would **require** metro watershed management programs to slow the movement of water to improve water quality and increase groundwater recharge, as well as protect and enhance surface water and groundwater used for drinking water.

HF 3805 / SF 3379 DISTRICT PROVISIONS MODIFIED (Lambert bill)

MAWD Board Direction: Monitor and act on proposed changes to 103D.
Description: This bill would make significant changes to the rule-making procedures and authorities of WDs.

Next Steps: MAWD will meet again with proponents of this legislation to discuss their concerns.

HF 3603 DISTRICT PLANNING REQUIREMENTS MODIFIED (Rep. Loon bill)

MAWD Board Direction: Monitor and act on proposed changes to 103D.
Description: This bill recognizes that municipalities and counties affected by watershed management plans may make recommendations on the plan to the WD and notify affected property owners.

HF 3940 / SF 3620 NUTRIENT REDUCTION STRATEGY WORKGROUP IN MN RIVER BASIN

2015 MAWD Resolution: Support establishment of watershed-based water management organizations in the MN River basin. Description: This bill would convene a technical stakeholder group to design a comprehensive nutrient reduction strategy for point and nonpoint sources in the MN River basin.

HF 2876 / SF3181 ALLOW BENEFITS TO BE UPDATED BASED ON MARKET VALUES FOR REPAIR PROJECTS

MAWD Board Direction: Monitor and act on any changes to the 103E.

HF 3512 / SF 3097 CONSERVATION EASEMENT TAX RELIEF

2016 MAWD Resolution: Advocate for allowing more favorable tax treatment of conservations easements.

HF 2687 / SF2419 DNR PERMITS FOR 103E PROJECTS

MAWD Board Direction: Monitor and act on any changes to the 103E.
Description: This bill would clarify when DNR permits are required for ditch system repair projects.

HF 4395 / SF 3960 BUFFER TAX CREDIT

Description: Use the Clean Water Fund to fund a $50/acre tax credit for land taken out of production due to the buffer law. This would be an ongoing tax credit estimated to take $12M-$15M out of the fund annually.

Thank you to everyone who played a role in advancing the legislative platform of MAWD this year. It is truly a team effort and very much appreciated!

STATE OF MINNESOTA

Office of Governor Mark Dayton

130 State Capitol ♦ 75 Rev. Dr. Martin Luther King Jr. Blvd ♦ Saint Paul, MN 55155-1611

May 23, 2018

The Honorable Michelle Fischbach
President of the Senate
2113 Minnesota Senate Building
95 University Avenue West
St. Paul, Minnesota 55155

Dear Madame President:

I have vetoed and am returning Chapter 201, SF 3656, the omnibus supplemental budget bill.

Repeatedly over the past several months, I implored the Legislature to send separate bills on Minnesotans' most urgent priorities. We agreed that we must reform elder care, address the opioid epidemic, and ensure safe schools for our children. Yet instead of coming together to find shared solutions to these critical issues, you have deposited them into a 989 page budget bill, with 51 policy provisions, which I oppose. This legislative gamesmanship was terrible, and I will not sign the result.

Despite efforts over the past several months to strengthen existing elder abuse laws, this bill fails to meet the expectations of a large number of lawmakers and of the coalition of nearly every consumer advocacy organization in the state working to stop elder abuse. This legislation does not ensure that there will ever be licensure or protections for assisted living or dementia care. It provides no private rights of enforcement for elderly and vulnerable adults who suffer preventable harm or even death at a long-term care facility. It fails to provide even the basic public right of action protections for elderly people being evicted from their care setting and residence. In fact, advocacy groups believe changes made in this bill would actually make current law less protective. This failure is unacceptable.

The bill also does far too little to combat the opioid epidemic plaguing our State. Several months ago, I proposed investing over $12 million annually in high impact strategies to treat and prevent opioid abuse, funded through an Opioid Stewardship Fee that would hold partially accountable the pharmaceutical companies, who created this deadly epidemic. Instead, this bill spends only $7 million in FY 2019 and about $10 million in FY20/21, entirely from the General Fund. Not one penny is ascribed to the drug companies, through either a "penny-a-pill" or a licensing fee. Evidently, the industry's 32 lobbyists and whatever promises they made outweighed the interests of the people of Minnesota.

The bill does not support a comprehensive approach and instead provides one-time grants and a small rate increase to providers. There is no funding targeted to communities of color or tribal communities that have been devastated by this crisis. The disparities between tribal communities and communities of color and white residents are the highest in the United States. You could have and should have done more.

Included in this enormous bill are workable responses to problems that I sincerely hoped would become law: school safety and HAVA funds. I was sincere in my oft-stated desire to work with you and make these provisions become law. However, you knowingly prevented their enactment by inserting them into a bill, containing policies and agency budget cuts that I had said I would not sign

I made my objections to this bill very clear throughout the Session. My Administration sent you over 100 detailed letters throughout the session, carefully explaining my concerns with each of the proposals.

This terrible bill and the resulting veto are your creations. Never have I seen a legislative session so badly mismanaged, less transparent, and more beholden to monied special interests.

For the above reasons, I have vetoed this bill.

Sincerely,

Mark Dayton
Governor

cc: Senator Paul E. Gazelka, Senate Majority Leader
Senator Thomas Bakk, Senate Minority Leader
Senator Julie Rosen, Chief Senate Author
Speaker Kurt Daudt, Speaker of the House
Representative Melissa Hortman, House Minority Leader
Representative Jim Knoblach, Chief House Author
The Honorable Steve Simon, Secretary of the State
Mr. Cal Ludeman, Secretary of the Senate
Mr. Patrick Murphy, Chief Clerk of the House of Representatives
Mr. Paul Marinac, Revisor of Statutes

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, June 13, 2018

Agenda Item
Item 6. G. - LMRWD Projects

Prepared By
Linda Loomis, Administrator

Summary

i. **Eden Prairie Area #3 Stabilization**
No new information to report since last update

ii. **Riley Creek Cooperative project Hennepin County Flying Cloud Drive/CSAH 61 reconstruction project**
Ames Construction is planning to begin construction of this project on August 18th.

iii. **Floodplain Lake Coring Project with Freshwater Society**
No new information to report since last update

iv. **Seminary Fen ravine stabilization project**
No new information to report since last update

v. **Analysis of Dakota County Monitoring**
No new information to report since last update

vi. **East Chaska Creek - CSAH 61 & TH 41 Transportation improvements**
No new information to report since last update

Attachments
No attachments

Recommended Action
No action recommended no new information to report since last update

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, June 13, 2018

Agenda Item
Item 6. H. - Project/Plan Reviews

Prepared By
Linda Loomis, Administrator

Summary

i. **MN Valley State Trail**
The LMRWD received plans from the DNR regarding filling in the floodplain for the construction of the MN Valley Trail in Bloomington. Staff reviewed the plans and provided comments, which are attached. The DNR responded and requested the District approve the plan even though a small rise in the flood elevation is expected. The DNR response is also attached.

ii. **Scott County WMO - 2019–2026 Comprehensive Water Resources Management Plan Review**
LMRWD Staff has completed its review of the Scott County WMO 2019-2016 Comprehensive Water Resources Management Plan and has provided comments, which are attached.

iii. **Draft Dakota County Comprehensive Plan Review**
LMRWD Staff has completed its review of the Dakota County Comprehensive Plan and has provided comments, which are attached.

iv. **Burnsville Comprehensive Plan Review**
LMRWD Staff has completed its review of the Burnsville 2040 Comprehensive Plan. Comments were provided to the city and are attached. Of note, this plan referred to a groundwater model the city of Burnsville has prepared to develop its Well-head protection plan. The LMRWD has requested that the city share the model with the District. In addition, several projects were identified within the LMRWD that the District would like to partner with the City when the projects are initiated.

v. **City of Burnsville - Dodge of Burnsville**
Staff has completed its review of this project and provided comments to the developer and the city. Comments are attached.

vi. **City of Chaska - MCES L-71 lift station project**
Staff has completed its review of this project and provided comments, which are attached.

vii. **City of Eden Prairie - Abra Auto Body**
The LMRWD received notice of this project and is currently reviewing the project

Attachments
LMRWD comments provided to DNR
DNR response to comments
LMRWD comments provided to Scott County WMO - 2026 Comprehensive Water Resources Management Plan
LMRWD comments provided to Draft Dakota County Comprehensive Plan
LMRWD comments provided to Burnsville Comprehensive Plan
LMRWD comments provided to Dodge of Burnsville
LMRWD comments to provided MCES L-71 lift station project

Recommended Action
No action recommended

Young Environmental Consulting Group, LLC

Technical Memorandum

To: Linda Loomis, Administrator

From: Lisa Buchli, PE
Della Schall Young, CPESC, PMP

Date: May 22, 2018

Re: Minnesota Valley State Trail Project—Floodplain Analysis Review

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The May 11, 2018, Minnesota Department of Natural Resources (MNDNR) memorandum describing the floodplain analysis of the Minnesota Valley State Trail Project (Project) was reviewed, as requested, by the Lower Minnesota River Watershed District (District).

