



Bassett Creek Watershed Management Commission

Public Hearing & Regular Meeting

Thursday October 15, 2020

8:30 – 11:00 a.m.

Via Zoom – Click [HERE](#) to join the meeting.

Or join by phone +1-312-626-6799; Meeting number 827 5734 3345

AGENDA

1. CALL TO ORDER and ROLL CALL

- 2. PUBLIC FORUM ON NON-AGENDA ITEMS** – *Members of the public may address the Commission 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 Commission will continue with the agenda. The Commission will take no official action on items discussed at the Forum, with the exception of referral to staff or a Commission committee.*

3. APPROVAL OF AGENDA

4. CONSENT AGENDA

- A. Approval of Minutes – September 17, 2020 Commission Meeting
- B. Acceptance of October 2020 Financial Report
- C. Approval of Payment of Invoices
 - i. Keystone Waters, LLC – September 2020 Administrative Services
 - ii. Keystone Waters, LLC – September 2020 Expenses
 - iii. Barr Engineering – September 2020 Engineering Services
 - iv. Lawn Chair Gardener – September 2020 Administrative and Education Services
 - v. Wenck – September WOMP Monitoring
 - vi. Kennedy & Graven – August 2020 Legal Services
 - vii. Metro Blooms – Lawns to Legumes Grant Project
 - viii. HDR – Website Services

5. BUSINESS

- A. Consider Awarding Contract for Sweeney Lake Alum Treatment (10 min)
- B. Review Additional Data and Cost Estimate for Further Analysis of Linear Projects (30 min)
- C. Bassett Creek Flood Control Project (FCP) (20 min)
 - i. Receive Report on Bassett Creek Deep Tunnel Inspection
 - ii. Review BCWMC Responsibilities for FCP Repairs
 - iii. Review Estimated Costs for FCP Repairs
- D. Review Protocols and Process for Addressing Potential Conflicts of Interest (20 min)
- E. Discuss Recommendations from Technical Advisory Committee and Possible Projects for 5-year CIP 2023 - 2027 (20 min)

6. COMMUNICATIONS (10 minutes)

- A. Administrator's Report
 - i. Plans for Staff Evaluation
 - ii. Update on Watershed Based Implementation Funds
 - iii. Report on MAISRC Showcase
 - iv. Invitation to "State of the County" Address
 - v. Reminder of WEDNESDAY November 18th Commission Meeting

- B. Chair
- C. Commissioners
- D. TAC Members
- E. Committees
- F. Education Consultant
 - i. Latest Education Video on [CAMP Volunteers](#)
- G. Legal Counsel
- H. Engineer

7. INFORMATION ONLY (Information online only)

- A. CIP Project Updates <http://www.bassettcreekwmo.org/projects>
- B. Grant Tracking Summary and Spreadsheet
- C. 2020 BCWMC Administrative Calendar
- D. Hennepin County Climate Plan Presentation
- E. WCA Notice of Application, Golden Valley

8. ADJOURNMENT

Upcoming Meetings & Events

- Metro MAWD Meeting: Tuesday October 20th, 7:00 p.m. (online, watch for more information)
- Bassett Creek Watershed Mgmt Commission Meeting: WEDNESDAY November 18th, 8:30 a.m. online
- Minnesota Water Resources Conference: October 20 – 21; Online <https://ccaps.umn.edu/minnesota-water-resources-conference>



Bassett Creek Watershed Management Commission

AGENDA MEMO

Date: October 8, 2020

To: BCWMC Commissioners

From: Laura Jester, Administrator

RE: Background Information for 10/16/20 BCWMC Meeting

1. **CALL TO ORDER and ROLL CALL**
2. **PUBLIC FORUM ON NON-AGENDA ITEMS**
3. **APPROVAL OF AGENDA – ACTION ITEM with attachment**
4. **CONSENT AGENDA**
 - A. Approval of Minutes – September 17, 2020 Commission Meeting- ACTION ITEM with attachment
 - B. Acceptance of October Financial Report - ACTION ITEM with attachment (full report online)
 - C. Approval of Payment of Invoices - ACTION ITEM with attachments (online) – I reviewed the following invoices and recommend approval of payment.
 - i. Keystone Waters, LLC – August 2020 Administrative Services
 - ii. Keystone Waters, LLC – August 2020 Expenses
 - iii. Barr Engineering – August 2020 Engineering Services
 - iv. Lawn Chair Gardener – August 2020 Administrative and Education Services
 - v. Wenck – August WOMP Monitoring
 - vi. Kennedy & Graven – July 2020 Legal Services
 - vii. Metro Blooms – Lawns to Legumes Project
 - viii. HDR – Website Services
5. **BUSINESS**
 - A. Consider Awarding Contract for Sweeney Lake Alum Treatment (10 min) – ACTION ITEM no attachment – *Bids from contractors to perform the alum treatment on Sweeney Lake are due October 9th. Staff will bring a tabulation of bids and recommendations on contractor selection to the meeting. The Commission should take action awarding a contract at this meeting. The alum treatment is part of the Sweeney Lake Water Quality Improvement CIP Project partially funded through a federal grant.*
 - B. Review Additional Data and Cost Estimate for Further Analysis of Linear Projects (30 min) – ACTION ITEM with attachment – *At the September meeting, the Commission reviewed and discussed analyses comparing the revised (new) linear project standards with the previous (old) standards on linear projects reviewed by the BCWMC since May 2017. At the meeting the Commission directed the Commission Engineer to spend up to \$2,000 to provide more detail on feasibility of water quality improvements based on a desktop analysis of site constraints and to bring a cost estimate for further analysis to a future meeting. The attached memo, table, and maps outline results of the further analyses and cost estimates for more details. The Commission Engineer will review results and provide recommendations for next steps.*
 - C. Bassett Creek Flood Control Project (FCP) (20 min)
 - i. Receive Report on Bassett Creek Deep Tunnel Inspection - INFORMATION ITEM no attachment) *Commission Engineer Jim Herbert will describe preliminary findings from the deep tunnel inspections. Several commissioners and TAC members also visited the tunnel entrance during the Mississippi River drawdown and may relay their*

observations. I recorded a short video of Engineer Herbert describing the tunnel entrance: <https://www.youtube.com/watch?v=vxfAjEKm5Jq>.

- ii. Review BCWMC Responsibilities for FCP Repairs – **INFORMATION ITEM with attachment** - At its June meeting, the Commission reviewed the double box culvert inspection report which detailed the observations made by the Commission Engineer and recommended certain major repairs. The Commission approved the inspection report and requested that the Commission Attorney provide an overview of the Commission's obligations and potential liability exposure if repairs are not made. Please see the attached memo from Commission Attorney Dave Anderson.
 - iii. Review Estimated Costs for FCP Repairs – **ACTION ITEM with attachment** - At its June meeting, the Commission reviewed the double box culvert inspection report which detailed the observations made by the Commission Engineer and recommended repairs to the shear key joint material, crack sealing, deposit removal, and repairs to exposed reinforcement. The Commission approved the inspection report and directed the Commission Engineer to prepare an opinion of cost for the repairs. Please see the attached memo with the opinion of cost and recommendations for next steps.
- D. Review Protocols and Process for Addressing Potential Conflicts of Interest (20 min) – **DISCUSSION ITEM with attachment** – In light of some recent questions about potential conflicts of interest related to Commission work, I worked with the Commission Attorney, and received input from Commission Engineers, to develop the attached framework for addressing potential conflicts as they arise. Commissioners could consider approving the recommended framework.
- E. Discuss Recommendations from Technical Advisory Committee and Possible Projects for 5-year CIP 2023 - 2027 (20 min) – **ACTION ITEM with attachment** – At their meeting on October 1st, the TAC discussed a variety of issues including developing future CIP lists and chloride reduction strategies. The attached memo outlines two TAC recommendations and seeks guidance from commissioners on future CIP projects to help inform further discussions by the TAC and staff on 5-year CIP development.

6. COMMUNICATIONS (10 minutes)

- A. Administrator's Report – **INFORMATION ITEM with attachment**
 - i. Plans for Staff Evaluation
 - ii. Update on Watershed Based Implementation Funds
 - iii. Report on MAISRC Showcase
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 - v. Reminder of WEDNESDAY November 18th Commission Meeting
- B. Chair
- C. Commissioners
- D. TAC Members
- E. Committees
- F. Education Consultant
 - i. Latest Education Video on [CAMP Volunteers](#)
- G. Legal Counsel
- H. Engineer

7. INFORMATION ONLY (Information online only)

- A. CIP Project Updates <http://www.bassettcreekwmo.org/projects>
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Item 4A.
BCWMC 10-15-20

Bassett Creek Watershed Management Commission

DRAFT Minutes of Regular Meeting

Thursday, September 17, 2020

8:30 a.m.

Via video conference due to the COVID-19 global pandemic

1. CALL TO ORDER and ROLL CALL

On Thursday, September 17, 2020 at 8:30 a.m. via video conference, Chair Prom called the meeting of the Bassett Creek Watershed Management Commission (BCWMC) to order.

Commissioners and city staff present:

City	Commissioner	Alternate Commissioner	Technical Advisory Committee Members (City Staff)
Crystal	Dave Anderson	<i>Vacant Position</i>	Mark Ray
Golden Valley	Stacy Harwell	Jane McDonald Black	Jeff Oliver, Eric Eckman
Medicine Lake	Clint Carlson	Gary Holter	<i>Absent</i>
Minneapolis	<i>Absent</i>	<i>Vacant Position</i>	<i>Absent</i>
Minnetonka	Mike Fruen	<i>Vacant Position</i>	Leslie Yetka
New Hope	<i>Absent</i>	Patrick Crough	Megan Hedstrom
Plymouth	James Prom (Chair)	Catherine Cesnik	Ben Scharenbroich
Robbinsdale	<i>Vacant Position</i>	Wayne Sicora	Richard McCoy, Marta Roser
St. Louis Park	Jim de Lambert (Secretary)	Patrick Noon	Erick Francis
Administrator	Laura Jester, Keystone Waters		
Engineer	Karen Chandler, Barr Engineering Greg Wilson, Barr Engineering Josh Phillips, Barr Engineering		
Recorder	Dawn Pape, Lawn Chair Gardener		
Legal Counsel	Dave Anderson, Kennedy & Graven		
Presenters/ Guests/Public			

2. PUBLIC FORUM ON NON-AGENDA ITEMS

No members of the public were present.

3. APPROVAL OF AGENDA

[Commissioner de Lambert's connection to the meeting dropped.]

MOTION: Alternate Commissioner Harwell moved to approve the agenda. Commissioner de Lambert seconded the motion. Upon a rollcall vote, the motion carried 7-0 with the Cities of Minneapolis, Robbinsdale, and St. Louis Park absent.

[Commissioner Carlson and Alternate Commissioner Sicora join the meeting.]

4. CONSENT AGENDA

The following items were approved as part of the consent agenda: August commission meeting minutes, September financial report, payment of invoices, approval to direct commission staff to finalize bid package and advertise for bids for Sweeney Lake alum treatment.

The general and construction account balances reported in the September 2020 Financial Report are as follows:

Checking Account Balance	\$ 650,049.57
TOTAL GENERAL FUND BALANCE	\$ 650,049.57
TOTAL CASH & INVESTMENTS ON-HAND (9/9/20)	\$4,015,388.47
CIP Projects Levied – Budget Remaining	\$(4,496,790.65)
Closed Projects Remaining Balance	\$1,587,439.52
2015-2018 Anticipated Tax Levy Revenue	\$2,288.14
2019 Anticipated Tax Levy Revenue	\$4,953.76
Anticipated Closed Project Balance	\$1,594,681.42

MOTION: Alternate Commissioner Crough moved to approve the consent agenda. Commissioner Fruen seconded the motion. Upon a rollcall vote, the motion carried 7-0, with the Cities of Minneapolis and St. Louis Park absent from the vote.

[Commissioner de Lambert rejoined the meeting.]

5. PUBLIC HEARING

A. Receive Comments on Proposed 2021 CIP Projects

- i. Mt. Olivet Stream Restoration Project (ML-20)
- ii. Parkers Lake Drainage Improvement Project (PL-7)
- iii. Cost Share Purchase of High Efficiency Street Sweeper (ML-23)
- iv. Dredging Accumulated Sediment in Main Stem Bassett Creek, Theodore Wirth Regional Park Project (BC-7)

The public hearing was opened at 8:40 a.m. No members of the public were present. Administrator Jester reported the public hearing was noticed according to requirements in two newspapers with information on

how to attend the meeting; and no one had contacted her with comments or concerns regarding the issues. The public hearing was closed at 8:43 a.m.

6. BUSINESS

A. Consider Approval of Resolution 20-06 Ordering 2021 Improvements

- i. Ordering 2021 Improvements
- ii. Making Findings Pursuant to Minnesota Statutes Section 103B.251
- iii. Certifying Costs to Hennepin County
- iv. Approving Agreement with City of Plymouth for Construction of Mt. Olivet Stream Restoration Project (ML-20)
- v. Approving Agreement with City of Plymouth for Construction of Parkers Lake Drainage Improvement Project (PL-7)
- vi. Approving Agreement with City of Plymouth for Implementation of Cost Share Purchase of High Efficiency Street Sweeper (ML-23)

Administrator Jester noted that since there were no comments from the public, staff recommends approving the resolution containing the six items listed above including designating members responsible for construction, making findings pursuant to MN Statutes 103B.25, certifying the costs of the 2021 projects to Hennepin County, and approving agreements with the City of Plymouth for implementation of the three projects in their city.

There was a discussion about the street sweeper equipment purchase policy, maintenance, and equipment operation. Administrator Jester reviewed the equipment purchase policy approved by the Commission earlier in the year. Alternate Commissioner Crough wondered who operated and maintained the equipment. Plymouth TAC member Ben Scharenbroich answered that the city would operate and maintain the equipment. Commissioner Carlson asked whether the city of Plymouth would allow other cities, such as Medicine Lake, to use the street sweeper. Ben Scharenbroich stated that although that wasn't the intention, if both cities had cooperative agreements, it might be possible. Crystal TAC member Mark Ray stated that Plymouth is very committed to sweeping all year which may make it difficult to share equipment. Mr. Scharenbroich echoed Mr. Ray's points and stated that Plymouth intends to sweep early in the spring and even in the winter to capture excess salt. He explained that they will be collecting data and compiling it into an annual report that will break data into sub-watersheds.

There was discussion about priority sweeping areas and the sweeping zone map was reviewed. Mr. Scharenbroich noted that priority areas included those with direct drainage to a waterbody that doesn't already have treatment. It was also noted that since Plymouth is furthest upstream in the watershed, sweeping here would benefit the whole watershed. Commissioner Carlson noted his intent to encourage the Medicine Lake city council to consider a cooperative agreement with Plymouth on sweeper use.