The proposed Project is the construction of a trail along the north side of the Minnesota River in the City of Bloomington, Minnesota. The trail extends from the Minnesota Valley National Wildlife Refuge Visitor Center near Interstate 494 to the Bloomington Ferry Bridge. A hydraulic analysis was conducted using the Hydrologic Engineering Center's River Analysis System (HEC-RAS) to evaluate the impact of the proposed Project on the base flood or 100-year flood elevation of the river.

The existing geometry of the Minnesota River effective hydraulic model was modified at 48 channel cross sections (also called "affected reach") that intersect the proposed Project. Each cross section in the affected reach was altered to show the trail width and elevations, as shown on the Project plans (the Project plans were not provided for review). The roughness coefficient for the trail portion of each cross section was set at 0.013, which is appropriate for smooth asphalt according to Ven Te Chow's 1959 Open Channel Hydraulics book.

The model results show no change in the water surface elevation due to the proposed Project at 19 of the 48 modified cross sections, mostly located downstream of the Interstate 35 (I-35) bridge. Twenty-seven cross sections show a small decrease (between 0.01 and 0.05 feet) in water surface elevation. These cross sections are located almost entirely upstream of the I-35 bridge, with the maximum decrease of 0.05

feet occurring near the upstream end of the affected reach. Two cross sections, one upstream and one just downstream of the I-35 bridge, show a 0.01-foot increase in water surface elevation as compared to the existing conditions model. The MNDNR memo states that this increase is due to a reduction in the energy gradient at the two cross sections. The water velocity dropped a very small amount at these two cross sections, which caused the water depth to increase slightly.

The Project requires placing fill in the 100-year floodplain, so it triggers the District Floodplain and Drainage Alteration Standard, which can be found in section 3.3 of the LMRWD Third Generation Watershed Management Plan, 2011–2020 (amended June 2015).

Conclusions:

1. The HEC-RAS model shows that construction of the proposed Project within the floodplain of the Lower Minnesota River will cause a 0.01-foot increase in the 100-year flood elevation at two cross sections in the affected reach.
2. Floodplain and Drainage Alteration Standard:
    a. The hydraulic modeling shows a 0.01-foot rise in the 100-year flood elevation at two cross sections, so the project does not meet the requirements of Regulation A of the District standard. To meet the standard, the Project must provide compensatory storage equal to the volume of fill being placed in the floodplain, or the model must be modified to show no rise in the 100-year floodplain elevation.
    b. The proposed Project does not include construction of any new structures and it is not located in the floodway; therefore, Regulations B and C of the District standard do not apply.

Additional information is needed before the Project can meet the District's floodplain requirements. Compensatory storage must be provided, or the hydraulic model must be modified to show no rise.

Before any land-disturbing activity takes place, it may be necessary to provide information showing that the plans meet the District Construction Erosion Control Standard. Additionally, if significant changes are made to the Project, information must be provided to the District expressing how the Project will maintain compliance with applicable District standards.

cc: Jeff Thuma, Burns & McDonnell

DEPARTMENT OF NATURAL RESOURCES

MEMORANDUM

To: Della Schall Young, CPESC, PMP
Young Environmental Consulting Group, LLC

From: Salam Murtada, P.E., PH, CFM
DNR- EWR, Floodplain Program

CC: Linda Loomis, Administrator
Lower Minnesota River Watershed District

Date: June 4, 2018

Subject: Addressing the Floodplain Analysis Review for the Minnesota Valley State Trail Project

Thank you for reviewing the floodplain analysis for the Minnesota Valley State Trail Project. According to your technical memo, issued on May 22, 2018, the rise of 0.01-ft in two cross-sections (RS 23.5 and RS 25), caused the project to not meet the requirements of Regulation A of the District Standard. Furthermore, the review letter recommended that the proposed conditions in the model should be modified further to show a no rise in the 100-YR base flood elevation. This could be done through modifying the trail design or providing a compensatory storage area for the amount of fill being placed. In either case, the results of these changes were supposed to yield a 0.00-ft rise in the HEC-RAS model.

Since the reduction in the energy gradient contributed to this minimal rise, the only possible way to eliminate the rise would be to actually raise the elevation of the trail grade, not lower it. As shown in the HEC-RAS output table below, raising the trail grade for RS 23.5 by 2-ft, would cause the 100-YR flow velocity to increase from 5.62 fps to 5.65 fps, just enough to maintain the existing water surface elevation of 715.09-ft. Conversely, for RS 25, the trail grade had to be raised by 1-ft and velocity increased from 5.46 fps to 5.48 fps for the water surface elevation to be maintained at 715.37-ft.

Reach	River Sta	Profile	Plan	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Lower	26	100-yr	Trail_City	03000.00	671.70	715.94	691.50	716.11	0.000128	4.30	45396.68	2437.49	0.13
Lower	25	100-yr	Ex_NewQ&SWSE	03000.00	673.70	715.37	691.59	715.74	0.000226	5.54	35690.85	6438.40	0.17
Lower	25	100-yr	NewFISQ_Trail	03000.00	673.70	715.38	691.59	715.74	0.000220	5.46	35721.75	6438.57	0.16
Lower	25	100-yr	Trail_City	03000.00	673.70	715.37	691.59	715.73	0.000221	5.48	35692.95	6438.50	0.16
Lower	23.7	100-yr	Ex_NewQ&SWSE	03000.00	670.40	715.22	691.02	715.65	0.000256	5.68	25785.78	6041.83	0.17
Lower	23.7	100-yr	NewFISQ_Trail	03000.00	670.40	715.21	690.99	715.64	0.000251	5.74	25660.75	6040.36	0.18
Lower	23.7	100-yr	Trail_City	03000.00	670.40	715.21	690.99	715.64	0.000251	5.74	25655.69	6039.83	0.18
Lower	23.6			Bridge									
Lower	23.5	100-yr	Ex_NewQ&SWSE	03000.00	670.40	715.09	691.02	715.52	0.000259	5.69	25807.77	6023.82	0.18
Lower	23.5	100-yr	NewFISQ_Trail	03000.00	670.40	715.10	691.02	715.51	0.000252	5.62	25777.69	6024.42	0.17
Lower	23.5	100-yr	Trail_City	03000.00	670.40	715.09	691.02	715.51	0.000255	5.65	25740.58	6023.38	0.17
Lower	23	100-yr	Ex_NewQ&SWSE	03000.00	671.00	715.04	691.01	715.47	0.000247	5.80	30255.32	4955.19	0.17
Lower	23	100-yr	NewFISQ_Trail	03000.00	671.00	715.03	691.01	715.46	0.000245	5.78	30160.30	4954.47	0.17
Lower	23	100-yr	Trail_City	03000.00	671.00	715.03	691.01	715.46	0.000245	5.78	30160.30	4954.47	0.17

Since eliminating the rise for these two cross-sections would result in raising the grade of the trail, a negative outcome, we recommend approving the original design and accepting the 0.01-ft minimal rise at the two cross-sections based on the energy gradient reduction.

Thank you for your consideration. Please let me know if you need further information.

Young Environmental Consulting Group, LLC

Technical Memorandum

To: Linda Loomis, Administrator

From: Lisa Buchli, PE
Della Schall Young, CPESC, PMP

Date: May 23, 2018

Re: Scott Watershed Management Organization 2019–2026 Comprehensive Water Resources Management Plan — Review

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The Lower Minnesota River Watershed District (District) reviewed the Scott Watershed Management Organization 2019–2026 Comprehensive Water Resources Management Plan (Scott WMO Plan) and compared it with the District's Watershed Management Plan (District Plan) to better understand how the District and Scott WMO can work together to protect, preserve, and manage the surface water and groundwater resources within the District.

Section 4 of the Scott WMO Plan briefly describes the standards of the Scott WMO. A complete version of the 2018 draft update to the standards is included as Appendix D of the Scott WMO Plan. Many of the goals, policies, and strategies found in the Scott WMO Plan are similar to those in the District Plan, especially those related to the management of surface water, groundwater, and flood management. The following sections describe how the standards described in the Scott WMO Plan compare with the District regulations on topics of shared concern to both entities.

STORMWATER MANAGEMENT

Standard D of the Scott WMO standards addresses stormwater management. The standard requires an approved Stormwater Management Plan and permit from the appropriate local government unit (LGU) if a land-disturbing activity or the development or redevelopment of land creates one or more acres of new impervious surface. This is similar to the District's Stormwater Management Standard, which requires compliance for development, redevelopment, and drainage alterations (including roads) creating new impervious areas more than one acre.

Standard D of the Scott WMO contains the following requirements for land-disturbing activity, development, and redevelopment projects:

1) Runoff rates for the proposed land-disturbing activities shall:
    a. Not exceed existing runoff rates for the 2-year, 10-year, and 100-year critical-duration storm events
    b. Not accelerate on- or off-site water course erosion, downstream nuisance, flooding, or damage, as demonstrated by the applicant according to an assessment of the potential for adverse impacts downstream of site improvements (assessment only required for sites 20 acres or larger, new impervious area of 8 percent or more of the project area, sites where the rate control requirement (above) cannot be met, or sites where the activity causes an increase in runoff volume for the 2-year storm event)
    c. Runoff rates may be restricted to less than the existing rates when necessary for the public health, safety, and general welfare of the Scott WMO
2) The minimum design capacity of all drainage systems shall accommodate the runoff from a 10-year storm event. All drainage systems and facilities must be designed to withstand the runoff from the critical 100-year event without damage to the system or facility, downstream areas and/or significant risk to public health, safety and welfare.
3) Detention basins must be designed to provide the following:
    a. An outlet structure to control the 2-year, 10-year, and 100-year critical storm events to existing runoff rates
    b. An identified overflow spillway and downstream route sufficiently stabilized to convey a 100-year critical storm event
    c. A normal water elevation above the ordinary high water (OHW) level of adjacent waterbodies or normal water level where an OHW is not established
    d. Access for future maintenance
4) Permanent stormwater quality management must be provided in accordance with the National Pollution Discharge Elimination System (NPDES) General Construction Permit.

The existing and proposed District standard includes rate control requirements very similar to those in section 1.a. The Scott WMO Plan requirement for a potential adverse impact assessment for larger sites (1.b) is more restrictive than the District standard, but the requirement is not unreasonable for sites greater than 10 acres. Although the

District plan specifies that stormwater runoff equal to one inch of runoff from the new impervious area must be retained onsite (i.e., infiltration or other volume reduction practices) and lists several infiltration restrictions, the Scott WMO Plan does not include any specific infiltration volume requirements. However, the Scott WMO Plan includes the requirement that permanent stormwater quality management must meet the requirements of the NPDES General Construction Permit, which includes retention and infiltration requirements and constraints similar to the District's.

Section E of the Scott WMO standards addresses erosion and sediment control. The specific erosion control plan, inspection, and maintenance requirements in the Scott WMO standard closely match the District's.

FLOODPLAIN ALTERATION

Standard F of the Scott WMO Standards addresses floodplain alteration. This standard prohibits floodplain alteration or filling that causes a net decrease in flood storage capacity below the projected 100-year high water elevation unless it is shown that the proposed alteration or filling, together with the alteration or filling of all other land on the affected reach of the waterbody to the same degree of encroachment as proposed by the applicant, will not cause high water or aggravate flooding on other land and will not unduly restrict flood flows. If "high water" is intended to mean "a water surface higher than the 100-year high water elevation," then this standard is similar to the District standards, which say that fill should not cause a decrease in storage capacity below the 100-year elevation, an increase in the 100-year elevation, or a decrease in the conveyance capacity of a waterbody. The Scott WMO standard is more restrictive because it requires these standards to be met when the entire reach is altered or filled to the same degree of encroachment, as proposed by the applicant. Standard F includes an exception stating that the criteria described above does not apply to fill amounts less than 40 cubic yards in the Minnesota River flood fringe or less than 20 cubic yards in other National Flood Insurance Program flood fringe areas and other floodplains areas in the Scott WMO. The District's Floodplain and Drainage Alteration Standard does not include this exception and applies no matter how much fill is placed.

Criteria concerning the minimum allowable low floor elevation for new structures is in Standard D, which states, "Where the 100-year flood level has been established, low floor elevations shall be at least 1 foot above the 100-year flood level." This is less restrictive than the District standard, which requires the lowest floor to be at least two feet above the 100-year high water elevation. As defined by the Minnesota DNR, the elevation of the lowest floor of a structure must be the 100-year high water elevation plus any stage increase due to determining a floodway, plus a minimum of one foot of freeboard. Standard D includes the required one foot of freeboard but does not address the stage increase due to determining the floodway. On a waterway that has undergone

a detailed study, the actual stage increase from the floodway determination modeling must be added. If no floodway has been established, the maximum potential stage increase of 0.5 feet must be added to the minimum lowest floor elevation.

BLUFF MANAGEMENT

The definitions section of the Scott WMO Standards defines a bluff as a topographic feature in which the average grade of any portion of the slope is 30 percent or greater, and there is at least a 25-foot rise in elevation. The toe and top of the bluff are defined as the points at the lower and upper part of the bluff, respectively, where the average slope levels off to 18 percent or less over a 50-foot segment. The Scott WMO has developed a Bluff Overlay district, defined as an area “where potential bluffs exist.” The definition also says that the Standards document includes a map of the bluff overlay districts of the Scott WMO, but the Scott WMO Plan does not include this map.

The Scott WMO bluff standard requires that any land-disturbing activity, development, or redevelopment in a bluff overlay district, as shown on the mapping (not included with the Scott WMO Plan), requires a topographic survey to determine if a bluff is indeed present. Where bluffs are present, the following standards apply:

1. All grading, removal of vegetation, and/or other land-disturbing activities are prohibited in the bluff impact zone (defined as a 25-foot zone at the top of a bluff) and/or bluff face.
2. Structures must be set back at least 30 feet from the top of the bluff.
3. Sewage treatment systems (community and individual) must be set back at least 50 feet from the top of the bluff.
4. Stormwater ponds, swales, infiltration basins, and other soil saturation-type features must be set back at least 50 feet from the top of the bluff.

The Scott WMO bluff standard includes some more lenient standards for bluffs within the Scott WMO bluff overlay district that have been identified and mapped in a Local Water Plan developed by an LGU within the Scott WMO watershed. Scott WMO still requires that activity in the bluff impact zone must not adversely affect slope stability or result in any new water discharge points along the bluff.

The District’s proposed Steep Slopes Standard includes a Steep Slopes Overlay district based on slopes greater than 18 percent that does not restrict structure location in the overlay zone. The District standard does not explicitly prohibit intensive vegetation clearing, although it is strongly discouraged. Land-disturbing activities that involve excavation of 50 cubic yards or more in the steep slope overlay district require a qualified professional or a professional engineer registered in the state of Minnesota to

certify that the area for the proposed activity, structure, or use is suitable.

HIGH VALUE RESOURCE AREAS

Section 1 of the Scott WMO Plan (Land and Water Resource Inventory) states that the Scott Soil and Water Conservation District monitors groundwater observation wells within the Savage Fen and surrounding area. The Scott WMO Standards define “Highly Susceptible Wetland Type” as “a wetland characterized as a sedge meadow; open or coniferous bog; calcareous fen; low prairie; coniferous or hardwood swamp; or seasonally flooded wetland.” However, the Scott WMO Standards contain no information specific to the protection of fens or trout waters.

GROUNDWATER

Most residents of the Scott WMO rely on groundwater from one of the four major aquifers in Scott County for their drinking water. One major exception is the City of Savage, which receives a portion of its drinking water from surface water sources in the City of Burnsville. Groundwater flow gradients in Scott County generally move toward the Minnesota River. The Scott WMO acknowledges that infiltration, recharge, and groundwater contamination within the Scott WMO is connected to and potentially affects groundwater conditions in the District. Areas near the Minnesota River in the northern and northwestern parts of the Scott WMO have relatively shallow bedrock and soils, with very fast infiltration rates. The Scott WMO has identified aquifers in these areas as being susceptible to contamination.

The Scott WMO identified groundwater protection as a high priority. Related policies included in the Scott WMO Plan include preserving and protecting groundwater quality and quantity and improving the understanding of groundwater resources.

The Scott WMO Plan includes numerous strategies that relate to the goal of protecting groundwater quality and supply, including continued groundwater monitoring, promoting water conservation and supporting water reuse, practices to control nitrates in the Belle Plain Drinking Water Supply. Management Area, establishing living cover in high-risk areas, and requiring compliance through the Scott WMO Standards.