MOTION: Commissioner Carlson moved to approve Resolution 20-06 Ordering 2021 Improvements. Alternate Commissioner Sicora seconded the motion. Upon a rollcall vote, the motion carried 7-0, with the Cities of Minneapolis and St. Louis Park absent from the vote. [Although present, Commissioner de Lambert's audio was not working in order to vote.]

B. Review Final Report for Winnetka Pond Dredging Project

Mark Ray, Crystal TAC member, reviewed the final report and project outcomes and noted that construction of the Winnetka Pond Dredging Project is complete. He reported that before the dredging, the ducks were "walking on water" because there was so much sediment built up and the pond was very shallow; now there is an average 6-foot depth. He reported that contaminated sediment was found during dredging which added about \$100,000 to the project's cost.

Mr. Ray reported that the native buffer around the pond is still being established and that there is a maintenance agreement with the owner of the apartment complex adjacent to the pond to share in ongoing

vegetation maintenance costs. He also noted an animal control officer is collecting goose eggs to keep the population down and that the buffer itself will serve as a goose deterrent.

Alternate Commissioner Cesnik asked what kind of contaminants were found in the sediment. Commission Engineer Chandler said Diesel Range Organics (DRO) were found and noted that there was a plume near the pond outlet that looked like it was old fill material dumped on the bank that migrated into the pond over time. Commissioner Harwell noted that it is good that contaminants were found and removed. Engineer Chandler said it was good to work with a contractor who worked diligently to find the edge of the contaminants, so not all of the sediment had to be disposed of as hazardous waste.

Alternate Commissioner Crough thanked the City of Crystal for implementing the project.

Administrator Jester noted that establishment of the buffer will continue through 2023. An addendum to the report will be added after buffer restoration is complete.

MOTION: Commissioner Anderson moved to approve the final report. Alternate Commissioner Crough seconded the motion. Upon a rollcall vote, the motion carried 8-0, with the City of Minneapolis absent from the vote.

C. Consider Approval of Reimbursement Request for Winnetka Pond Dredging Project

Administrator Jester noted that the majority of the funding for construction was paid through previous reimbursements to the city and that she recommends approval of this request. There was no discussion.

MOTION: Commissioner Anderson moved to approve the Reimbursement Request for Winnetka Pond Dredging Project. Commissioner Carlson seconded the motion. Upon a rollcall vote, the motion carried 8-0, with the City of Minneapolis absent from the vote.

D. Review Impacts of Old vs. New Linear Project Requirements

Commission Engineer Chandler reviewed this item. She noted that at the May 18, 2017 meeting, the Commission approved revisions to the BCWMC's Requirements document that revised the BCWMC's water quality performance standards for linear projects. The Commission has requested periodic analysis comparing the revised (new) linear project standards with the previous (old) standards on linear projects reviewed by the BCWMC. Engineer Chandler presented the findings.

The previous (2015) standards required MIDS treatment for linear projects when the project would result in 1 acre of new/fully reconstructed impervious: capture and retain the larger of 1.1 inches off the net increase in impervious – or – 0.55 inches off the new/fully reconstructed impervious (acre-feet). Follow flexible treatment options if volume reduction BMPs are not feasible or not allowed.

The revised/current (2017) standards require treatment for linear projects when the project will result in 1 acre of net **new** impervious: capture & retain 1.1 inches off the net new impervious area (acre-feet). Follow flexible treatment options if volume reduction BMPs are not feasible or not allowed.

Commission Engineer Chandler reviewed a table that included the first analysis presented to the Commission in September 2018 with the addition of the analysis of several more recent projects. She compared the old requirements with the current requirements for the 25 linear projects that triggered BCWMC review since May 2017. Only 1 of the 25 linear projects reviewed by the BCWMC triggered water quality treatment per the

current requirements. In contrast, 19 of the 25 projects would have triggered water quality treatment using the old requirements.

For the 19 projects that would have triggered water quality treatment under the previous requirements, it is noteworthy to consider that many projects in the Bassett Creek watershed are unable to meet volume reduction requirements due to poor (low infiltrating) soils. It is not known if the project proposers could have provided that treatment volume.

Since the May 2017 Commission meeting, the 25 linear projects requiring BCWMC review have created nearly 91 acres of new/fully reconstructed impervious surfaces resulting in an estimated total phosphorus (TP) loading of 162.0 pounds per year. The previous requirements would have required 60-100% TP removal—or an estimated 97.2 - 162.0 pounds of TP per year.

However, of the 91 acres of new/fully reconstructed impervious surfaces, only approximately 6% (5.39 acres) was *new* impervious surface. Therefore, the projects requiring BCWMC review created an additional TP loading of 9.6 pounds per year compared to pre-project conditions.

The extent of the reduced water quality treatment for projects was evaluated by comparing the estimated TP loading from the projects to the total TP loading for the entire watershed. It is estimated that the linear projects since May 2017 are contributing up to 3.0% - 5.1% additional TP loading to Bassett Creek more than if the previous requirements were still in place.

Another way to look at this is based on the change in impervious only (i.e., 5.39 acres of net new impervious). In this case, the projects since May 2017 are contributing approximately 0.3% additional TP loading to Bassett Creek, compared to pre-project conditions. In addition, TP removal may be provided by onsite or downstream treatment before discharging to Bassett Creek, so the estimated TP loading increases should be viewed as a maximum.

Also, some of the reviewed linear projects may provide some level of water quality treatment, but the data was not provided to the BCWMC because it was not required as part of the review. A more detailed analysis of the specific effects of these linear projects could be performed using the P8 model and the Commission expects cities to annually submit any new water quality improvement structures to the Commission Engineer so the P8 model can be updated appropriately.

Commissioner Harwell reiterated the difficulty in improving water quality with linear projects—especially with difficult soils and groundwater constraints. Commissioner Harwell mentioned the benefits of street sweeping and that a P8 model update would be interesting.

There was discussion about the difference between projects where the new or reconstructed impervious surface is disconnected and doesn't run off directly into storm sewer systems, but into vegetation. Commissioner Harwell indicated that further analysis would be interesting to understand what treatment could have been provided in these projects, given the constraints. She wondered where water quality improvements truly were not feasible. Would it have been feasible to provide infiltration in some areas? She also wanted to quantify the amount of phosphorus that has been removed with other projects. Engineer Chandler noted that BCWMC is due for a P8 model update. She also stated that there isn't great soil survey data available for much of the watershed so determining specific site constraints could be difficult.

Plymouth TAC member Ben Scharenbroich pointed out that just because cities aren't required to do these BMPs—like street sweeping—doesn't mean cities aren't doing those activities.

Commissioner Carlson said the Commission should reward cities who are doing the right thing and wondered about the cost of the further analysis. He also stated that he felt Commissioner Welch should weigh in on this matter.

Alternate Commissioner McDonald Black stated that she appreciated seeing the analysis and seeing what “we’re leaving on the table.”

MOTION: Commissioner Harwell moved to direct the Commission Engineer to take the analysis a step further to understand true impacts of projects where water quality improvements were feasible vs. projects where site constraints made water quality improvements infeasible. Alternate Commissioner Crough seconded the motion.

Commissioner de Lambert stated he would vote against this further analysis because it’s not urgent, he would like Commissioner Welch involved in the discussion, and would like to get a cost estimate from Barr Engineering to do this further analysis.

Alternate Commissioner Sicora asked for clarification on the motion. He acknowledged this is a slippery slope and wanted to better understand what Commissioner Harwell was requesting Barr Engineering to do. He suggested a scope of work be developed first.

Engineer Chandler replied that further analysis is a significant effort because it will necessitate gathering much information from cities about each project. She estimated a full week’s worth of effort by an engineer. Commission Engineer Phillips mentioned that doing a GIS desktop analysis looking at soils, space, high groundwater and other site constraints could be done in a day or two.

It was noted in the “chat section” of the online meeting platform by Engineer Phillips that he believes Shingle Creek WMO, Rice Creek WD, Riley Purgatory Bluff Creek WD, Nine Mile WD, Minnehaha Creek WD, and Elm Creek WMO all utilize the same or similar requirements to the current BCWMC requirement for linear projects.

Golden Valley TAC member, Eric Eckman, stated that the additional analysis requested through the motion is more complicated because it also needs to consider sanitary sewer, contaminated soils, and utilities. This is the reason BCWMC adopted the current standards. He noted the Commission Engineer won’t easily be able to determine feasibility.

A \$2,000 limit was suggested to limit on the engineers’ initial work to review site constraints and a cost estimate for even further analysis. Commissioner Harwell agreed that the level of effort should be defined.

MOTION: Commissioner Harwell moved to amend the motion on the floor to direct the Commission Engineer to spend up to \$2,000 to provide more detail on feasibility based on a desktop analysis of site constraints and to bring a cost estimate for further analysis to a future meeting. Alternate Commissioner Crough seconded the motion. Upon a rollcall vote, the motion carried 7-1, with the City of Minneapolis absent from the vote and the City of St. Louis Park voting against.

7. COMMUNICATIONS

A. Administrator’s Report

- i. Commission engineers and the Administrator met with Minneapolis staff about the Bryn Mawr Meadows Park water quality improvement project. The project spans two different entities so the Administrator is proposing that the Commission Engineer design the entire project. Administrator Jester asked whether the Commission Engineer should develop a proposal for this work, or if there should be a discussion at a future Commission meeting first. Chair Prom indicated that an RFP for the work might be appropriate. Administrator Jester noted she would bring this item to a future meeting.
- ii. ERF grant for Lagoon Dredging Project is being prepared
- iii. A kick off meeting was held for the Medley Park feasibility study. The next step is to design the resident engagement process.

B. Chair

- i. Chair Prom suggested moving to the Zoom platform for the next Commission meeting since there were so

many technical challenges during the meeting.

C. Commissioners

- i. Commissioner Harwell received an email from a resident wondering whether a plant was a desirable species or a weed; the plant grew from seeds in the seed packets the Commission hands out.

D. TAC Members

- i. Upcoming Meeting: Thursday, October 1st

E. Committees

F. Education Consultant

Latest video has had about 700 views and several shares. ["Importance of Pollinators"](#) The next video will be on BCWMC's volunteer programs.

G. Legal Counsel

- i. Nothing to report

H. Engineer

- i. Update on Deep Tunnel Inspection
 - a. Engineer Herbert noted that October 6 is the date slated for the inspection, and explained the complexity of the inspection due to the high number of stakeholders and the environmental conditions that need to be in place to complete the inspection. He explained how the tunnel works and what would be included in the inspection. The plan is to have a 3-person inspection team. The inspection will show whether the accumulated sediment at the outlet from 12 years ago is still in place or if it washed away. The last time the Mississippi River was drawn down in this area was 12 years ago, so it's a neat opportunity to see the middle pool. There will be video and photos of the inspection that will be shared with the Commission. Three days of drawdown will need to take place, so this is highly weather-dependent. Administrator Jester will send information about the timing of the river drawdown to commissioners.

8. INFORMATION ONLY (Information online only)

- A. CIP Project Updates <http://www.bassettcreekwmo.org/projects>
- B. CIP Project Updates
- C. Grant Tracking Summary and Spreadsheet
- D. 2020 BCWMC Administrative Calendar
- E. Letter to Residents for Medley Park Feasibility Study

9. ADJOURNMENT

Chair Prom adjourned the meeting at 10:44 a.m.

Upcoming Meetings & Events

- MAISRC Showcase: Afternoons of September 22 – 24, <https://www.maisrc.umn.edu/showcase>
- BCWMC TAC Meeting: Thursday, October 1, 2020, 10:30 – 12:00 via Zoom
- Bassett Creek Watershed Mgmt Commission Meeting: Thursday October 15th, 8:30 a.m. via WebEx
- Minnesota Water Resources Conference: October 20 – 21; Online <https://ccaps.umn.edu/minnesotawater-resources-conference>

Signature/Title

Date

Signature/Title

Date

Bassett Creek Watershed Commission
General Fund (Administration) Financial Report
Fiscal Year: February 1, 2020 through January 31, 2021
MEETING DATE: October 15,2020

Item 4B.
BCWMC 10-15-20
Full Document Online

(UNAUDITED)

BEGINNING CASH BALANCE	9-Sep-2020	50,049.57	
Transfer to 4M Fund			
	Total Cash Balance		50,049.57
BEGINNING INVESTMENT BALANCE		600,000.00	
Transfer from Cash			
	Total Investment Balance		600,000.00
Total Cash and Investments			650,049.57
ADD:			
General Fund Revenue:			
Interest less Bank Fees-Wells Fargo	(0.98)		
Interest Earnings - 4M Funds	19.13		
Total Interest Earnings		18.15	
Other:			
WOMP Grant - Metropolitan Council		0.00	
Permits:			
Ace Properties		1,500.00	
City of Plymouth		1,500.00	
Reimbursed Construction Costs		27,940.83	
	Total Revenue and Transfers In		30,958.98
DEDUCT:			
Checks:			
3336 Barr Engineering	Sept Services	57,332.85	
3337 Kennedy & Graven	August Legal	1,134.30	
3338 Keystone Waters LLC	Sept Administrator	4,896.00	
3339 Keystone Waters LLC	Meeting Expenses	159.05	
3340 Lawn Chair Gardener	September Admin Serv / Educ	1,040.00	
3341 Wenck	September WOMP	1,490.30	
3342 HDR Engineering	2020 Website services	357.26	
3343 Metro Blooms	Lawns to Legumes Grant	15,175.27	
	Total Checks/Deductions		81,585.03
Outstanding from previous month:			
3321 Catherine Cesnik	Training Reimbursement	160.00	
ENDING BALANCE	7-Oct-2020		599,423.52

Bassett Creek Watershed Commission
General Fund (Administration) Financial Report
Fiscal Year: February 1, 2020 through January 31, 2021
MEETING DATE: October 15, 2020

(UNAUDITED)