However, the Groundwater Standard (Standard J) has been deleted from the Scott WMO Standards because Individual Sewer Treatment System authorities are statutorily mandated functions of the MPCA and the County. The County already has ordinances, and the language in the Scott WMO Standards was inconsistent with that of the county ordinance.

POTENTIAL PROJECTS FOR PARTNERING WITH THE DISTRICT

Capital Improvements Plan, 2019–2026

- Salisbury Hill (CR 51) Ravines - Unstable ravines are contributing large amounts of sediment to the Minnesota River and affecting county road maintenance. This project was included as a CIP in the previous plan but has been delayed because of changing priorities from the 2014 disaster and the need to wait for decisions about the future of roads in the area. The schedule is unknown; we are waiting for decisions about roads in the area ($750K–$1.5M, depending on the option selected).
- Blaha Ravine - This ravine stabilization project has been discussed with the City of Belle Plaine in the past; they have now included it as an official request in the letter of issues submitted to the Scott WMO at the start of the plan update process. The Scott WMO acknowledges that this will have some pollutant loading reduction to the Minnesota River, but the reduction is small compared to the whole basin; thus, it is listed as a Tier 2 project. The City of Belle Plaine will lead the project ($234K—2016 estimate; it is unknown if the Scott WMO support will be financial, technical, grant writing, or a combination).
- Chestnut Ravine - This ravine stabilization project has been discussed with the City of Belle Plaine in the past; they have now included it as an official request in the letter of issues submitted to the Scott WMO at the start of the plan update process. The Scott WMO acknowledges this will have some pollutant loading reduction to the Minnesota River, but the reduction is small compared to the whole basin; thus, it is listed as a Tier 2 project. The City of Belle Plaine will lead the project ($102K—2016 estimate; it is unknown if the Scott WMO support will be financial, technical, grant writing, or a combination).

SUMMARY

The District commends the Scott WMO for developing a thoughtful and thorough Comprehensive Water Resources Management Plan. The Scott WMO clearly takes pride in its efforts to conserve and protect natural resources. A comparison of the Scott WMO Plan with the District Plan shows that the Scott WMO and the District share several goals in our efforts to preserve and manage surface water resources and groundwater.

The following recommendations for inclusion in the Scott WMO Plan are suggested to strengthen the plan and better align the Scott WMO Plan and the District Plan:

- Scott WMO Standards, Standard F (Floodplain Alteration), Section 2a: clarify the meaning of the phrase “will not cause high water or aggravate flooding on other land.” Does this mean “cause an increase in the 100-year flood elevation”?
- Scott WMO Standards, Standard F (Floodplain Alteration), Section 2a: replace

the phrase “unduly restrict flood flows” with “decrease conveyance capacity” or provide an explanation of what is meant by unduly restrict flood flows.”

- Scott WMO Standards, Standard F (Floodplain Alteration), Section 4b: include a statement saying that this exception does not provide an exception to LMRWD requirements. The District’s Floodplain and Drainage Alteration Standard applies regardless of the volume of fill being placed.
- Scott WMO Standards, Standard D: include a requirement that the lowest floor of the lowest enclosed area of the proposed structures must be a minimum of two feet above the 100-year flood level of nearby surface waters.
- After the Board of Soil and Water Resources approves the 2018 amendment to the LMRWD Watershed Management Plan, consider updating the Scott WMO bluff management standard to better align it with the District bluff standard.

The District looks forward to future partnerships with the Scott WMO as we work to complete potential projects that meet our common goals of reducing pollutants and sediment entering the Minnesota River and protecting, preserving, and managing our shared surface and groundwater resources.

CC: Jeff Thuma, Burns & McDonnell

Young Environmental Consulting Group, LLC

Technical Memorandum

To: Linda Loomis, Administrator

From: Lisa Buchli, PE
Della Schall Young, CPESC, PMP

Date: May 22, 2018

Re: Draft Dakota County Comprehensive Plan Review

The draft Dakota County Comprehensive Plan (DC2040) was reviewed by the Lower Minnesota River Watershed District (District). The DC2040 was compared to the District's Watershed Management Plan (Plan) to better understand how the District and Dakota County (County) can work together to protect, preserve, and manage the surface water resources and groundwater within the District.

The sections of the DC2040 relevant to the District are chapter 5, Land Use and Natural Resources, and chapter 6, Implementation. Many of the goals, objectives, and policies found in chapter 5 of the DC2040 are similar to the goals, policies, and strategies found in the District Plan, especially those related to the management of surface waters, groundwater, floodplains, and unique natural resources. Dakota County relies on several ordinances to meet the goals and objectives of the DC2040. The following sections describe how the County ordinances compare to the District regulations on topics of shared concern to both entities.

STORMWATER MANAGEMENT

Two Dakota County ordinances address stormwater management. The first is Ordinance 132, Dakota County Storm Sewer System. The ordinance includes the following stormwater requirements for construction in areas that drain to the County municipal separate storm sewer system (MS4). According to the ordinance, the requirements are consistent with the general National Pollutant Discharge Elimination System (NPDES) permit:

1. For new development projects, construction activity shall result in no net increase from pre-project conditions, on an annual average basis, of stormwater discharge volume, stormwater discharges of total suspended solids (TSS), and stormwater

discharges of total phosphorus (TP).

2. For redevelopment projects, construction activity shall result in a net reduction, from pre-project conditions, on an annual average basis, of stormwater discharge volume, stormwater discharges of TSS, and stormwater discharges of TP.

Unlike the District Stormwater Management Standard, Ordinance 132 does not include a stormwater rate control requirement, and the volume control requirement does not specify the amount of infiltration. However, the ordinance does state that post-construction stormwater management best management practices (BMPs) must incorporate infiltration and other green infrastructure techniques to meet the County requirements to the maximum extent practicable.

Dakota County Ordinance 132 also includes the following stormwater management limitations:

1. Structural stormwater BMPs designed for infiltration are prohibited when the BMP will receive discharges from, or be constructed in, areas:
    a. Where industrial facilities are not authorized to infiltrate industrial stormwater under an NPDES Industrial Stormwater Permit issued by the MPCA
    b. Where vehicle fueling and maintenance occur
    c. With less than three feet of separation distance from the bottom of the infiltration system to the elevation of the seasonally saturated soils or top of bedrock
    d. Where high levels of contaminants in soil or groundwater will be mobilized by infiltrating the groundwater
2. Infiltration techniques will be restricted without higher engineering review sufficient to provide a functioning treatment system and prevent adverse impacts to groundwater when the infiltration device will be constructed in areas:
    a. With predominantly Hydrologic Soil Group D (clay) soils
    b. Within 1,000 feet up-gradient, or 100 feet down-gradient of active karst features
    c. Within a Drinking Water Supply Management Area (DWSMA), as defined in Minn. R. 4720.5100, subp. 13
    d. Where soil infiltration rates are more than 8.3 inches per hour

The District standard includes similar restrictions on infiltration practices, with some exceptions. The District standard does not include items 1.d, 2.b, or 2.d from the County

ordinance. Meanwhile, the County ordinance does not include an item from the District standard that restricts infiltration practices within 50 feet of a septic tank or drain field.

The shoreland development section of Dakota County Ordinance 50 includes these additional stormwater management requirements:

1. Impervious surface coverage of lots can't exceed 25 percent.
2. Constructed facilities used for stormwater management must be designed and installed according to the requirements of the area's Soil and Water Conservation District.
3. Newly constructed stormwater outfalls to public waters must provide for filtering or settling of suspended solids and skimming of surface debris before discharge.
4. Settling basins to intercept urban runoff must be sized for at least a 10-year design event.

FLOODPLAIN MANAGEMENT

Section 18 of Dakota County Ordinance 50 addresses floodplain management. Like the District Floodplain and Drainage Alteration Standard, the County ordinance prohibits placing fill in the floodway, and fill is allowed in the flood fringe as long as it does not adversely affect the hydraulic capacity of the channel. Like the District, the County requires that any fill placed in the flood fringe must be offset with compensatory storage. However, the County requires compensatory storage at a ratio of 2:1 storage to fill, while the District only requires a 1:1 ratio. In addition, the County requires that the compensatory storage be located on the same lot or parcel that the fill is placed.

Ordinance 50 requires the lowest floor of all structures to be no lower than "one foot above the elevation of the regional flood plus any increases in flood elevation caused by encroachments on the flood plain that results from designation of a floodway." This means that on streams with a floodway, the lowest floor of a structure can't be less than 1.5 feet above the 100-year flood elevation. On streams with no floodway delineated, the lowest floor can't be less than one foot above the 100-year flood elevation. In contrast, the District requires that the lowest level of proposed structures be a minimum of two feet above the 100-year flood elevation.

BLUFF MANAGEMENT

The shoreland section of Dakota County Ordinance 50 includes requirements related to bluffs. The ordinance defines a bluff line as a line along the top of a slope connecting the points at which the slope becomes less than 12 percent. The bluff impact zone is the bluff and adjacent land located within 40 feet from the top of a bluff. Structures

cannot be placed in bluff impact zones. This differs from the District's proposed bluff standard, which includes a Steep Slope Overlay district based on slopes greater than 18 percent and doesn't restrict structure location in the overlay zone.

Clear-cutting and intensive vegetation clearing within the bluff impact zone is not allowed, though the removal of dead or diseased trees is allowed. Disturbance of more than five cubic yards on steep slopes or in a bluff impact zone requires a shoreland alteration permit, and fill or excavated material cannot be placed in a bluff impact zone. Plans to place fill or excavated material on steep slopes must be reviewed by a qualified professional for continued slope stability and must not create finished slopes of 30 percent or greater. In contrast, the proposed District bluff standard does not explicitly prohibit intensive vegetation clearing, though it is strongly discouraged. Land-disturbing activities that involve excavation of 50 cubic yards or more in the Steep Slope Overlay district requires a qualified professional or a professional engineer, registered in the state of Minnesota, to certify that the area for the proposed activity, structure, or use is suitable.

FENS AND TROUT WATERS

The DNR identifies three calcareous fen areas in Dakota County, all located in the Minnesota River Valley. The County also has 11 designated trout streams. One of the water management policies included in the DC2040 supports the protection of unique water resources such as fens and trout streams. Fens are fed by groundwater and trout streams are spring-fed. As development in Dakota County increases, the amount of impervious surface also increases, which reduces natural rainwater infiltration and aquifer recharge. The County recognizes that encouraging natural infiltration of stormwater is important in protecting surface water features that depend on groundwater. This is why the County's storm sewer system ordinance stresses incorporating infiltration to the maximum extent practicable, as discussed previously.

The District is home to several rare fens and sensitive trout waters. The specific hydrologic and chemical requirements of fens and trout waters make them especially sensitive to sedimentation, stormwater runoff, and changed groundwater conditions. It is the District's policy to prevent resource degradation due to erosion and sedimentation and protect and improve natural resources within the watershed to protect further degradation. This is especially true for high value resources such as fens and trout waters.

The establishment of stricter protection for areas contributing runoff to a trout water or fen (referred to as High Value Resource Areas [HVRA] in the District standards) is critical for preventing further destruction of these unique and irreplaceable resources.

Three proposed District standards include stricter requirements for HVRAs. The District Erosion and Sediment Control Standard, which normally applies to land-disturbing activities of one acre or more, applies to the alteration or removal of 5,000 square feet or more of surface area or the excavation of 50 cubic yards or more of earth within HVRAs. Similarly, the District Stormwater Management Standard, which normally applies to development, redevelopment, and drainage alterations (including roads) that create new impervious areas greater than one acre, applies to new impervious areas greater than 10,000 square feet in HVRAs.

The District Water Appropriations Standard is also stricter in HVRAs. Normally this standard applies to groundwater appropriations of 10,000 gallons per day and one million gallons per year or greater for a non-essential use. In HVRAs, groundwater appropriations of less than 10,000 gallons per day and one million gallons per year for non-essential use are regulated, including temporary dewatering activities. Projects meeting the above criteria within HVRAs must also develop a discharge management plan and demonstrate no net change in groundwater levels to adjacent fens and trout waters.

GROUNDWATER

Ninety percent of Dakota County's population relies on groundwater for drinking water. Two-thirds of the County land area is highly vulnerable to groundwater contamination because of thin soils and glacial material over fractured underlying bedrock. In 2013 and 2014, 13 townships and five cities in Dakota County were selected for private well nitrate sampling, and 27 percent of private wells sampled were above the health standard for nitrates.

Dakota County Ordinance 114, Well and Water Supply Management, includes standards for regulation of wells and water supplies to protect groundwater and the environment. The ordinance addresses proper location and construction of wells; necessary modifications and reconstruction; operation, maintenance, and repair; permanent sealing; and annual maintenance permitting, including registered use wells and unused wells.

The ordinance does not, however, address the issue of groundwater quantity. Excessive consumption of drinking water for uses that do not require drinkable water quality can threaten the long-term supply of drinking water. It is unclear whether groundwater supplies are adequate in some areas of the County to meet drinking water demand. In addition, a sustainable, non-fluctuating supply of groundwater is required to maintain water levels and soil chemistry in fens, and temperature in trout waters. The County's storm sewer system ordinance does stress incorporating infiltration to the maximum extent practicable, but there are no standards in place outlining specific

infiltration requirements.

MISSISSIPPI RIVER CORRIDOR CRITICAL AREA (MRCCA) PLAN

Dakota County has updated Ordinance 50 (Shoreland and Floodplain Management) for consistency with major provisions and enforceable standards of the Mississippi River Critical Area Act in the past and expects to do so again after adoption of its 2040 Comprehensive Plan, as necessary. As part of DC2030, Dakota County adopted the MRCCA goals and objectives. Three of the goals relate directly to the District Plan:

1. Protect and preserve unique and valuable state and regional resources in the corridor.
2. Prevent and mitigate irreversible damage to the corridor.
3. Protect and preserve the biological and ecological functions of the corridor.

There are eleven projects on the Capital Improvement Plan (CIP) for projects within the MRCCA. The projects include construction and reconstruction of trails, adding signage and kiosks to existing parks and trails, highway reconstruction, a transit study, two master plan updates, and some ADA improvements. None of the projects include any work specific to water quality or quantity, floodplains, or groundwater.

An additional $13.7 million is included in the Dakota County 2018–2022 CIP for wetland restoration projects and habitat protection on private lands, which could be applied to eligible properties with willing owners in the MRCCA. No specifics about these projects were provided.

POTENTIAL PROJECTS FOR PARTNERING WITH THE DISTRICT

<u>Transportation Capital Improvement Plan, 2018–2022</u>

- Storm sewer system repair in Dakota County and Cities – $500,000 annually (cost divided between County and cities)

<u>Parks and Greenways Capital Improvement Plan, 2018–2022</u>

- Natural Resources—advancing natural resource protection and restoration of the park and greenway system. In addition to managing 2,280 acres of land that have been restored or are undergoing restoration, the 2018–2022 CIP will restore an additional 956 acres.
- No specific projects are named, but $1.023 million dollars is set aside annually for “Natural Resources Management: Base Program Funding.”

<u>Land Conservation Capital Improvement Plan, 2018–2022</u>

- The Land Conservation Program works with willing landowners and partners to

permanently protect and manage shoreland along rivers, streams, and undeveloped lakeshore; high-quality natural areas; wetlands; and associated agricultural land throughout Dakota County.

- Habitat Protection and Restoration (2018, 2019, 2021) – $11.335 million total (cost divided between County, state, and the Environmental Legacy Fund).

SUMMARY

The District commends the County for developing a thoughtful and thorough Comprehensive Plan update. The County clearly takes pride in its efforts to conserve and protect natural resources. A comparison of the DC2040 to the District Plan shows that the County and the District share several goals in our efforts to preserve and manage surface water resources and groundwater.

The following recommendations for inclusion in the DC2040 are suggested to strengthen the County's plan and better align the DC2040 and the District plan:

- In Ordinance 132, Dakota County Storm Sewer System, include a standard that restricts infiltration practices within 50 feet of a septic tank or drain field.
- In Section 18 of Ordinance 50, require the lowest level of proposed structures to be a minimum of two feet above the 100-year flood elevation.

The District looks forward to future partnerships with the County as we work to complete potential projects that meet our common goal of protecting, preserving, and managing our shared surface water groundwater resources.

CC: Jeff Thuma, Burns & McDonnell

Young Environmental Consulting Group, LLC

Technical Memorandum

To: Linda Loomis, Administrator

From: Lisa Buchli, PE
Della Schall Young, CPESC, PMP

Date: May 22, 2018

Re: City of Burnsville 2040 Comprehensive Plan Update Review

The *City of Burnsville 2040 Comprehensive Plan Update* (*Burnsville 2040*) was reviewed by the Lower Minnesota River Watershed District (District). The District compared the *Burnsville 2040* to its *Watershed Management Plan* (*Plan*) to better understand how the District and the City of Burnsville (City) can work together to protect, preserve, and manage the surface water resources and groundwater within the District.