	2020/2021 BUDGET	CURRENT MONTH	YTD 2020/2021	BALANCE
OTHER GENERAL FUND REVENUE				
ASSESSMENTS TO CITIES	550,450	0.00	550,451.00	(1.00)
PROJECT REVIEW FEES	50,000	3,000.00	45,500.00	4,500.00
WOMP REIMBURSEMENT	5,000	0.00	4,500.00	500.00
TRANSFERS FROM LONG TERM FUND & CIP	42,000	0.00	0.00	42,000.00
CIP ADMINISTRATIVE CHARGE	30,000			
LONG TERM MAINT-FLOOD CONTROL PRC	12,000			
USE OF FUND BALANCE	15,000	0.00	0.00	15,000.00
METROPOLITAN COUNCIL - LRT		0.00	0.00	
THREE RIVERS PARK DISTRICT - CURLY LEAF POND		0.00	0.00	
CITY OF MINNEAPOLIS-BASSETT CREEK STUDY			53,571.89	
REVENUE TOTAL	662,450	3,000.00	654,022.89	61,999.00
EXPENDITURES				
ENGINEERING & MONITORING				
TECHNICAL SERVICES	130,000	12,454.50	100,612.14	29,387.86
DEV/PROJECT REVIEWS	75,000	3,529.00	72,608.75	2,391.25
NON-FEE/PRELIM REVIEWS	20,000	1,764.00	12,735.00	7,265.00
COMMISSION AND TAC MEETINGS	12,000	889.50	6,205.70	5,794.30
SURVEYS & STUDIES	10,000	0.00	0.00	10,000.00
WATER QUALITY/MONITORING	102,600	5,502.12	61,850.38	40,749.62
WATER QUANTITY	6,500	565.00	4,297.44	2,202.56
ANNUAL FLOOD CONTROL INSPECTIONS	12,000	3,970.00	18,870.00	(6,870.00)
REVIEW MUNICIPAL PLANS	2,000	0.00	1,260.00	740.00
WOMP	20,500	2,123.20	13,375.83	7,124.17
APM / AIS WORK	30,000	0.00	6,634.42	23,365.58
ENGINEERING & MONITORING TOTAL	420,600	30,797.32	298,449.66	122,150.34
PLANNING				
Next Generation Plan Development	18,000	0.00	0.00	18,000.00
MAINTENANCE FUNDS TOTAL	18,000	0.00	0.00	18,000.00
ADMINISTRATION				
ADMINISTRATOR	69,200	4,896.00	39,852.00	29,348.00
MN ASSOC WATERSHED DIST DUES	500	0.00	500.00	0.00
LEGAL COSTS	15,000	1,134.30	10,071.43	4,928.57
AUDIT, INSURANCE & BONDING	18,000	0.00	18,684.00	(684.00)
FINANCIAL MANAGEMENT	3,500	0.00	0.00	3,500.00
MEETING EXPENSES	1,500	0.00	223.50	1,276.50
ADMINISTRATIVE SERVICES	15,000	890.30	7,229.20	7,770.80
ADMINISTRATION TOTAL	122,700	6,920.60	76,560.13	46,139.87
OUTREACH & EDUCATION				
PUBLICATIONS/ANNUAL REPORT	1,300	0.00	1,000.00	300.00
WEBSITE	1,000	357.26	724.50	275.50
PUBLIC COMMUNICATIONS	1,000	0.00	1,112.59	(112.59)
EDUCATION AND PUBLIC OUTREACH	22,000	15,484.02	26,137.38	(4,137.38)
WATERSHED EDUCATION PARTNERSHIPS	15,850	0.00	9,850.00	6,000.00
OUTREACH & EDUCATION TOTAL	41,150	15,841.28	38,824.47	2,325.53
MAINTENANCE FUNDS				
EROSION/SEDIMENT (CHANNEL MAINT)	25,000	0.00	0.00	25,000.00
LONG TERM MAINTENANCE (moved to CF)	25,000	0.00	0.00	25,000.00
MAINTENANCE FUNDS TOTAL	50,000	0.00	0.00	50,000.00
TMDL WORK				
TMDL IMPLEMENTATION REPORTING	10,000	85.00	85.00	9,915.00
TMDL WORK TOTAL	10,000	85.00	85.00	9,915.00
TOTAL EXPENSES	662,450	53,644.20	413,919.26	248,530.74

BCWMC Construction Account
Fiscal Year: February 1, 2020 through January 31, 2021
October 2020 Financial Report

(UNAUDITED)

Cash Balance 09/09/2020

Cash

Transfer to purchase investments

Total Cash 0.00

Investments:

Minnesota Municipal Money Market (4M Fund)
Dividends-Current

4,015,388.47
65.15

Total Investments 4,015,453.62

Total Cash & Investments 4,015,453.62

Add:

Interest Revenue (Bank Charges)

0.00

State of MN - Pollution Control Agency - Sweeney Lake (SL-8)

0.00

Total Revenue 0.00

Less:

CIP Projects Levied - Current Expenses - TABLE A

(8,641.25)

Proposed & Future CIP Projects to Be Levied - Current Expenses - TABLE B

(15,506.58)

Total Current Expenses (24,147.83)

Total Cash & Investments On Hand 10/7/2020 3,991,305.79

Total Cash & Investments On Hand

3,991,305.79

Current Anticipated Levy -2020 (July 20/Dec 20/Jan 21)

728,701.70

CIP Projects Levied - Budget Remaining - TABLE A

(4,488,149.40)

Secured Grant Funds (CIP Projects Levied)-Not yet received

710,060.00

2021 Expected Levy for 2020/2021 Projects

630,080.00

Closed Projects Remaining Balance

1,571,998.09

2015 - 2018 Anticipated Tax Levy Revenue - TABLE C

2,288.14

2019 Anticipated Tax Levy Revenue - TABLE C

4,953.76

Anticipated Closed Project Balance

1,579,239.99

Proposed & Future CIP Project Amount to be Levied - TABLE B

4,003,700.00

TABLE A - CIP PROJECTS LEVIED

		Approved Budget	Current Expenses	2020/21 YTD Expenses	INCEPTION To Date Expenses	Remaining Budget	Grant Funds Received- included in Cash Balances	Secured Grant Funds	2021 Expected Levy for 2020/2021 Projects
Projects Completed-to be removed at year end									
Northwood Lake Pond (NL-1) - FINALLED	1,433,740								
Close Project - Use Closed Project Funds	13,403	1,447,143	0.00	0.00	1,447,143.38	0.00	700,000		
Plymouth Creek Restoration (2017 CR-P) - FINALLED	863,573	627,329	0.00	0.00	627,329.10	0.00	435,468		
Close Project - funds to Closed Project Fund	(236,244)								
Current Projects									
Four Seasons Mall Area Water Quality Proj (NL-2)		990,000	0.00	7,481.00	182,512.56	807,487.44			
2014									
Schaper Pond Enhance Feasibility/Project (SL-1)(SL-3)		612,000	0.00	3,146.00	431,508.45	180,491.55			
Twin Lake Alum Treatment Project (TW-2)		163,000	0.00	0.00	91,037.82	71,962.18			
2017									
Main Stem Cedar Lk Rd-Dupont (2017CR-M)	2017 Levy	400,000	1,064,472	0.00	132,029.25	932,442.75			
	2018 Levy	664,472						150,300	
2018									
Bassett Creek Park & Winnetka Ponds Dredging (BCP-2)		1,000,000							
Mar-19 Budget Adj		114,301							
Mar-19 From Channel Maint		9,050	0.00	3,500.00	1,066,648.32	56,702.68			
2019									
Decola Ponds B&C Improvement(BC-2,BC-3,BC-8)		1,031,500	0.00	787,615.09	894,212.65	137,287.35	34,287	34,287	
Westwood Lake Water Quality Improvement Project(Feasibility)		404,500	0.00	174,486.76	223,640.96	180,859.04			
2020									
Bryn Mawr Meadows (BC-5)		912,000	860.00	860.00	98,547.03	813,452.97	200,000	200,000	412,000
Jevne Park Stormwater Mgmt Feasibility (ML-21)		500,000	0.00	0.00	46,390.75	453,609.25			
Crane Lake Improvement Proj (CL-3)		380,000	0.00	0.00	12,000.85	367,999.15			
Sweeney Lake WQ Improvement Project (SL-8)		568,080	7,781.25	81,074.96	82,224.96	485,855.04	9,771	325,473	218,080
		9,823,375	8,641.25	1,058,163.81	5,335,226.08	4,488,149.40	244,058	710,060.00	630,080.00

TABLE B - PROPOSED & FUTURE CIP PROJECTS TO BE LEVIED

	Approved Budget - To Be Levied	Current Expenses	2020/21 YTD Expenses	INCEPTION To Date Expenses	Remaining Budget
2021					
Main Stem Dredging Project (BC-7)	3,259,000	1,171.00	34,949.00	77,143.72	3,181,856.28
Mt Olivet Stream Restoration (ML-20)	178,100		14,410.50	35,993.92	142,106.08
Parkers Lake Stream Restoration (PL-7)	485,000		24,564.90	57,547.12	427,452.88
Purchase High Efficiency Street Sweeper (ML-23)	81,600		0.00	0.00	81,600.00
2021 Project Totals	4,003,700	1,171.00	73,924.40	170,684.76	3,833,015.24
2022					
DeCola Ponds/Wildwood Park/SEA School Flood Control (BC-2,3,8,10)	0	2,387.39	3,225.39	3,225.39	(3,225.39)
Medley Park Stormwater Treatment Feasibility (ML-12)	0	11,948.19	13,621.69	1,673.50	(1,673.50)
2022 Project Totals	0	14,335.58	16,847.08	4,898.89	(4,898.89)
Total Proposed & Future CIP Projects to be Levied	4,003,700	15,506.58	90,771.48	175,583.65	3,828,116.35

BCWMC Construction Account

Fiscal Year: February 1, 2020 through January 31, 2021

(UNAUDITED)

October 2020 Financial Report

TABLE C - TAX LEVY REVENUES

	County Levy	Abatements / Adjustments	Adjusted Levy	Current Received	Year to Date Received	Inception To Date Rec'd	Balance to be Collected	BCWMO Levy
2020 Tax Levy	1,500,000.00	1,537.81	1,501,537.81	0.00	772,836.11	772,836.11	728,701.70	1,500,000.00
2019 Tax Levy	1,436,000.00	(4,500.13)	1,431,499.87		1,498.40	1,426,546.11	4,953.76	1,436,000.00
2018 Tax Levy	1,346,815.00	(8,893.33)	1,337,921.67		(405.17)	1,335,359.23	2,562.44	947,115.00
2017 Tax Levy	1,303,600.00	(16,571.62)	1,287,028.38		150.38	1,287,861.38	(833.00)	1,303,600.00
2016 Tax Levy	1,222,000.00	(11,662.58)	1,210,337.42		74.86	1,210,145.57	191.85	1,222,000.00
2015 Tax Levy	1,000,000.00	(103.70)	999,896.30		172.94	999,529.45	366.85	1,000,000.00
				0.00			735,943.60	

OTHER PROJECTS:

	Approved Budget	Current Expenses / (Revenue)	2020/21 YTD Expenses / (Revenue)	INCEPTION To Date Expenses / (Revenue)	Remaining Budget
TMDL Studies					
TMDL Studies	135,000.00	0.00	0.00	107,850.15	27,149.85
TOTAL TMDL Studies	135,000.00	0.00	0.00	107,850.15	27,149.85
Flood Control Long-Term					
Flood Control Long-Term Maintenance FEMA Model	694,573.00	3,793.00	13,525.00	418,901.91	
Less: State of MN - DNR Grants		0.00	(3,231.50)	(145,078.40)	
	694,573.00	3,793.00	10,293.50	273,823.51	420,749.49
Annual Flood Control Projects:					
Flood Control Emergency Maintenance	500,000.00	0.00	0.00	0.00	500,000.00
Annual Water Quality					
Channel Maintenance Fund	415,950.00	0.00	11,453.70	267,073.30	148,876.70
Metro Blooms Harrison Neighborhood CWF Grant Project					
BWSR Grant	134,595.00	0.00	0.00	87,892.89	46,702.11
	134,595.00	0.00	0.00	(67,298.00)	(67,298.00)
	134,595.00	0.00	0.00	20,594.89	
Total Other Projects	1,880,118.00	3,793.00	21,747.20	602,043.85	1,076,180.15



Memorandum

To: Bassett Creek Watershed Management Commission (BCWMC)
From: Barr Engineering Co.
Subject: Item 5B – Review Additional Linear Projects Data and Consider Further Evaluation of Project Specific Information
BCWMC October 15, 2020 Meeting Agenda
Date: October 8, 2020

5B Review Additional Linear Projects Data and Consider Further Evaluation of Linear Project Information

Recommendations:

1. Review and discuss additional water quality data and possible site constraints
2. Do not move forward with further evaluation of linear project information

Background

At their May 18, 2017 meeting, the Commission approved revisions to the BCWMC's Requirements for Improvements and Development Proposals (Requirements document) that revised the BCWMC's water quality performance standards for linear projects. After the approved revisions, the Commission requested a periodic analysis comparing the revised linear project standards vs. the previous (MIDS) standards on linear projects reviewed by the BCWMC after the standards were revised. The Commission Engineer completed the first analysis for review by the Commission at their September 2018 meeting and a second analysis for review by the Commission at their September 17, 2020 meeting. At their September 2020 meeting, the Commission requested additional data for project specific pollutant loading, water quality treatment, and site constraints.

Additional Water Quality Data for Linear Projects

Water quality data, including existing (pre-project) total phosphorus (TP) loading, proposed (post-project) TP loading, and the difference between pre-project and post-project TP loading, has been added to Table 1. TP removals along with footnotes for project specific data (where available) is also listed in Table 1. The total difference in TP loading between pre-project and post-project conditions is a net increase of 6.18 pounds TP per year. Project specific TP removal information was submitted for three projects and the footnotes provide additional information on these projects and the stormwater best management practices (BMPs). A number of linear projects provided sump manholes, but these features are generally not credited for water quality treatment as they are considered pretreatment devices.

Included in the net 6.18 pounds per year of increased TP loading was the loading from the Theodore Wirth Golf Course Cart Path project. However, this project included only impervious surface that is

disconnected from storm sewers and downstream resources, meaning the runoff flows over pervious areas, like grass and vegetation, before flowing into a waterbody or storm sewer. Therefore, the 2.67 pounds per year of TP loading from this project may not reach the downstream waterbody or storm sewer. Further, the 3.12 pounds per year of TP loading from the county state aid highway 9 (CSAH 9) and I-494 Interchange project will be treated with existing stormwater BMPs that had capacity for additional treatment.

Total phosphorus loading from the two projects described above totals 5.79 pounds per year, but may not reach downstream waterbodies due to the disconnected nature of the cart paths and existing stormwater BMPs. The 5.79 pounds per year of TP loading represents 94% of the calculated net new TP loading (6.18 pounds per year) from all linear projects analyzed.

Potential Site Constraints

As shown in Table 1, site constraints for linear projects that may prohibit or limit feasibility of stormwater BMPs include: poor soils, high groundwater, space constraints, infiltration and inflow concerns, drinking water supply management areas (DWSMAs), karst, contaminated soils, or shallow bedrock. To better understand whether any site constraints were present for each specific project, more discussion and coordination is needed with project applicants, however Figures 1-6 show publicly available data for the Bassett Creek watershed where select constraints may generally affect projects within the watershed.

Figure 1 – Bedrock:

Requirement: A minimum of 3 feet of soil depth (10 feet or more is preferred) from the bottom of a stormwater BMP to bedrock. Figure 1 shows that within the Bassett Creek watershed, bedrock is within 50 feet of the surface along the east side of the watershed in portions of the cities of Minneapolis and Golden Valley.

Figure 2 – Groundwater:

Requirement: A minimum of 3 feet of soil depth (10 feet or more is preferred) from the bottom of a stormwater BMP to groundwater. Figure 2 shows that groundwater is within 10 feet of the surface throughout much of the Bassett Creek watershed.