The section of the *Burnsville 2040* relevant to the District is Chapter 5, "Natural Environment." Many of the goals and policies found in the *Burnsville 2040* are similar to the goals, policies, and strategies found in the District *Plan*, especially those related to the management of surface waters, groundwater, floodplains, and wetlands. The City relies on several overlay district standards in its zoning ordinance to meet the goals and policies of the *Burnsville 2040*. The following sections describe how the City standards in the ordinance compare to the District regulations on topics of concern to both entities.

Construction Erosion Control Standard

Chapter 8 of the City of Burnsville zoning ordinance addresses all the environmental overlay districts that have been established in the City. Section 10-8-8, "Controlling Erosion and Sediment from Land-Disturbing Activities," of the chapter states that any land-disturbing activities that involve 90 or more cubic yards of earthwork must comply with the requirements of the section. This standard is more stringent than the District's Construction Erosion Control Standard, which requires erosion and sediment control measures to meet the requirements of the National Pollutant Discharge Elimination System (NPDES) general permit. An NPDES general permit is required for construction activity that results in land disturbance of equal to or greater than one acre. The City code goes on to state that the erosion and sediment control measures must comply with the most recent regulations of the Minnesota Pollution Control Agency's (MPCA)

NPDES/State Disposal System permit program. The specific erosion control plan inspection and maintenance requirements in the code closely match the District's erosion and sediment control standards.

STORMWATER MANAGEMENT

In Chapter 8, Section 10-8-11, "Stormwater Management Overlay District Standards," states that "development shall comply with the water resources management plan adopted by the city council in 2002 and any future amendments." The 2017 *Burnsville Water Resources Management Plan* (WRMP) is included as an appendix to the *Burnsville 2040* and was reviewed. The Development Standards included as Appendix C to the WRMP state that any development that disturbs one-half acre or more or creates 5,000 square feet or more of new impervious surface must meet the water quality treatment, volume control, water quantity, and rate control requirements of the WRMP. This standard is more stringent than the District's existing and proposed general Stormwater Management Standard, which requires compliance for development, redevelopment, and drainage alterations (including roads) creating new impervious areas of more than one acre.

The existing District standard requires that 0.5 inches of runoff from development and redevelopment sites must be infiltrated, so the City's requirement is stricter than the District's. However, the District standard is currently being updated, and the proposed standard requires one inch of runoff from new impervious surfaces to be retained on site. The City's water quality treatment requirement for new development and redevelopment includes redeveloping more than 50 percent of the site which is still stricter than the District's proposed standard. However, the City's requirement for redevelopment that includes redeveloping less than or equal to 50 percent of the site is less strict than the District's proposed standard. The proposed District standard does not differentiate between development and redevelopment. If a project creates one acre or more of new impervious surface, one inch of runoff from the new impervious surface must be retained on site.

The City's phosphorus removal requirements are unique to the City's WRMP. The existing District standard does not have any specific phosphorus removal requirements. Instead, it requires water quality stormwater management to comply with the requirements of the MPCA general permit, which has additional requirements if the receiving water of a construction site is impaired by phosphorus. The proposed District stormwater management standard requires that projects have no net increase from existing conditions in total phosphorus and total suspended solids.

The existing and proposed District standard includes the same rate control requirements and constraints on infiltration practices as the City standard.

Section 10-8-10 of Burnsville's zoning ordinance for the shoreland overlay district

contains the following additional stormwater management requirements that the District does not include these guidelines:

1. Where 50 percent or more of the lot area lies within the shoreland overlay district, the maximum impervious surface coverage is 25 percent of the lot area.
2. In certain zoning districts, impervious surface may be increased if the proposed development mitigates additional stormwater runoff to a level consistent with 25 percent impervious surface coverage under a 1.5-inch rainfall design storm.

Floodplain Management

Chapter 10 of Burnsville's zoning ordinance addresses floodplain management. Like the existing and proposed District Floodplain and Drainage Alteration Standard, the City ordinance prohibits placing fill in the floodway that will cause an increase in the 100-year or regional flood or cause an increase in flood damages in the reach or reaches affected. Fill is allowed in the flood fringe if it does not adversely affect the hydraulic capacity of the channel. The cumulative placement of more than 1,000 cubic yards of fill on a parcel is allowable only as a conditional use, unless the fill is specifically intended to elevate a structure. An erosion/sedimentation control plan that clearly specifies methods to stabilize the fill on site for the 100-year flood event must be submitted to the City. Unlike the District, Burnsville does not require fill placed in the flood fringe that causes a rise in the high-water level to be offset by compensatory storage.

Appendix C of the WRMP states that for all structures in the flood fringe, the lowest floor of the structure (including the basement) must be at or above the regulatory flood protection elevation. The regulatory flood protection elevation is defined as one foot above the regional (100-year) flood plus any increase in flood elevation caused by encroachments on the floodplain that result from designation of a floodway (0.5 feet in Minnesota). This means that the lowest floor of structures can't be less than 1.5 feet above the 100-year flood elevation. In contrast, the existing and proposed District standard requires the lowest level of proposed structures be a minimum of two feet above the 100-year flood elevation.

Bluff Management

In the definitions section of the zoning ordinance, a bluff is defined as a topographic feature located in a shoreland area with a slope that drains toward a water body, rises at least 25 feet above the ordinary highwater level of the water body, and has an average slope of 30 percent or more. The bluff impact zone is defined as a bluff and land located within 20 feet from the top of a bluff. The toe and top of the bluff are defined as the lower and higher points of a 50-foot segment with an average slope exceeding 18 percent. Steep slopes are defined as lands having average slopes over 12 percent, as measured over horizontal distances of 50 feet or more, that are not

bluffs.

Section 10-8-6, “Soil Erosion Overlay District Standards,” of the zoning ordinance states that a 40-foot building setback must be established along the Minnesota River bluffs. The bluff line is defined as the point at which the slope gradient exceeds 40 percent. It isn’t clear whether this building setback and slope gradient, which differ from those defined at the beginning of the ordinance, are meant to be specific to only the Minnesota River bluffs or whether the inconsistencies are errors. Section 10-8-10, “Shoreland Overlay District,” of the ordinance requires a structure setback of 30 feet from the top of a bluff, but it also states that structures must not be placed within bluff impact zones (which were earlier defined as a bluff and land within 20 feet from the top of a bluff).

The shoreland section of the zoning ordinance includes the following bluff requirements:

1. Intensive vegetation clearing within bluff impact zones and on steep slopes is prohibited.
2. On steep slopes or within bluff impact zones, a grading and filling permit is required for the movement of more than 10 cubic yards of material (outside of steep slopes and bluff impact zones, a grading and filling permit is not required until more than 90 cubic yards of material are moved).
3. Fill or excavated material must not be placed in bluff impact zones.
4. Roads, driveways, and parking areas must not be placed within bluff impact zones.

The District’s existing Bluff Standard’s slope threshold is 30 percent or greater and includes aspects of the Minnesota Department of Natural Resources (MnDNR) bluff definition, which tied it to shoreland areas. The District standard includes a 30-foot structure setback requirement, a minimum 50-foot setback for sewage treatment systems, and stormwater features that involve soil saturation. Like the City’s, the District’s standard does not allow extensive vegetation removal, such as clear-cutting, in the Bluff Impact Zone. Unlike the City’s, the District’s existing standard prohibits all grading, vegetation removal, and other land-disturbing activities as well.

The District’s proposed steep slopes standard includes a Steep Slopes Overlay district based on slopes greater than 18 percent and doesn’t restrict structure location in the overlay zone. The District standard does not explicitly prohibit intensive vegetation clearing, although it is strongly discouraged. Land-disturbing activities that involve excavation of 50 cubic yards or more in the Steep Slopes Overlay district require a qualified professional or a professional engineer registered in the state of Minnesota, to certify that the area for the proposed activity, structure, or use is suitable.

High Value Resource Areas

Most of the wetlands along the Minnesota River within the City of Burnsville are included within the Minnesota Valley National Wildlife Refuge (MVNWR). The Black Dog wetland complex, located south of Black Dog Lake, is a designated calcareous fen. The Black Dog Scientific and Natural Area (BDSNA) is a designated protected area that includes portions of the Black Dog fen. The MVNWR is under the authority of the US Fish and Wildlife Service, and the BDSNA is managed by the MnDNR and the Nature Conservancy. The City has three designated trout streams in the northeast portion of the city, all of which are located within the District boundary and drain into the Minnesota River through Black Dog Lake. The three trout streams include Unnamed Trout Stream Segment #7, One Mile Creek (also identified as Segment #4 and Unnamed Stream #4), and a very small portion draining into Harnack Creek (Harnack Creek is also identified as Segment #1 or Unnamed Stream #1).