Figure 3 – Drinking Water Supply Management Areas (DWSMAs):

Requirement: Where sites are located within a Drinking Water Supply Management Area (DWSMA), a wellhead protection area, or within 200 feet of a drinking well, infiltration is only allowed if a local unit of government can provide a higher level of engineering review to ensure a functioning system that prevents adverse impacts to groundwater. Figure 3 shows DWSMAs covering significant areas within the Bassett Creek watershed. Wellhead protection areas and drinking well locations were not found within publically available data.

Figure 4 – Karst:

Requirement: Where sites are located within 1,000 feet up-gradient or 100 feet down-gradient of active karst areas, infiltration is only allowed if a local unit of government can provide a higher level of

engineering review to ensure a functioning system that prevents adverse impacts to groundwater. Figure 4 shows surface karst features along the east side of the watershed in portions of the cities of Minneapolis and Robbinsdale.

Figure 5 – Soil Types and Infiltration Capacity:

Requirement: Where there are very low infiltration soils (<0.2 inches per hour) or very high infiltrating soils (>8 inches per hour), infiltration may not be feasible or may not be allowed for a stormwater BMP. Figure 5 shows hydrologic soil groups within the Bassett Creek Watershed. Significant portions of the watershed have no data available and significant portions of the watershed have soils with poor infiltration (i.e., Hydrologic Soil Group C and D soils).

Figure 6 – Contaminated Soils:

Requirement: Where contaminated soils, contaminated groundwater or hotspot runoff is present, and hotspot or contamination cannot be isolated or remediated to mitigate risk of increased contamination, no infiltration practices are allowed. Figure 6 shows point data from the Minnesota Pollution Control Agency's "What's in My Neighborhood" tool for locations of feedlots, hazardous waste, investigation and cleanup, solid waste, tanks and leaks, and water quality within the Bassett Creek watershed.

Further Evaluation of Project Specific Information

Project-specific Site Constraints

As previously noted, to better understand whether any site constraints were present for each specific project, more discussion and coordination is needed with project applicants. The level of effort could vary quite a bit. For the lowest level of Commission Engineer effort, the applicants would need to compile, review, and provide all of the site constraint information; then, the Commission Engineer would only need to summarize the information. Examples of this information may include: geotechnical reports, soil borings, or infiltration tests for infiltration, groundwater, bedrock or karst; city specific requirements for infiltration and inflow; nearby well locations or wellhead protection areas; Phase I or Phase II Environmental Site Assessments and/or extent of contamination and remediation alternatives considered for contamination or hotspot runoff; or project plans for space (right of way) constraints. For the highest level of Commission Engineer effort, the applicants may provide some site constraint information, but the Commission Engineer would need to compile any additionally available information, review all of the project information to determine the site constraints for each project, and then summarize the information. A significant limitation of this effort is that not all project-specific site constraint information may be available. Since project applicants were not required to implement infiltration practices or other stormwater BMPs, the applicants may not have assessed the feasibility of implementing infiltration or stormwater BMPs as part of the projects. For the 25 projects reviewed, we estimate the cost of this work to range from around \$4,000 (lowest level of effort) to \$10,000-\$15,000 (highest level of effort), recognizing that the final results may still provide incomplete data.

To: Bassett Creek Watershed Management Commission (BCWMC)
From: Barr Engineering Co.
Subject: Item 5B – Review Additional Linear Projects Data and Consider Further Evaluation of Project Specific Information
BCWMC October 15, 2020 Meeting Agenda
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The additional project-specific site constraint information would tell us whether applicants could have implemented infiltration practices (and resultant volume retention) and other stormwater BMPs at the linear project sites reviewed since the 2017 revisions to the Requirements document. These results could also identify “missed opportunities” or locations where infiltration practices or stormwater BMPs were feasible but were not incorporated into projects. Based on the projects reviewed prior to the 2017 revision, it is likely that this additional information will show that most projects would have constraints preventing implementation of infiltration and possibly other stormwater BMPs.

Based on the level of effort to obtain information and the likelihood that the information may still be incomplete, the Commission Engineer does not recommend this additional analysis.

Project-specific BMPs and TP Removals

Some of the reviewed linear projects included stormwater BMPs that may provide TP removals, but the applicants did not submit information to determine the level of TP removal. Discussion and coordination would be needed with these applicants to quantify TP removals from these projects. Similar to above, the level of effort could vary quite a bit. For the lowest level of Commission Engineer effort, the applicants would need to calculate and provide all of the stormwater BMP and TP removal information; then, the Commission Engineer would only need to summarize the information. For the highest level of Commission Engineer effort, the applicants may provide some information; but the Commission Engineer would need to compile and review, or analyze, or calculate the TP removal based on the available project data; and then summarize the information. For the 25 projects reviewed, we estimate the cost of this work to range from around \$2,500 (lowest level of effort) to \$8,000-\$10,000 (highest level of effort).

This additional project-specific information would tell us the resultant TP removals achieved by these stormwater BMPs. However, the total additional TP loading for all linear projects reviewed since the 2017 revisions to the Requirements document is already relatively small in relation to the entire watershed. Based on the level of effort to obtain the additional TP removal information, and given the additional information would show a lower additional TP loading to downstream water bodies, the Commission Engineer does not recommend this additional analysis.

Table 1. Comparison of previous (2015) and current BCWMC triggers and water quality performance standards for linear projects

BCWMC Reviews of Linear Projects			2017-33 Metro Transit C Line BRT	2018-02 Hwy 55 Frontage Road Reconstruction	2018-04 Golden Valley 2018 PMP	2018-05 Luce Line Regional Trail Reconstruction	2018-07 Toledo-Scott Avenue Reconstruction	2018-08 Kilmer Park Street Reconstruction	2018-09 CenterPoint Energy 2018 MBLC GV West	2018-11 CenterPoint Energy Boone Avenue N Mill	2018-15 Trunk Highway 55 (TH 55) West Improvements	2018-18 CenterPoint Energy 2018 MBLC GV Central	2018-21 MCES Golden Valley Interceptor	^ Previously reviewed by the BCWMC at their September 2018 meeting. ^	2018-22 Plymouth Sanitary and Storm Sewer Rehab	2018-30 Winpark Drive Infrastructure Impr.	2018-31 CSAH 9 (Rockford Road) and I-494 Interchange	2019-02 Golden Valley 2019 PMP	2019-04 CenterPoint MBLSW Winnetka Avenue	2019-05 Candlelight Terrace Street Reconstruction	2019-10 Ridgedale Drive Improvements	2019-12 Theodore Wirth Golf Course Cart Paths	2019-28 Plymouth 2020 Street Construction	2020-01 Golden Valley 2020 PMP	2020-04 CenterPoint Energy 2020 MBLNW Winnetka	2020-07 Crystal 2020 Utility Reconstruction	2020-12 New Hope 2020 Infrastructure Improvements	2020-13 West Broadway Ave (CSAH81) Bridges Recon.	TOTAL (OR SUM)
BCWMC Project Review Data	Project Disturbance (acres)		5.50	1.50	8.37	1.92	3.40	7.70	1.80	0.90	2.66	1.77	4.42		0.67	3.90	19.17	11.03	2.50	1.61	14.24	7.00	20.70	7.90	4.50	4.09	14.08	7.4	158.73
	Existing Impervious (acres)		5.40	1.15	5.27	0.76	2.89	4.58	1.80	0.00	0.92	1.77	0.86		0.16	2.64	5.91	5.89	2.50	0.95	8.94	2.35	12.81	4.56	4.50	1.95	6.08	3.64	88.28
	Proposed Impervious (acres)		5.00	1.17	5.07	0.73	3.00	4.96	1.80	0.00	1.58	1.77	0.86		0.16	2.43	7.66	5.64	2.50	0.92	8.84	3.85	13.76	4.32	4.50	1.74	6.08	3.41	91.75
	Change in Impervious (acres)		-0.40	0.02	-0.20	-0.03	0.11	0.38	0.00	0.00	0.66	0.00	0.00		0.00	-0.21	1.75	-0.25	0.00	-0.03	-0.10	1.50	0.95	-0.24	0.00	-0.21	0.00	-0.23	3.47
	New Impervious (acres)		0.00	0.02	0.00	0.00	0.11	0.38	0.00	0.00	0.66	0.00	0.00		0.00	0.00	1.76	0.00	0.00	0.00	0.00	1.50	0.96	0.00	0.00	0.00	0	0	5.39
	Reconstructed Impervious (acres)		5.00	1.15	5.07	0.73	2.89	4.58	1.80	0.00	0.92	1.77	0.86		0.16	2.43	5.91	5.64	2.50	0.92	8.84	2.35	12.81	4.32	4.50	1.74	6.08	2.56	85.53
	Total New and Reconstructed Impervious (acres)		5.00	1.17	5.07	0.73	3.00	4.96	1.80	0.00	1.58	1.77	0.86		0.16	2.43	7.66	5.64	2.50	0.92	8.84	3.85	13.76	4.32	4.50	1.74	6.08	2.56	90.90
Previous (2015) BCWMC Requirement:	Trigger MIDS at 1 acre of new/fully reconstructed impervious	MIDS Treatment: Capture & retain larger of 1.1 inches off the net increase in impervious – or – 0.55 inches off the new/fully reconstructed impervious (acre-feet). Follow flexible treatment options if volume reduction is not feasible or not allowed.	0.23	0.05	0.23	0 ¹	0.14	0.23	0.08	0	0.07	0.08	0		0 ¹	0.11	0.35	0.26	0.11	0	0.41	0 ¹	0.63	0.2	0.21	0.08	0.28	0.12	3.87
Current BCWMC Requirement:	Trigger treatment at 1 acre of net new impervious	Capture & retain 1.1 inches off the net new impervious area (acre-feet). Follow flexible treatment options if volume reduction is not feasible or not allowed.	0	0	0	0 ¹	0	0	0	0	0	0	0		0 ¹	0	0.16	0	0	0	0	0 ¹	0	0	0	0	0	0	0
Capture and Retain Volume Provided (acre-feet) ²			0 ⁴	- ³	0 ⁵	0 ¹	- ³	0	0	0	0	0	0	0 ¹	- ³	- ⁶	0	0	- ³	- ⁷	0 ¹	0	0	0	0	0	0	0	0.00
Site Constraints	1 = Poor Soils 3 = Space (Right of Way) Constraints 5 = Drinking Water Management Areas 7 = Contaminated Soils 9 = Other 2 = High Groundwater 4 = Infiltration & Inflow Concerns 6 = Karst Areas 8 = Shallow Bedrock		More discussion and coordination needed with applicants to evaluate and determine whether any site constraints were present for each specific project.												More discussion and coordination needed with applicants to evaluate and determine whether any site constraints were present for each specific project.														
Water Quality	TP Loading from Existing (Pre-Project) Impervious (lb/year)		9.61	2.05	9.38	1.35	5.14	8.15	3.20	0	1.64	3.15	1.53	0.28	4.70	10.52	10.48	4.45	1.69	15.91	4.18	22.80	8.12	8.01	3.47	10.82	6.48	157.14	
	TP Loading from Proposed (Post-Project) Impervious (lb/year)		8.90	2.08	9.02	1.30	5.34	8.83	3.20	0	2.81	3.15	1.53	0.28	4.33	13.63	10.04	4.45	1.64	15.74	6.85	24.49	7.69	8.01	3.10	10.82	6.07	163.32	
	Difference in TP Loading from Existing (Pre-Project) to Proposed (Post-Project) (lb/year)		-0.71	0.04	-0.36	-0.05	0.20	0.68	0	0	1.17	0	0	0	-0.37	3.12	-0.45	0	-0.05	-0.18	2.67	1.69	-0.43	0	-0.37	0	-0.41	6.18	
	TP Removal (lb/year)		0 ⁴	- ³	6.34 ⁵	- ¹	- ³	- ³	0	0	0	0	0	0	- ¹	- ³	17.0 ⁶	- ³	0	- ³	9.85 ⁷	- ¹	- ³	- ³	0	0	- ³	- ³	
	TP Removal (%)		0% ⁴	- ³	64% ⁵	- ¹	- ³	- ³	0%	0%	0%	0%	0%	0%	- ¹	- ³	550% ⁶	- ³	0%	- ³	55% ⁷	- ¹	- ³	- ³	0%	0%	- ³	- ³	

¹ Trails and sidewalks and other miscellaneous disconnected impervious surfaces are exempt from BCWMC water quality performance goals. Adjacent pervious areas may provide some pretreatment or water quality treatment.

² Projects with site restrictions may not be required to "capture & retain" the water quality volume. These projects must follows BCWMC Flexible Treatment Options (FTOs).

³ Water quality treatment/pretreatment provided by project but documentation not submitted or not reviewed.

2018-02: Project included 5 new sump maholes for pretreatment. Drainage routed to existing ditches and wetlands along linear project which may also provide some water quality treatment and/or infiltration.

2018-07: Project included 18,905 cubic-foot Stormtech underground detention and infiltration system.

2018-08: Project included 4 new sump manholes for pretreatment.

2018-30: Project included 1 new sump manhole for pretreatment and an underground filtration trench to provide water quality treatment and/or infiltration.

2019-02: Project included 2 new sump manholes with SAFL baffles for pretreatment.

2019-05: Project included 4 new sump manholes for pretretment. Drainage routed to existing stormwater ponds, which were improved as part of this project and provide water quality treatment.

2019-28: Project included 23 new sump manholes with SAFL baffles for pretreatment.

2020-01: Project included 1 new sump manhole for pretreatment.

2020-12: Project included 1 new sump manhole for pretreatment.

2020-13: Project was designed to maximized the amount of runoff that is routed to ditches and infield ponding areas in order to maximize pretreatment and water quality treatment.