Black Dog fen and the trout streams are fed by groundwater from natural springs. The *Burnsville 2040* states that limiting the amount of impervious surface cover and reducing stormwater discharge volume is critical for maintenance of these cold-water–dependent resources. The City also recognizes that encouraging natural infiltration of stormwater is important in protecting surface water features that depend on groundwater. Therefore, the City's WRMP stresses incorporating infiltration to the maximum extent practicable, as discussed previously.

Appendix C of the City WRMP includes the following requirements for special waters and wetlands:

1. Sites discharging to Trout Streams #1, #4, or #7 must incorporate BMPs that address runoff temperature requirements, maintain an undisturbed buffer zone of at least 100 feet between the project site and the trout stream, and cover exposed slopes that are steeper than 3:1 (H:V) within three days of the disturbance.
2. Horizontal vegetated buffer zones shall be established and/or maintained around existing wetlands and stormwater treatment ponds. New development and redevelopment projects shall provide a buffer zone around wetlands in accordance with the requirements in the City's *Wetland Protection and Management Plan*.
3. Water level fluctuations in wetlands shall be managed in accordance with the City's *Comprehensive Wetland Protection and Management Plan*. A rise (bounce) in elevation greater than 12 inches during a 10-year storm shall be avoided.
4. New discharge points to all wetlands and waters must include pretreatment. New direct discharges to Management II wetlands must have at least grit removal prior to discharge.

The District is home to several rare fens and sensitive trout waters. The specific hydrologic and chemical requirements of fens and trout waters make them especially sensitive to sedimentation, stormwater runoff, and changes to groundwater level and quality. It is the District's policy to prevent resource degradation due to erosion and sedimentation and protect and improve natural resources within the watershed to halt further degradation. This is especially true for high-value resources such as fens and trout waters. The existing District *Plan* does not include any standards specific to fens or trout waters. According to the existing *Plan*, fen protection in the District is regulated under MN Rule 7050, "Non-degradation for outstanding resource value waters," which is administered by the MPCA. Trout streams within the District are managed by the MnDNR.

The establishment of stricter protections for areas contributing runoff to a trout water or fen (referred to as high value resource areas [HVRA] in the proposed District standards) is critical for preventing further destruction of these unique and irreplaceable resources.

The proposed District standards include stricter requirements for HVRAs. The District Erosion and Sediment Control standard, which normally applies to land-disturbing activities of one acre or more, applies to the alteration or removal of 5,000 square feet or more of surface area or the excavation of 50 cubic yards or more of earth within HVRAs. Similarly, the District Stormwater Management standard, which normally applies to development, redevelopment, and drainage alterations (including roads) that create new impervious areas greater than one acre, applies to new impervious areas greater than 10,000 square feet in HVRAs.

Groundwater

The *Burnsville 2040* states that the most sensitive areas with the shortest lengths of time required for surface water to infiltrate to the aquifer in the City of Burnsville are generally located in the outwash terraces along the bluff line and in the floodplain. A large area that extends from just east of I-35W to the Savage border between Highway 13 and the river, as well as a smaller floodplain area in the Black Dog Preserve east of I-35W, possesses very high sensitivity ratings, indicating that waterborne contaminants can travel from the surface to the aquifer in as little as a few hours to a few months.

Studies indicate the Minnesota River and river valley serve as groundwater discharge areas rather than recharge areas. In other words, the natural groundwater in this area flows from the glacial overburden and St. Peter and Prairie du Chien-Jordan aquifers into the river and associated river valley lakes, wetlands, and springs rather than from the surface downward into the aquifers. This natural direction of flow limits the transmission of contaminates downward into the deeper aquifers and, instead, tends to divert surface them into the Minnesota River.

The City recognizes that groundwater sustainability is an emerging issue. The community requires a safe and reliable source of drinking water, which makes it essential to preserve and protect the groundwater aquifers that supply the City's drinking water. Burnsville has developed a groundwater model that focuses on the Burnsville well field, Kraemer Quarry, and Black Dog and Savage fens. The model will be used in the design of groundwater withdrawal and the minimization of impacts to protected surface waters. The *Burnsville 2040* also recognizes that restoring wetlands is an important part of promoting groundwater recharge.

Section 10-8-12, "Drinking Water Protection Overlay District," of the zoning ordinance includes performance standards intended to protect groundwater from contamination. The ordinance addresses proper location and construction of wells; necessary modifications and reconstruction; operation, maintenance, and repair; permanent sealing; and annual maintenance permitting, including registered used and unused wells. The ordinance does not, however, address the issue of groundwater quantity. Excessive consumption of drinking water for uses that do not require drinkable water quality can threaten the long-term supply of drinking water. It is unclear whether groundwater supplies are adequate in some areas of the County to meet drinking water demand. In addition, a sustainable, nonfluctuating supply of groundwater is required to maintain water levels and soil chemistry in fens and temperature in trout waters. The county's storm sewer system ordinance does stress incorporating infiltration to the maximum extent practicable and requires the runoff volume from 1.1 inches of rainfall from the new and/or redeveloped impervious surfaces to be treated by infiltration practices.

Potential Projects for Partnering with the District

Capital Improvements Plan, 2018–2022

- Trout Stream #4 Restoration – The MnDNR and MN Trout Unlimited are considering rehabilitating a trout stream near the Cedarbridge area in an existing stream. The City may need to make storm sewer and drainage improvements in the existing system to help the stream become a viable trout habitat. This project is not being led by the City but may include some improvements to the City's drainage system or be used for cost sharing on the project ($10K – 2018).
- Resiliency Assessment of Major Drainage Systems – This assessment includes a review of the City's major drainage system to identify areas where failure of the system would necessitate expensive repair in a short time and/or cause significant damage to private buildings. These high-risk areas will be identified to aid staff in planning future improvements ($40K – 2018).
- Resiliency Improvements – This project is designed to provide improvements for the highest-risk systems identified through the resiliency assessment of major

drainage systems ($350K – 2019).

- Keller Lake to Minnesota River Water Level Hydrologic and Hydraulic Analysis and Report – Analysis of the chain of water bodies that starts at Keller Lake and ends at the Minnesota River to identify adjustments that could be made to optimize water levels in the system ($75K – 2019).
- Minnesota River Quadrant (MRQ) Stormwater and Floodplain Study and Report – Analysis of the overall stormwater management system needs for the MRQ to accommodate future development. The report will guide the review of future developments in the MRQ to optimize the location of future stormwater management facilities ($50K – 2022).
- Bluff Area Risk Analysis **–** Analysis of the bluffs within the City to identify areas where the risk of failure is high or where the failure of which would lead to public safety risk or create a significant expense in a short time. This study would aid in the planning of related improvements in future capital improvement plans and future maintenance operations to proactively prevent slope failure ($50K – 2018).
- Ravine Restoration – Analysis of ravines to target those most in need of maintenance and then to fund their repair to prevent loss of soils retaining property values and reduce off-site deposit of these soils ($500K – 2019, $500K – 2021).

SUMMARY

The District commends the City for developing a thoughtful and thorough comprehensive plan. The City clearly takes pride in its efforts to conserve and protect natural resources. A comparison of the *Burnsville 2040* to the District's *Watershed Management Plan* shows that the City and the District share several goals in efforts to preserve and manage surface water resources and groundwater.

The following recommendations are suggested for inclusion in the *Burnsville 2040* to strengthen the City's plan and to better align the *Burnsville 2040* with the District's existing and proposed standards:

- In Title 10, Chapter 10, "Floodplain Regulations":
    - Require the lowest level of proposed structures to be a minimum of two feet above the 100-year flood elevation.
    - When the placement of fill in the 100-year floodplain causes a rise in the 100-year flood elevation, require the creation of compensatory floodplain storage equal to or greater than the volume of fill placed.
- In Title 10, Chapter 8, "Environmental Overlay Districts":
    - Refine the definition of bluff so it is the same throughout the chapter and better matches the District's proposed Steep Slopes standard, which has

replaced “bluff” with “steep slope” and defines it as a natural topographic feature having average slopes of 18 percent or greater over a horizontal distance of 25 feet or more.

- Remove the requirement that a bluff (or steep slope, if the term is changed) must be in a shoreland area. Correspondingly, shift the bluff management information in Chapter 8, Section 10, “Shoreland Overlay District,” to an alternative location in Chapter 8.