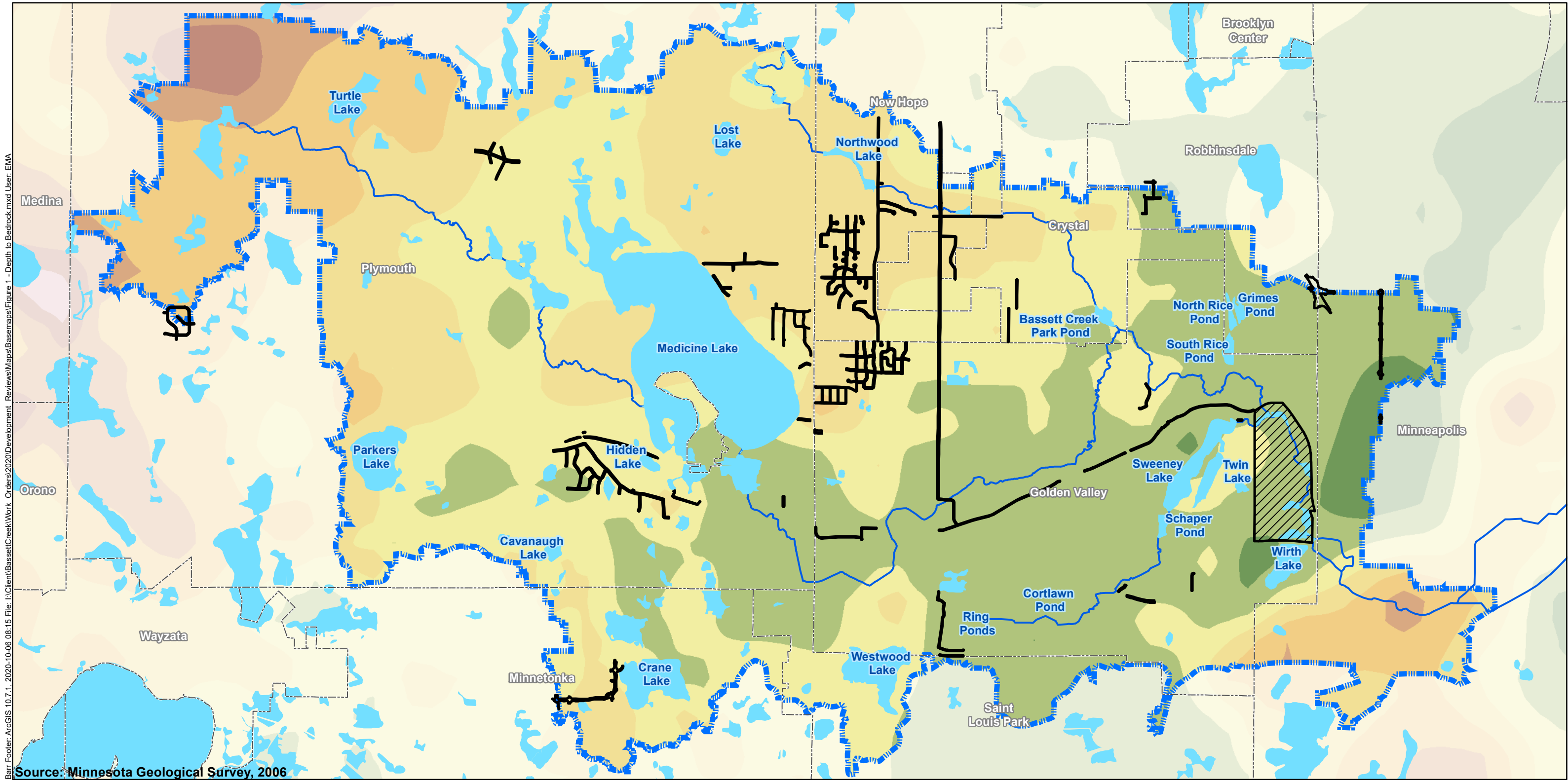
⁴ Draft 90% designs for the project included 6 new sump manholes for pretreatment. However, the city asked that these be removed from the final design due to access and maintenance concerns, minimal effectiveness, and future stormwater improvement plans for the area.

⁵ No volume retained specifically as part of project, but a filtration basin proposed as mitigation for 2016 PMP project and 2017 PMP project.

⁶ Project included existing regional stormwater ponds, filtration basins, and swales within the construction limits that were utilized to demonstrate compliance to BCWMC requirements.

⁷ Water quality treatment provided as part of BCWMC Capital Improvement Program (CIP) Project CL-3 in conjunction with this project.

Barr Footer: ArcGIS 10.7.1, 2020-10-06 08:15 File: I:\Client\BassettCreek\Work_Orders\2020\Development_Reviews\Maps\Basemaps\Figure 1 - Depth to Bedrock.mxd User: EMA



Source: Minnesota Geological Survey, 2006

- | | |
|-------------------------------|-------------------------|
| Linear Project Footprint | Depth to Bedrock |
| Theodore Wirth Golf Course | 0' - 50' |
| BCWMC Jurisdictional Boundary | 51' - 100' |
| Municipal Boundary | 101' - 150' |
| Lake | 151' - 200' |
| Creeks | 201' - 250' |
| | 251' - 300' |
| | 301' - 350' |
| | 351' - 400' |

Depth to bedrock created from well data in the County Well Index (CWI) database with verified locations that intersect the bedrock surface.

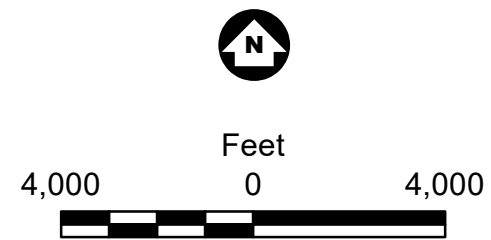
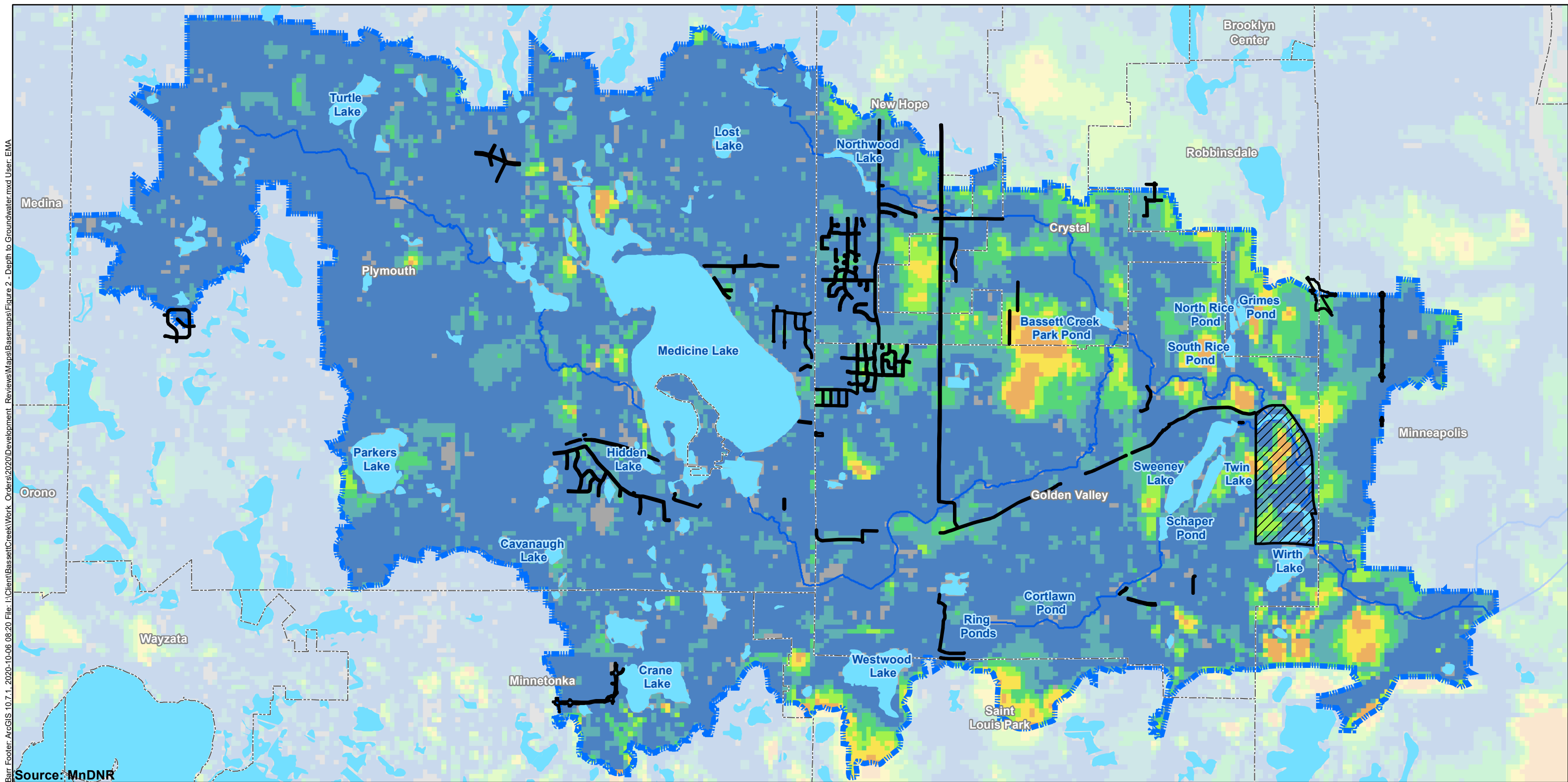


Figure 1

DEPTH TO BEDROCK
Bassett Creek Watershed
Management Commission

**Bassett Creek Watershed
Management Commission**

Barr Footer: ArcGIS 10.7.1, 2020-10-06 08:20 File: I:\Client\BassettCreek\Work_Orders\2020\Development_Reviews\Maps\BassettCreek\Figure 2 - Depth to Groundwater.mxd User: EMA



- Linear Project Footprint
- Theodore Wirth Golf Course
- BCWMC Jurisdictional Boundary
- Municipal Boundary
- Lake
- Creeks
- Depth to Groundwater**
- 0-10'
- 10-20'
- 20-30'
- 30-40'
- 40-50'
- 50'+
- Water

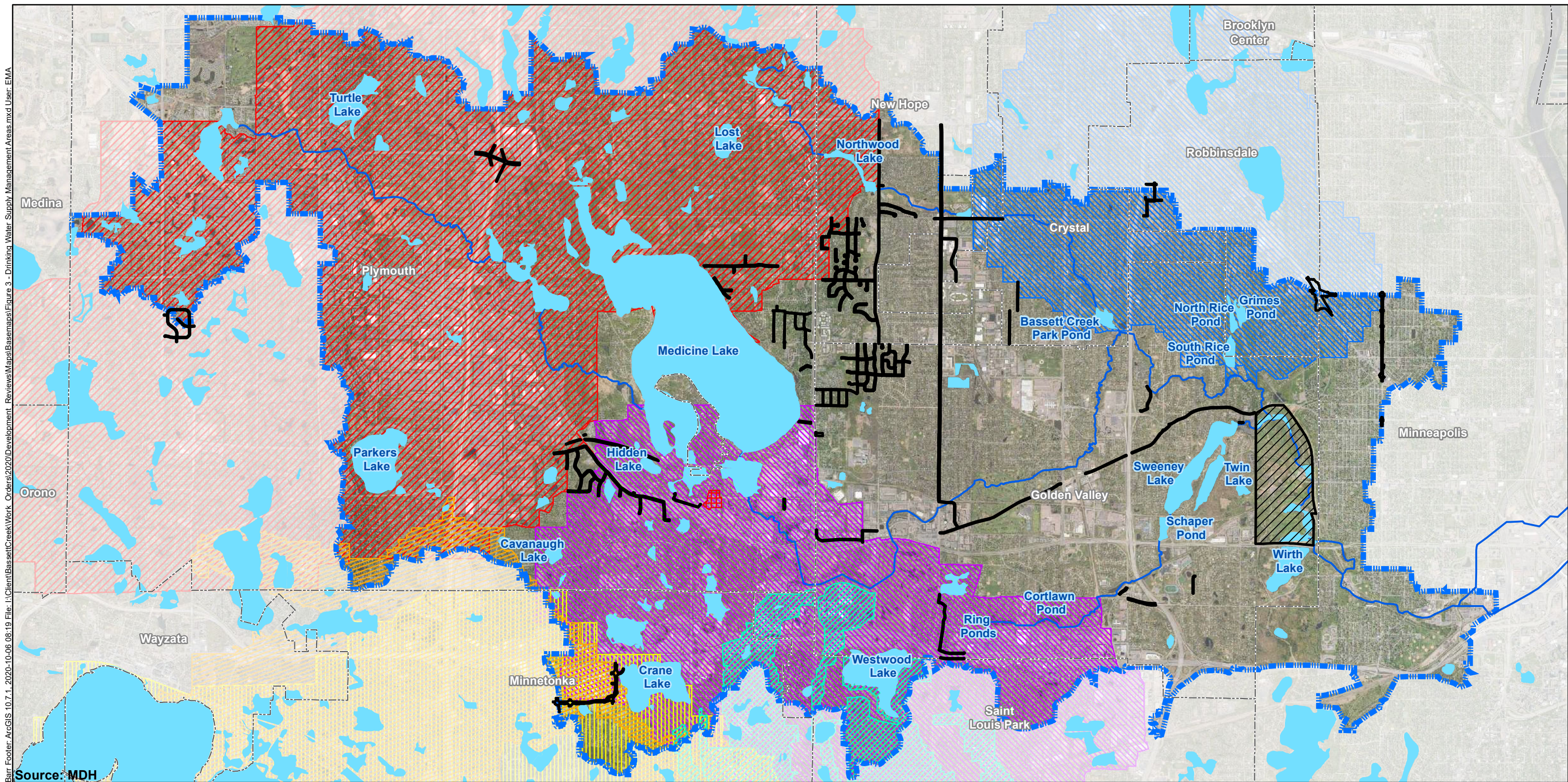
This dataset estimates the water table elevation from three primary sources: depth to water table in saturated soils from Natural Resources Conservation Service data (which are converted to elevation), elevation of surface water bodies, and the static water elevation in water table wells with verified locations. With the use of a 30-meter DEM derived using LiDAR data, depth to water table is derived from the water-table elevation.



Figure 2

DEPTH TO GROUNDWATER
Bassett Creek Watershed
Management Commission

**Bassett Creek Watershed
Management Commission**



- Linear Project Footprint
- Theodore Wirth Golf Course
- BCWMC Jurisdictional Boundary
- Municipal Boundary
- Lake
- Creeks
- DWSMA Boundary**
- Edina
- Hopkins
- Minnetonka
- Plymouth
- Robbinsdale
- Saint Louis Park
- Sun Valley Mobile Home Park

Drinking water supply management area (DWSMA) is the Minnesota Department of Health (MDH) approved surface and subsurface area surrounding a public water supply well that completely contains the scientifically calculated wellhead protection area and is managed by the entity identified in a wellhead protection plan. The boundaries of the drinking water supply management area are delineated by identifiable physical features, landmarks or political and administrative boundaries.

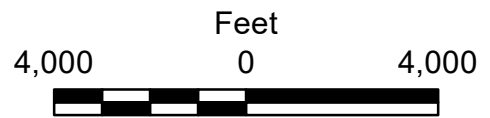
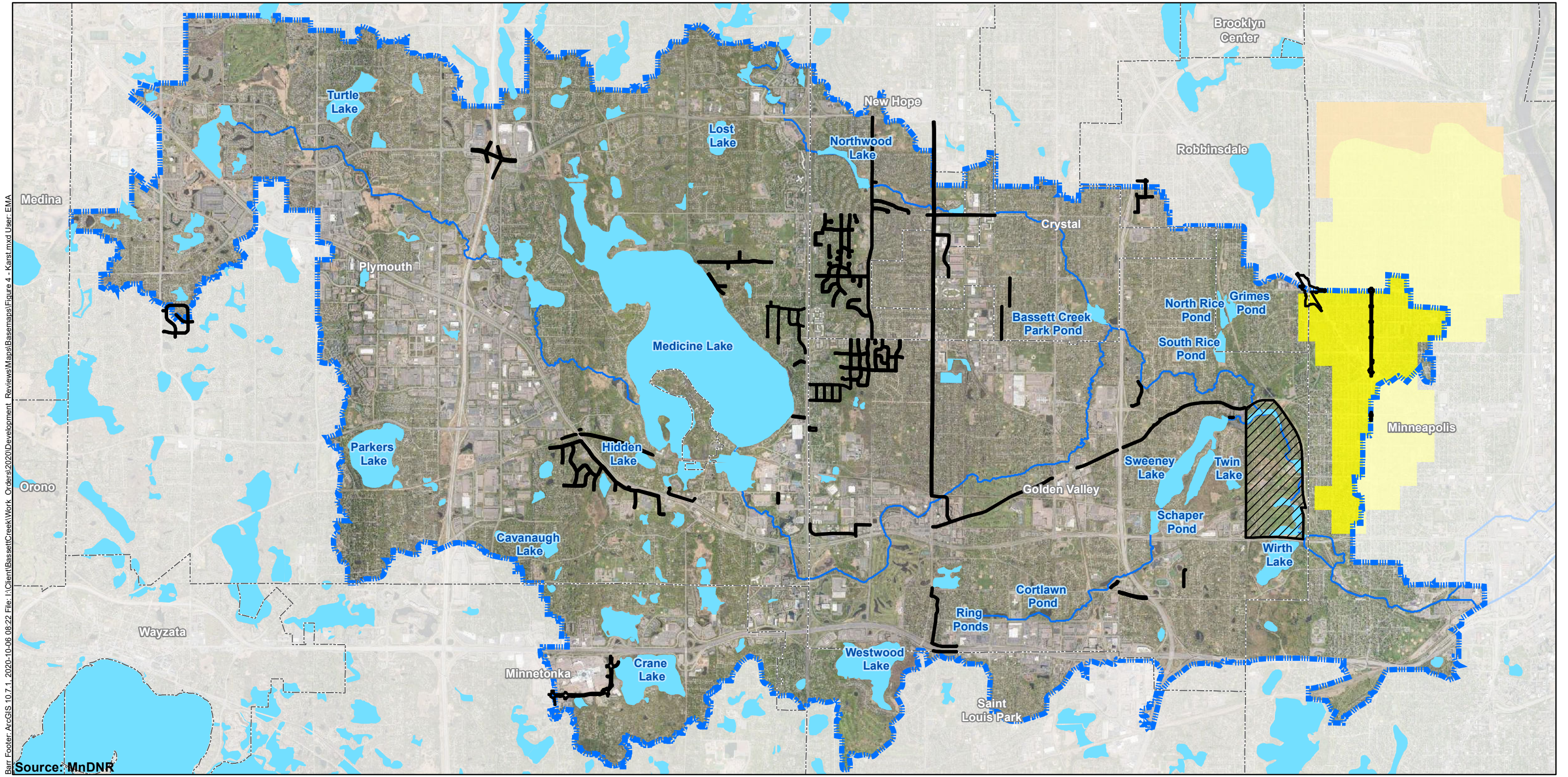


Figure 3

DRINKING WATER SUPPLY
MANAGEMENT AREAS (DWSMA)
Bassett Creek Watershed
Management Commission

**Bassett Creek Watershed
Management Commission**

Barr Footer: ArcGIS 10.7.1, 2020-10-06 08:22 File: I:\Client\BassettCreek\Work_Orders\2020\Development_Reviews\Maps\Basemaps\Figure 4 - Karst.mxd User: EMA



- Linear Project Footprint
- Theodore Wirth Golf Course
- BCWMC Jurisdictional Boundary
- Municipal Boundary
- Lake
- Creeks

- Surface Karst**
- Platteville Formation and Glenwood Formation (Carbonate Only)
 - St. Peter Sandstone (Carbonate Sandstone)

In Minnesota, surface karst features (including but not restricted to sinkholes, caves, stream sinks, and karst springs) are observed to primarily occur where 50 feet or less of unconsolidated material overlies Paleozoic carbonate bedrock and St. Peter Sandstone, or the Mesoproterozoic Hinckley Sandstone. Bedrock geology maps and depth to bedrock models were obtained from the MGS. Bedrock units that were previously determined to be karst susceptible by MGS, DNR, and University of Minnesota staff were singled out in areas where the depth to bedrock was less than 50 feet from the land surface.

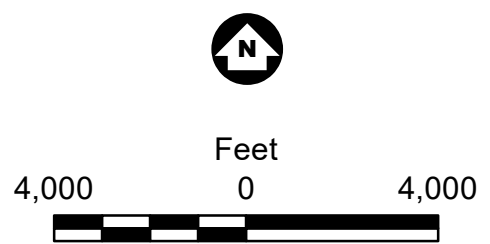
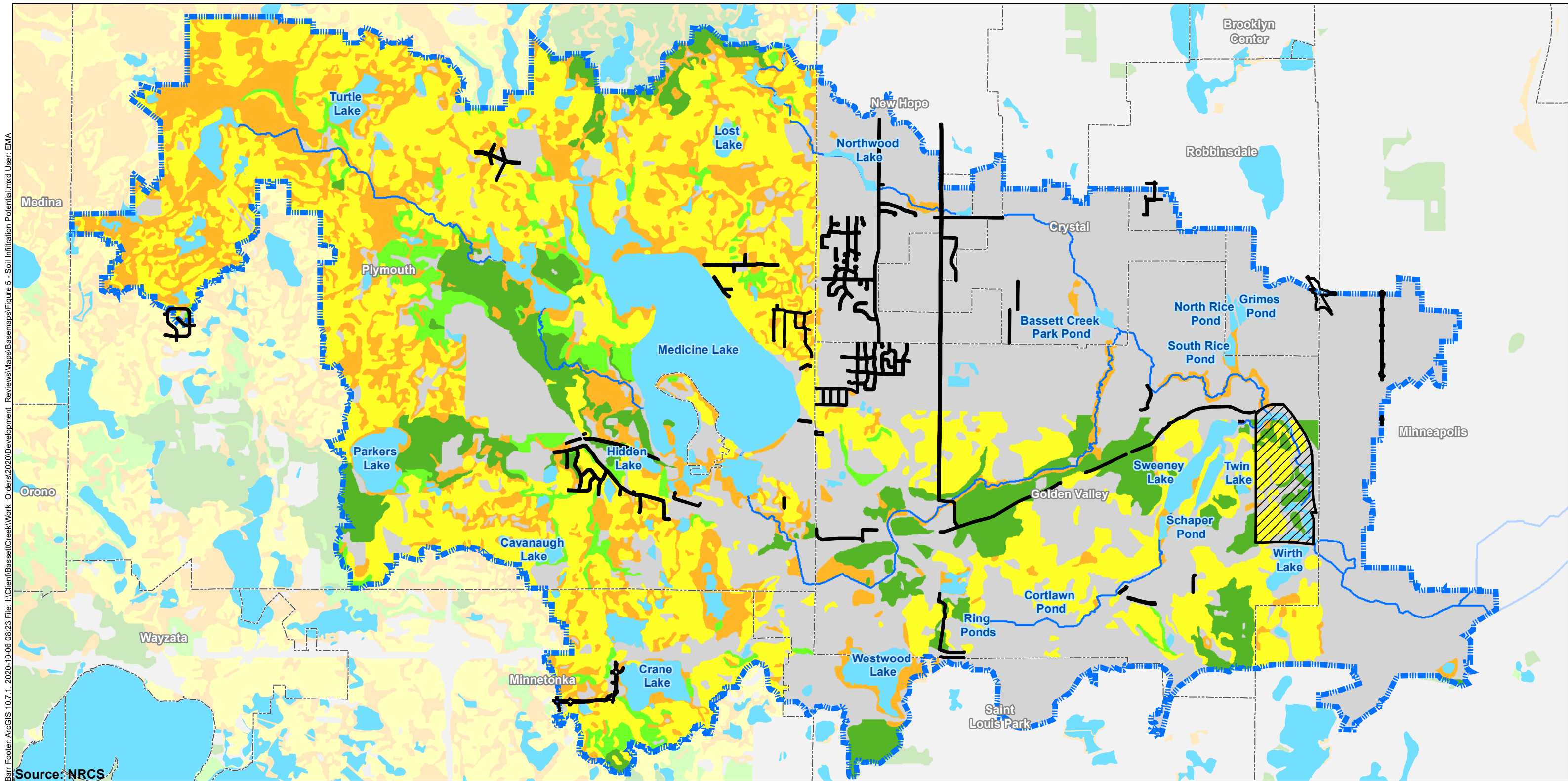


Figure 4

SURFACE KARST
Bassett Creek Watershed
Management Commission

**Bassett Creek Watershed
Management Commission**

Barr Footer: ArcGIS 10.7.1, 2020-10-06 08:23 File: I:\Client\BassettCreek\Work_Orders\2020\Development_Reviews\Maps\Basemaps\Figure 5 - Soil Infiltration Potential.mxd User: EMA



- Linear Project Footprint
- Theodore Wirth Golf Course
- BCWMC Jurisdictional Boundary
- Municipal Boundary
- Lake
- Creeks
- Hydrologic Soil Group**
- A
- B
- C
- D
- No Data (Urban Soils)
- Anticipated Good Infiltration
- Poor Infiltration

The NRCS has established four general hydrologic soil groups based on infiltration rate. Soil composition, slope, and land management practices determine the impact of soils on water resource issues. Infiltration capacities of soils affect the amount of direct runoff resulting from rainfall. Higher infiltration rates result in lower potential for runoff from the land, as more precipitation is able to enter the soil.

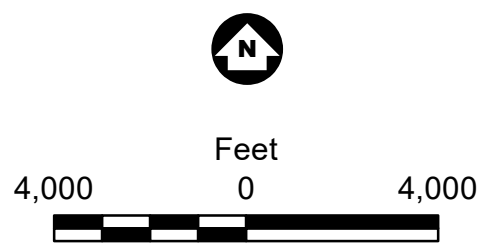
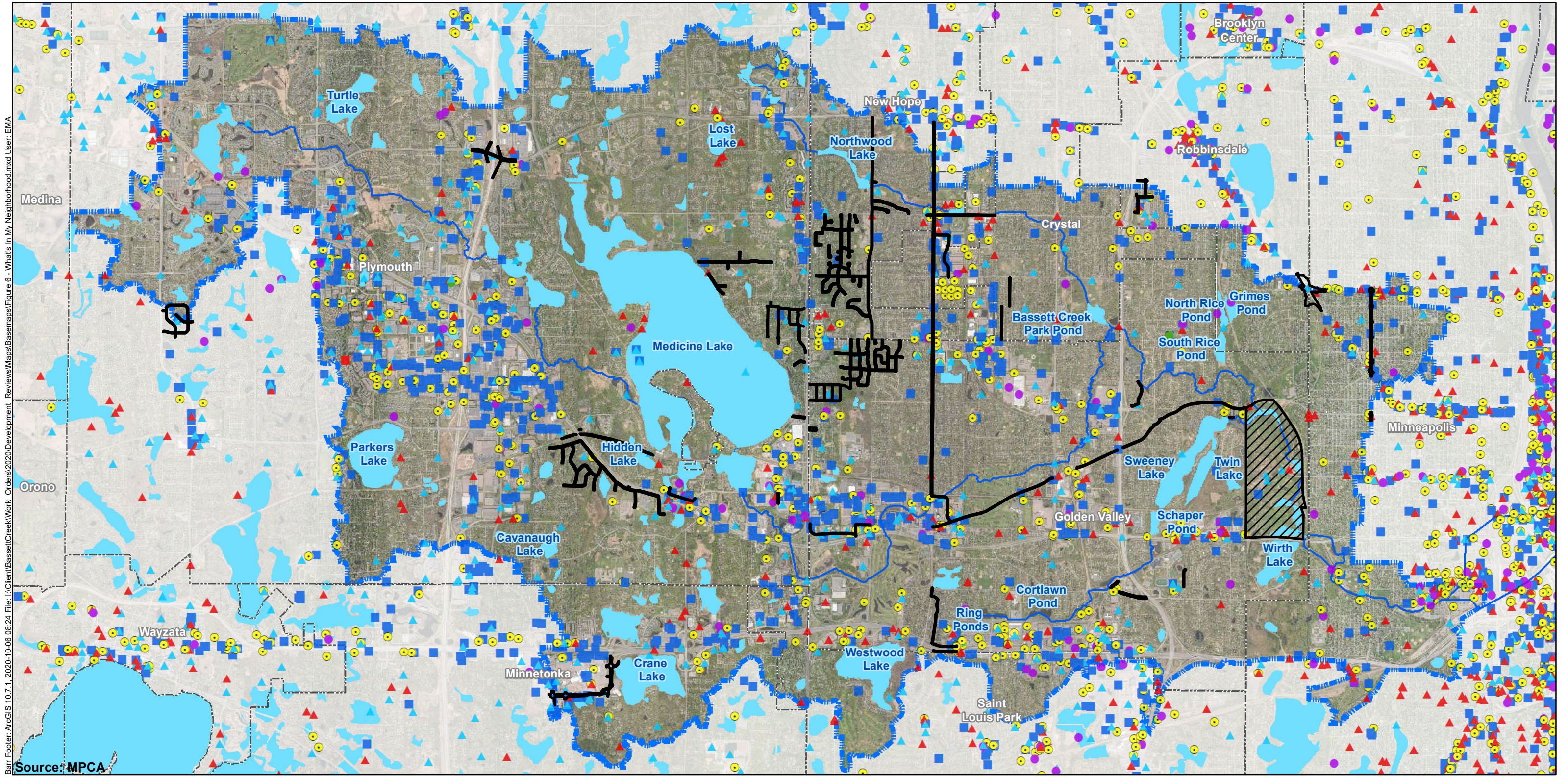


Figure 5

SOIL INFILTRATION POTENTIAL
Bassett Creek Watershed
Management Commission

**Bassett Creek Watershed
Management Commission**

Barr Footer: ArcGIS 10.7.1, 2020-10-06 08:24 File: I:\Client\BassettCreek\Work Orders\2020\Development_Reviews\Maps\Basemaps\Figure 6 - What's in My Neighborhood.mxd User: EMA



- Linear Project Footprint
- Theodore Wirth Golf Course
- BCWMC Jurisdictional Boundary
- Municipal Boundary
- Lake
- Creeks
- What's in my Neighborhood (MPCA)**
- Feedlot
- Hazardous Waste
- Investigation and Cleanup
- Solid Waste
- Tanks and Leaks
- Water Quality
- Multiple Activities

The data set was created as part of the Minnesota Pollution Control Agency's What's in My Neighborhood web application, which allows for public access to sites with environmental cleanup, pollution prevention, permitted, registered, or licensed activities. Methods for creating site locations have different levels of precision. The most accurate locations use coordinates from GPS (global positioning system). Coordinates are also derived using the site's street address, zip code or public land survey information. Some MPCA sites are not mapped. These are generally activities that are mobile, like ships with ballast water permits.