- Identify all steep slope (bluff) protection measures in a single overlay district—for example, the Soil Erosion Overlay District Standard. In Appendix C of the City’s *Water Resources Management Plan*, Development Standards:
  - Define and include fens in Section 6, “Special Waters and Wetlands.”
  - On land that contributes runoff to a trout water and/or fen, require a higher level of protection by applying the standards of the water quality treatment, volume control, water quantity, and rate control requirements in the WRMP to any development that includes disturbing 5,000 square feet or more of surface area, excavating 50 cubic yards or more of earth, or creating more than 10,000 square feet of new impervious area.

The District looks forward to future partnerships with the City as we work to complete potential projects that meet our common goal of reducing the flow of pollutants and sediment to the Minnesota River and protecting, preserving, and managing our shared surface and groundwater resources.

cc: Jeff Thuma, Burns & McDonnell

Young Environmental Consulting Group, LLC

Technical Memorandum

To: Linda Loomis, Administrator

From: Lisa Buchli, PE
Della Schall Young, CPESC, PMP

Date: May 16, 2018

Re: Dodge of Burnsville – Project Review

The plan sheets and stormwater management calculations for the Dodge of Burnsville Out-Lot Redevelopment Project (Project) were reviewed as requested by the Lower Minnesota River Watershed District (District).

The existing Dodge of Burnsville site is located southeast of the West 121st Street and Interstate 35W South Frontage Road intersection in Burnsville, Minnesota. The Project proposes a parking lot expansion that would add the adjacent lot to the southeast of the existing Dodge of Burnsville site. The adjacent lot would be used for vehicle inventory storage for the existing Dodge of Burnsville site.

The existing adjacent lot is zoned as park land and is used as an archery site. The proposed Project will add 1.05 acres of new impervious area to the adjacent site and 0.90 acres of new impervious area to the existing Dodge of Burnsville site to provide access to the out-lot site.

The proposed Project triggers the following District standards: Stormwater Management and Construction Erosion Control.

STORMWATER MANAGEMENT STANDARD

1. Rate Control:

    a. The proposed development activity will not increase the peak stormwater runoff rate from the site under predevelopment conditions for anything less than a 24-hour precipitation event with a return frequency of 1 or 2, 10, and 100 years. Predevelopment is defined as land use on a site immediately prior to the proposed alteration/activity.

b. The Project must comply with the requirements of the Minnesota Pollution Control Agency's (MPCA) National Pollutant Discharge Elimination System (NPDES) General Permit for Construction Activities.

2. Volume Control:

    a. Stormwater runoff volume retention shall be achieved onsite in the amount equivalent to the runoff generated from 0.5 inches of runoff over new impervious surfaces of the redevelopment or development.

    b. To achieve the volume control regulation, infiltration must be used where practicable. Filtration is an acceptable alternative for soil types from hydrologic soil groups C and D or when infiltration is infeasible.

3. Water Quality:

    a. Water quality stormwater management must comply with the requirements of the NPDES General Permit for Construction Activities.

CONSTRUCTION EROSION CONTROL STANDARD

1. Erosion and sediment control measures shall meet the standard for the NPDES General Permit for Construction Activities as amended, except where more specific requirements are provided.
2. All onsite stormwater conveyance channels shall be designed and constructed to withstand, after construction, the expected velocity of flow from a 10-year frequency storm without erosion.

<u>Conclusions:</u>

1. Runoff from the proposed out-lot will be routed to an infiltration basin at the southwest corner of the out-lot. This basin will outlet to the west to a second infiltration basin, which drains through a new PVC pipe connected to an existing catch basin connected to the city storm sewer system.
2. The portion of the archery range that previously drained to the railroad ditch will be routed to the infiltration basins.
3. Stormwater Management Standard Compliance:
    a. Rate Control: According to the stormwater management calculations, there is no increase in the peak runoff rates to the existing storm sewer

system or overland to the northeast for the 2-, 10-, and 100-year storm events.

b. Volume Control: The stormwater runoff volume retained onsite by the infiltration basins is equal to the runoff generated from 1.1 inches of runoff over the area of the new impervious surfaces and 0.55 inches of runoff over the area of the redeveloped impervious surfaces, per the City of Burnsville requirements. These requirements are more stringent than the District requirement because they require retention more water than the District requires.

c. Water Quality: The infiltration basins are intended to perform the required water quality function. This satisfies the water quality requirements of the MPCA NPDES General Permit for Construction Activities.

4. Construction Erosion Control Standard:

   a. The proposed erosion and sediment control measures shown on Sheet C3 of the plans meet the requirements of the MPCA NPDES General Permit for Construction Activities.

   b. The proposed onsite storm sewer is designed for a 10-year frequency design storm per the City of Burnsville's requirements.

A small area in the northwest corner of the existing Dodge of Burnsville site is mapped as "Shaded Flood Zone X—Other Flood Areas" on Flood Insurance Rate Map Number 27037C0070E, dated December 2, 2011. Areas designated as "Zone X—Other Flood Areas" are defined as areas of 0.2 percent annual chance flood, areas of 1 percent annual chance flood with average depths less than 1 foot or with drainage areas less than 1 square mile, and areas protected by levees from the 1 percent annual chance flood. The remaining portion of the existing Dodge of Burnsville site and the entire adjacent site are mapped as Zone X—areas determined to be outside the 0.2 percent annual chance floodplain. The proposed construction is located entirely in Zone X, so the Project does not trigger the District Floodplain and Drainage Alteration Standard.

The information provided sufficiently satisfies the District's requirements. If significant changes are made to the Project, the Project proposed must update calculations and send a narrative to the District expressing how the Project will maintain compliance with applicable District standards.

CC: Sarah Arnold, City of Burnsville
Mark Saba, Dodge of Burnsville
Jeff Thuma, Burns & McDonnell

Young Environmental Consulting Group, LLC

Technical Memorandum

To: Linda Loomis, Administrator

From: Lisa Buchli, PE
Della Schall Young, CPESC, PMP

Date: May 16, 2018

Re: DNR Water Appropriation #2018-1639, Chaska L71 Lift Station (Review)

The Minnesota Department of Natural Resources (MNDNR) Permitting and Reporting System Water Appropriation Permit Application (MPARS Application) and the dewatering layout for the Chaska L71 Lift Station Project (Project) were reviewed as requested by the Lower Minnesota River Watershed District (District).

The proposed Project is located southeast of the East 2nd Street and Beech Street intersection in Chaska, Minnesota. The Project proposes lowering the groundwater level temporarily for construction dewatering to allow for the installation of a new manhole near the Chaska L71 Lift Station. Water will be pumped from an existing set of three wells installed at a depth of 40 feet below the ground. The pumped water will be discharged into an existing storm sewer manhole approximately 50 feet southwest of the wells. The manhole drains directly to the Minnesota River. The proposed Project triggers the District Water Appropriations Standard, as discussed below.

WATER APPROPRIATIONS STANDARD

A. In all cases of appropriation of surface or groundwater requiring a DNR appropriation permit in or near the District, a copy of the permit application and information on the location of the discharge/withdrawal must be filed with the District for its review.

B. The effect of the proposed appropriation must be defined for consideration by the District.

Conclusions

Water Appropriations Standard Compliance

a. A copy of the DNR Water Appropriation Permit Application and the dewatering layout were received by the District via email from Dan Scollan, an MNDNR Groundwater Protection Hydrologist.

b. The email included the following information about previous dewatering related to construction of the new lift station:

   "Past dewatering to allow construction of the new L71 Lift Station was conducted under DNR Individual Water Appropriation Permit #2015-2154, by a different contractor. Monitoring of lake levels in nearby Courthouse Lake was required by the previous permit. The applicant, however, has reported no impacts to the water level of Courthouse Lake from past dewatering operations."

It is not clear whether the requirement to monitor the level of Courthouse Lake will be included as part of the forthcoming permit. If monitoring will not be required because no impacts to the water level of Courthouse Lake were reported during previous dewatering operations, we request the following information about the previous dewatering operations before the Project can satisfy the District's requirements:

1. Total volume of water pumped
2. Maximum rate of pumping
3. Depth water was pumped from (well depth)
4. Dates of dewatering

If the provided information shows that previous dewatering operations were of greater magnitude than those of the proposed Project, and it is clear that the effects of the proposed pumping will not affect the water level of Courthouse Lake, the District should be reassured that the proposed Project will not negatively affect groundwater in the vicinity of the project.

Once the requested information is provided and reviewed, the District's requirements will be satisfied. If significant changes are made to the Project, information must be provided to the District to express how the Project will maintain compliance with applicable District Standards.

cc: Dan Scollan, MNDNR
Jeff Thuma, Burns & McDonnell