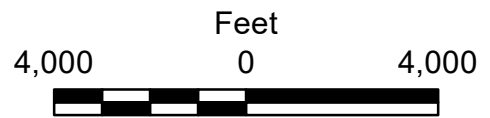


Figure 6

WHAT'S IN MY NEIGHBORHOOD
Bassett Creek Watershed Management Commission

Bassett Creek Watershed Management Commission

Kennedy

&

Graven

CHARTERED

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MEMORANDUM

Date: October 5, 2020

To: BCWMC Commissioners

From: David T. Anderson

Re: Flood Control Project Maintenance

I. Introduction and Background

In October of 2019, pursuant to the Commission's Flood Control Project Policy (the "FCP Policy"), the Commission Engineer inspected the double box culvert, a feature of the BCWMC Flood Control Project located in the city of Minneapolis. The FCP Policy was previously approved by the Commission at its May 19, 2016 and July 21, 2016 meetings. It includes a five-year inspection schedule for the double box culvert and further delegates major repair responsibility of the Flood Control Project to the Commission.

At its June 18, 2020 meeting, the Commission reviewed the inspection report which detailed the observations made by the Commission Engineer and recommended certain major repairs to the double box culvert, including repairs to the shear key joint material, crack sealing, deposit removal, and repairs to exposed reinforcement (collectively, the "Repairs"). The Commission approved the inspection report and directed the Commission Engineer to prepare an opinion of cost for the Repairs. As part of that approval, the Commission further requested that I provide an overview of its obligations and potential liability exposure if the Repairs are not made. The purpose of this memorandum is to provide such an overview ahead of the October 15, 2020 meeting, as the Commission will be asked to review additional information from the Commission Engineer at that meeting.

II. Commission Policy

The Commission's legal responsibilities related to the Flood Control Project were carefully reviewed in a January 13, 2014 memorandum prepared by former Commission attorney Charles LeFevere and attached to this memorandum for reference. I generally concur with the conclusions contained in that memorandum, including the fact that although the

Commission is not contractually obligated to maintain the Flood Control Project, it is not precluded from doing so via policy, including its Watershed Management Plan or any other internal policy, e.g. the FCP Policy.

It seems that the Commission's reasoning for historically taking on heightened maintenance responsibilities with respect to the Flood Control Project is generally rooted in the Commission's establishment of a Flood Control Project emergency repair fund and long-term maintenance fund, which were both created with money that was leftover from the original Flood Control Project and since supplemented with annual assessments from member cities. The FCP Policy outlines the Commission's self-imposed responsibilities as it relates to the Flood Control Project, including duties to regularly inspect the double box culvert and implement major repairs to the same. It is also worth noting that inspections and reporting are essential to ensure the Commission maintains its eligibility to receive federal funds to repair or replace Flood Control Project features in the event of a catastrophe.

In light of the FCP Policy, and because the Repairs are being recommended by the Commission Engineer, it is recommended that the Commission move forward with such Repairs in a manner consistent with its current Watershed Management Plan and the FCP Policy. While the Commission is under no contractual obligation to make the Repairs, it previously made an affirmative policy determination that it will do so.

III. Potential Liability

Additionally, a failure by the Commission to follow established policy regarding the maintenance of the Flood Control Project could expose it to legal liability. Although Minnesota Statutes, section 466.03, subd. 6 affords the Commission with legislative immunity, such immunity only applies to those functions that are discretionary in nature.¹ Discretionary functions are those which involve professional judgment to balance competing public policy considerations, such as political, economic, or social considerations. Although the Commission's past decisions regarding Flood Control Project maintenance responsibilities would most likely be viewed by a court as a discretionary function due to the inherent policymaking considerations that went into such a decision, its operational actions related to carrying out those established policies would likely not be viewed as such. The Minnesota Supreme Court has made clear that "[i]mplementing a policy, in contrast to formulating the policy itself, is often not subject to statutory immunity."²

In this case, the Commission Engineer has inspected the double box culvert and is now making repair recommendations, all in accordance with the Commission's FCP Policy. The Commission previously made a policy-level decision regarding the extent to which it will be responsible for such repairs. Because implementing that policy is less a matter of

¹ Specifically, the Commission is immune from "[a]ny claim based upon the performance or the failure to exercise or perform a discretionary function or duty, whether or not the discretion is abused."

² *Angell v. Hennepin Cty. Reg'l Rail Auth.*, 578 N.W.2d 343, 346 (Minn. 1998).

the Commission's discretionary function and more a matter of its operational duties, failing to do so might certainly expose the Commission to unnecessary liability.

IV. Conclusion

For the reasons above, the Commission should proceed with the Repairs in a manner consistent with the Commission Engineer's recommendation and its established policies. Failing to do so would not only be contrary to the Commission's current policies related to the Flood Control Project, but it might also expose the Commission to liability should any claims arise that might have otherwise been prevented had the Repairs been carried out by the Commission.

January 13, 2014 Memorandum Regarding Flood Control Project Maintenance

Kennedy

&

Graven

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MEMORANDUM

TO: Bassett Creek Commissioners and Alternates

FROM: Charles LeFevere

DATE: January 13, 2014

RE: Commission Participation in Surface Water Management Facilities
Maintenance Expenses

I. INTRODUCTION

The Commission has requested that staff gather information about the responsibility for inspection, maintenance, repair and replacement of facilities that were part of the Bassett Creek Flood Control Project constructed from the late 1970s through the 1990s. Discussion of the role of the Commission in maintaining the Flood Control Project led to questions about responsibilities for maintenance of other surface water management facilities in the watershed - facilities constructed for flood control as well as those constructed primarily for water quality purposes.

This memorandum is intended to 1) provide information about decisions that have been made in the past about responsibilities for maintaining surface water management facilities, and 2) suggest some considerations that may be helpful to the Commission in allocating maintenance responsibilities in the future. Maintenance could include any activity needed to maintain the function of a storm water management facility, including inspection, testing, cleaning, routine maintenance, repairs and replacement. For the sake of simplicity, the term "maintenance" as used in this memo is generally inclusive of all of these activities.

Of the various surface water management facilities in the watershed, the allocation of maintenance responsibilities for the Flood Control Project has been given the greatest attention. Therefore it may be helpful to start with that background.

II. FLOOD CONTROL PROJECT MAINTENANCE RESPONSIBILITIES

By agreement dated June 27, 1986, between the City of Minneapolis and the Department of the Army ("Army"), Minneapolis took responsibility to "operate, maintain and rehabilitate" the Flood

Control Project. At about the same time, Minneapolis entered into contracts with the upstream cities in the Commission. Under those agreements the cities where the flood control improvements were located agreed to take ownership of those improvements and maintain them. It was apparently contemplated that this responsibility might be assumed in the future by the Commission because the agreements stated that the maintenance required could be changed if the Commission was given authority to take on such maintenance and the Commission ordered it. In addition, the Army's Operation and Maintenance Manual for the Flood Control Project states that the "City of Minneapolis has assigned the tasks for operation and maintenance to the Chairman of the Bassett Creek Water Management Commission." However, staff has not been able to locate any document that shows the city assigning this responsibility to the Commission or the Commission legally assuming such responsibility.

However, although there has been no formal, binding commitment by the Commission to maintain the Flood Control Project, the Commission has indicated an intent to do so. At a special meeting on November 13, 2001, the Commission considered maintenance of the Flood Control Project as a part of what would become the 2004 Watershed Management Plan. The Commission decided to use some of the remaining funds from the original Flood Control Project construction to fund 1) an emergency repair fund for the Flood Control Project (\$500,000) and 2) a Long Term Maintenance Fund (\$335,000 plus an annual assessment of \$25,000). The Commission described the responsibilities it intended to take on for the Flood Control Project in Section 5.2.2.1 of its 2004 Watershed Management Plan as more fully described in the Barr Memorandum of October 31, 2013. That Memorandum also explains the Commission Engineer's understanding of how the 2004 Plan language applies to specific flood control facilities and raises some questions about areas where the intent of the Plan is unclear.

During discussions of maintenance responsibilities as part of the next generation planning process, the question was raised whether the statements in the 2004 Plan about the Commission's intent to undertake these maintenance tasks "trumps" the original existing contracts between the Army and Minneapolis and between Minneapolis and the other cities. The Plan is not a binding contract and does not relieve the cities of their existing contractual obligations. If the Commission fails to maintain facilities as stated in the Plan, the cities will still be obligated to do so.

The Commission could enter into contracts with Minneapolis and the other cities taking on the responsibilities for the Flood Control Project facilities that the cities assumed under the original 1986 contracts. If this were done, the cities could look to the Commission to meet their obligations under the 1986 contracts. However, the Commission's obligation would be meaningful only as long as the Commission is in existence, and its current joint powers agreement expires on January 1, 2015. If the Commission ceases to exist and a watershed district is formed, that entity would not be required to assume the contractual obligations of the Commission.

The member cities could enter into a separate joint powers agreement providing for the creation of a separate joint powers organization that would assume the cities' responsibilities to maintain the Flood Control Project if the Commission ceased to exist and providing a means of funding that separate joint powers organization's assumed maintenance responsibilities.

Unless separate contractual commitments of some kind are made, the member cities will continue to have the maintenance responsibilities they assumed under the 1986 contracts. However, this in no way restrains the Commission from continuing to take on maintenance responsibility in accordance with its 2004 Plan, and the Plan currently under development, if it wishes to do so.

III. ALLOCATING MAINTENANCE RESPONSIBILITIES

A. Flood Control Facility Maintenance

Maintenance is required on all flood control facilities, whether or not they were constructed as a part of the Flood Control Project. Functionally, a pond that stores four acre-feet of water constructed before (or after) the Flood Control Project can provide the same flood control benefits as a pond of the same capacity constructed as a part of the Flood Control Project. In terms of function or benefit to the watershed, there is no reason to treat Flood Control Project facilities differently with respect to maintenance than other facilities that serve the same functions.

There is one practical reason, however, for treating the Flood Control Project facilities differently. That is the Flood Control Emergency Repair Project Fund (Emergency Fund) and the Flood Control Project Long Term Maintenance Fund (Long Term Maintenance Fund) which includes money left over from the original Flood Control Project that was contributed by the member cities specifically for that project. The Long Term Maintenance fund also includes \$25,000 in annual contributions from the member cities since 2001. To date those remaining monies and contributions have been spent primarily for the Flood Control Project and facilities that were constructed as a part of that project. However, there have been some exceptions. The Commission funded the 2012 Sweeney Lake Outlet project, which was not a part of the Flood Control Project, and the Commission authorized the use of the Long Term Maintenance Fund for the cost of the 2012 P8 and XP SWMM modeling projects (although costs have not yet been deducted from that fund). The current balance of the Emergency and the Long Term Maintenance Funds, combined, is \$1,059,806.67 and would be \$989,806.67 if the modeling project costs were deducted.

The Commission may wish to consider whether maintenance of the Flood Control Project will be continued in the same way after the remaining funds from the Flood Control Project are expended.

B. Water Quality Facility Maintenance

Most of the money spent by the Commission on water quality facilities has been for initial construction of the facilities, while maintenance costs have been the responsibility of the cities within which the projects are located. However, there are exceptions. One is the Plymouth Creek Fish barrier, which was intended to reduce the population of rough fish in Medicine Lake and which has been maintained by the Commission in the past. Another is the \$25,000 per year contribution by the Commission to the Creek and Streambank Trunk System Maintenance Repair and Sediment Removal (Channel Maintenance) Fund for stream bank maintenance projects (which is not maintenance of prior Commission CIP projects). Another is that the Commission has

modified its standard contract terms relating to maintenance for some recent projects. Most of the cooperative agreements for construction of water quality projects with Commission funds have required the responsible city to own and maintain the facilities. However, recent contracts with Golden Valley have either limited the explicit obligation of the city to “routine maintenance” or, as in the case of the contract for the Wirth Lake Outlet Modification project, explicitly made the Commission responsible for major maintenance, defined as including replacement of any of the major structural components of the project.

C. Development of Criteria for Commission Participation in Maintenance

The Commission has developed criteria, which it continues to re-evaluate and refine, to be used in the determination of what water quality projects it should pay to construct. It would be reasonable also to develop criteria to be used in the determination of what water quality facilities and what flood control facilities the Commission should maintain. To some extent, different criteria will be appropriate for different categories of facilities. As a start, the categories might include:

1. Flood Control Facilities
 - A. Flood Control Project
 - i. Maintenance using existing Flood Control Project funds
 - ii. Maintenance after original Flood Control Projects funds are expended
 - B. Flood Control Facilities Constructed with City Funds
 - C. Flood Control Facilities Other than the Flood Control Project that are Constructed with Commission Funds
2. Water Quality Facilities
 - A. Facilities Funded with Commission Funds
 - B. Facilities Funded with City Funds

There may be some kind of projects that will not fit neatly into these categories, stream bank maintenance or restoration as an example.

Over the years a number of arguments and observations have been made about the sharing of maintenance responsibilities. These include:

1. The Commission has decided that certain projects have sufficient watershed-wide benefits or importance that the construction of these projects should be funded by the Commission. The same factors that led to that decision may militate in favor of Commission participation in maintenance costs for those projects.
2. In both flood control and water quality, there may be many alternate means of addressing the Commission’s goals. For example, the TMDL obligations of several cities can be met either by constructing multiple local facilities higher in the watershed or by acting in concert and constructing a larger, more cost-effective facility downstream. Member cities report construction of water quality improvements funded by the Commission in their MS4

reports. Likewise, the Flood Control Project was designed to address flooding problems in the most cost-effective way using best engineering practices on a watershed-wide basis rather than being designed to spread the elements of the project among the cities in a way that would result in the most equitable maintenance burdens. Where flood control facilities or water quality facilities benefit a number of municipalities and help to meet the legal obligations of a number of municipalities, it may not be fair to the host city to burden it alone with the costs of maintenance of such facilities.

3. Surface water management facilities constructed without Commission funds may serve the same functions as facilities constructed with Commission funds. Although it is probably not reasonable to revisit contribution of costs for initial construction, these facilities could be considered for shared maintenance expenses.

D. Definition of Maintenance Obligations

The continuing costs of maintaining existing facilities may include inspection, cleaning, testing, maintenance, routine and major repairs and partial or complete replacement. None of these terms have a precise or universal meaning that can be used for all projects. If either a city or the Commission is solely responsible for all maintenance and repair of a given facility, it is not necessary to define the precise extent of each part of maintenance. However, if responsibility is shared, the definition of each party's obligations becomes more important and more difficult. It becomes difficult, for example, to define where minor maintenance ends and major maintenance begins or when replacement is necessary as opposed to major repair. And it is often the case that diligent maintenance makes for less frequent major repairs and may forestall the need for replacement for long periods of time.

E. Possible Interim Steps in Developing Maintenance Participation Policies

It may not be reasonably possible to develop a comprehensive policy to address all maintenance questions, particularly in the timeframe for completion of the next generation plan. The Commission could consider less ambitious approaches. One would be to deal only with the Flood Control Project maintenance at this time and identify the development of policies on Commission participation in maintenance of other facilities as tasks to be completed on some reasonable, specified schedule during the life of the Plan. Another would be to leave responsibility for maintenance with the host city of a facility and respond to requests from cities for maintenance and repair funds on a case-by-case basis, much as it currently does with requests for allocation of stream bank maintenance funds and as it did for the Sweeney Lake Outlet Project.

Memorandum

To: Bassett Creek Watershed Management Commission (BCWMC)
From: Barr Engineering Co. (Barr)
Subject: Item 5Ciii: Bassett Creek Double Box Culvert Estimated Costs for Recommended Repairs – Minneapolis, MN
BCWMC October 15, 2020 Meeting Agenda
Date: October 7, 2020
Project: 23270051.48 2020

5Ciii Bassett Creek Double Box Culvert Estimated Costs for Recommended Repairs – Minneapolis, MN

Recommendations:

1. Plan for Bassett Creek Double Box Culvert repairs before 2025
2. Add repair project to BCWMC Capital Improvement Program

General Project Information

On behalf of the BCWMC, the Commission Engineer conducted a condition inspection of the Bassett Creek Double Box Culvert (Double Box Culvert) during October 2019. The purpose of the inspection was to compare the current tunnel conditions to past inspections, identify changes in condition over time, and provide recommendations to the Commission regarding future monitoring and repair. The report *Bassett Creek Double Box Culvert Inspection Report, October 2019* was presented to the BCWMC at its June 18, 2020 meeting. Based on the 2019 inspection observations, and evaluation of tunnel condition over time, the following repairs were recommended:

Shear Key Joint Repair: It is recommended that the BCWMC repair the shear key joint material to minimize infiltration and potential for soil transport into the tunnel. It is recommended that this work occur in the next 5 years.

Crack Sealing, Deposit Removal: Various degrees of infiltration were observed throughout the tunnel, occurring at cracks, joints, and other defects. At four locations, continuous infiltration was observed that equates to a grade 4 PACP (Pipeline Assessment Certification Program) defect. It is recommended that the BCWMC repair these points of infiltration, and remove deposits as necessary to improve the operational condition of the tunnel, and slow degradation of the concrete. It is recommended that this work be coordinated with the shear key joint repair work.

Repair Exposed Reinforcement: At two locations, exposed reinforcement was observed that equates to a grade 5 PACP defect. It is recommended that the BCWMC repair these areas to minimize further degradation of the reinforcement and concrete. It is recommended that this work be coordinated with the shear key joint repair and crack sealing repair work.

At their June 18, 2020 meeting, the Commission directed the Commission Engineer to develop an estimate (opinion) of costs for repairs.

Opinion of Costs for Maintenance Repairs

In 2016, the Commission approved [policies for the Bassett Creek Flood Control Project \(FCP\)](#) to provide guidance to the BCWMC and member cities for maintaining the FCP. Based on the FCP policies, the recommended box culvert repairs would be considered Major Maintenance and Repair, with repair costs over \$100,000. The FCP policies also call for the Commission to add identified FCP major repairs, rehabilitation and replacement projects to the BCWMC CIP and to fund the projects using the BCWMC's ad valorem levy (via Hennepin County) (although it is recognized that some funding could be sought from other partners or sources). The FCP policies further note that the Commission will need to amend the BCWMC Watershed Management Plan to add these projects to the CIP and to change (or add to) the funding mechanisms for project implementation. Therefore, the Commission Engineer recommends that the Commission to move forward with repairs by adding the project to the BCWMC's CIP within the next 5 years.

The engineer's opinion of repair costs is provided in the following table:

BASSETT CREEK TUNNEL - DOUBLE BOX CULVERT				Engineers Opinion of Costs	
Item	Description	Unit	Est. Quantity	Unit Price	Extension
A	Mobilization	LS	1	\$150,000	\$150,000
B	Water Management	LS	1	\$100,000	\$100,000
C	Erosion Control	LS	1	\$20,000	\$20,000
D	Traffic Control	LS	1	\$10,000	\$3,000
F	Crack Repair	LF	2,500	\$90	\$225,000
G	Chemical Grout	GAL	500	\$75	\$37,500
H	Encrustation Demolition and Disposal	LS	1	\$20,000	\$20,000
I	Shear Key Joint Repairs	EA	60	\$3,500	\$210,000
CONSTRUCTION SUBTOTAL					\$765,500
J	Permitting	LS	1	\$10,000	\$10,000
K	Bid Administration	LS	1	\$10,000	\$10,000
L	Construction Administration	LS	1	\$140,000	\$140,000
M	Quantity Inspection	LS	1	\$5,000	\$5,000
N	Engineering (plans and specs)	LS	1	\$76,550	\$76,550
SUBTOTAL					\$1,007,050
	Contingency (20%)			\$201,410	\$202,950
TOTAL					\$1,210,000



Bassett Creek Watershed Management

MEMO

To: BCWMC Commissioners and Alternate Commissioners
From: Laura Jester, Administrator
Reviewed by Commission attorney
Date: October 8, 2020

RE: Addressing Potential Conflicts of Interest of Commission Engineer

This memo serves to outline the State of Minnesota's professional rules pertaining to conflicts of interest (COI) for licensed engineers, provide information on recent examples of potential conflicts and how the BCWMC dealt with those instances, and lay out recommendations to address future instances of potential COI. In the past, BCWMC has assessed conflicts of interest and perceived conflicts that have arisen when the Commission engineer was asked to undertake work within the watershed that related to BCWMC's authority.

Definition and Rules of Professional Conduct for Engineers

Minnesota Administrative Rules Chapter 1805 provides the rules of professional conduct for licensed engineers. Specifically, Minn. R. 1805.0300, subp. 1 prohibits a licensed engineer from accepting a project where a duty to the client or the public would conflict with the personal interest of the licensee or the interest of another client.

Subpart 2 of the same rule further stipulates that a licensed engineer shall not accept compensation for services relating or pertaining to the same project from more than one party unless:

- A. there is a unity of interest between or among the parties to the project;
- B. the licensee or certificate holder makes full disclosure; and
- C. the licensee or certificate holder obtains the express consent of all parties from whom compensation will be received.

BCWMC Examples and Actions

Transparency and disclosure are critical to ensuring that a perceived or actual conflict does not negatively affect or influence Commission decision-making. The above Rule prohibits an engineer from proceeding unless each of the rule criteria are met. That is why, as a general rule, Barr Engineering Co. (Barr) does not accept work in the Bassett Creek watershed that will require review by its own personnel on behalf of the Commission. In my experience, Barr staff takes potential conflicts very seriously and operates consistent with their professional duties, including the above rules. Below are a few examples of when COI or potential COI were addressed:

- In early September, the Commission Engineer called me to describe a potential conflict. They were asked by the City of Golden Valley to model proposed temporary emergency repairs to an equalizer

pipe between East and West Ring Ponds because of a recent pipe failure. I did not object to Barr providing modeling assistance to Golden Valley, as all three requirements in Minn. R. 1805.0300, subp. 2 (A, B, and C above) were met. The City contracted directly with Barr for the work. This type of activity (modeling assistance) is sometimes performed by the Commission, at the Commission's expense, for work in individual cities. In this case, however, the city was willing to pay Barr without Commission funding to expedite the work in the emergency situation. In hindsight, I should have informed the commissioners about this work at a Commission meeting.

- In late June, Minneapolis city staff contacted me requesting authorization to retain Barr to perform the floodplain modeling along Bassett Creek to evaluate the impact of the Irving Avenue bridge removal and streambed fill proposed as part of the Irving Avenue sanitary sewer replacement project. This was a slightly different situation because the Commission requested the City to evaluate any changes to flows and water surface elevations due to removal of the Irving Avenue bridge and abutments in its June 23, 2020 letter and would then be reviewing the modeling results as part of its review of the project (which the Commission approved at their August meeting). I approved the work as there appeared to be a "unity of interest" because the result of the modeling work was not subjective (the model outcome is the model outcome). Also, Barr developed the model, so they can most efficiently and effectively run it, which in my opinion was in the best interest for both the Commission and the City. Although I mentioned this situation verbally during the Commission meeting, it could have been more fully explained by me and within the Commission Engineer's project review memo.
- For many years, Barr has performed environmental services for the City of Minneapolis in multiple areas around the city, including the city impound lot on the south side of Bassett Creek, Bryn Mawr Meadows Park, and other areas in the Bassett Creek Valley. This work included preparation of the Response Action Plan (RAP) for the Irving Avenue sanitary sewer replacement project for the City. These environmental services do not trigger BCWMC review and therefore do not constitute any inherent conflict. Even so, Barr disclosed its involvement in the Irving Avenue sanitary sewer replacement RAP in its project review memo to the Commission.
- Golden Valley and Minnetonka hired Barr to prepare their surface water management plans. In 2017, the Commission elected to hire an independent consultant to review these surface water management plans to remove a potential conflict of interest if Barr were to also review the plans as the Commission Engineer. This process was coordinated with the Commission.

Recommendations for Future Potential COI

The following proposed framework for addressing conflicts of interest are in keeping with the practice I and the Commission Engineer have followed in the past. These recommendations, modified as the Commission wishes, should be the subject of a formal motion to direct and authorize the administrator as the Commission sees fit and appropriate. The goal is to clarify the process for addressing potential Commission Engineer COI so that staff has clear direction and staff and commissioners have congruent expectations.

Barr will continue to operate within the provisions of MN Administrative Rule 1805.0300. In all cases of actual or potential conflicts, transparency about the situation and reporting by and to all parties is of utmost importance.

Administrative Review (no approval needed)

- Projects in the Bassett Creek watershed that may be related to water or natural resources but do not require Commission Engineer review (such as natural resources protection plans, environmental impact statements, response action plans, etc.)
 - a. This is for scenarios where the above-described provisions in Minn. R. 1805.0300 do not apply because there is no actual conflict, nor is the Commission Engineer being compensated by more than one party for the same project

Administrative Approval (Administrator and Attorney):

- Projects where there is a clear unity of interest (i.e., modeling assistance); and the timeframe of the work is either emergency in nature or requires an expedited timeline such that there is not time for Commission approval; and the administrative approval is disclosed at the next Commission meeting

Commission Action Required:

- Projects that have a unity of interest but where there is time for Commission approval
- Projects that require Commission Engineer review, e.g. an actual conflict exists (such as preparation of local water management plans)
 - a. In these scenarios, the Commission will consider contracting with an outside firm for review or other remedies deemed appropriate



Bassett Creek Watershed Management

MEMO

To: BCWMC Commissioners and Alternate Commissioners
From: Laura Jester, Administrator
Date: October 8, 20220

RE: Technical Advisory Committee Recommendations and Initial CIP Discussion

At their meeting on October 1st, the BCWMC Technical Advisory Committee (TAC) discussed a variety of topics. Below is an overview of those discussions and recommendations.

1. Chloride reduction strategies

TAC members were asked if they would like BCWMC assistance with education of residents, city officials, or city staff on chloride reduction strategies as we head into winter. They indicated that enough training for city staff is already available, that city councils are informed on this topic, and many cities have snow and ice removal policies they follow. Plymouth staff indicated that MPCA's Smart Salting Assessment Tool was very useful for their city crews. No other cities reported using the tool to date.

Generally, cities are waiting to see the chloride management requirements in the new MS4 permit (expected later this fall) before deciding what strategies or changes are needed at the city level. TAC members also agreed the Parkers Lake Chloride Reduction Project (part of BCWMC's Parkers Lake CIP Project) is likely to provide good direction for future activities in other parts of the watershed.

The TAC discussed an idea to include language in project approval letters encouraging developers to implement a chloride management plan for their developed/redeveloped site. Cities could decide to require a chloride management plan with permit approval, or reinforce the encouragement to do so. TAC members were supportive of the language in BCWMC project review letters. It was noted the Commission or permitting city could provide a template for appropriate chloride management plans.

TAC RECOMMENDATION:

When applicable, project approval letters from the Commission Engineer should include language encouraging developers and property managers to implement a chloride management plan with the goal of using best management practices for winter deicers and reducing the over application of chlorides.

2. Review of current CIP implementation timelines

The TAC reviewed the implementation timelines of various CIP projects over the years and noted significant differences in how long it takes some projects to be constructed. The TAC discussed the possibility of recommending timing guidelines or requirements, but in the end agreed that due to vast differences between the projects (including funding availability, partnerships, city schedules, adjacent construction schedules, etc.), the timing of CIP implementation should continue on a case-by-case basis without imposing timing constraints.

3. Approaches for developing 10-year CIP for 2025 watershed management plan

The TAC discussed approaches for developing the 2025 – 2035 CIP that will be included in the next watershed management plan. Staff noted that some activities may need to get started in the next year or two, ahead of actually drafting the plan. TAC members agreed that performing subwatershed analyses for priority areas of the watershed would be a good way to target specific CIP projects in specific areas. A subwatershed analysis (SWA) is a method to systematically analyze and assess a subwatershed to determine the location and cost-benefit of best management practices or projects that can be implemented to reduce pollution to a specific waterbody or to reduce flooding. It was noted that Shingle Creek WMC performs SWAs to identify the best areas for water quality improvement projects that not only help target Shingle Creek WMC CIP projects, but also help cities understand where projects would have the most benefit. This allows cities to look for improvement opportunities in those areas when city projects or development/redevelopment projects are proposed. It was noted that areas in need of SWAs could be determined through a combination of model results, hot spot and flood potential maps, known water quality issues, and Commission and city staff knowledge and input. There was discussion about the cost of developing SWAs. It was noted that the Commission's "Surveys and Studies" budget within the annual operating budget could be used, that additional operating funds in future years would likely be needed for this task, and that some grant funding may be available.

TAC RECOMMENDATION:

The Commission should explore the development of subwatershed analyses (SWAs) to assist in developing the next 10-year CIP. First steps could include reporting on successful SWAs in Shingle Creek WMC or other watersheds and developing cost estimates for SWA development.

4. Initial discussion on the next 5-year CIP (2023 – 2027)

The TAC reviewed the current 5-year and 10-year CIPs and began discussions on possible projects to include in the 2023 – 2027 CIP. Possible larger projects include dredging Bassett Creek Park Pond in Crystal (second phase after dredging Winnetka Pond), and an alum treatment for Medicine Lake. However, the best timing for those projects is not currently known. Chloride management projects were also mentioned.

TAC members will continue to consider possible project needs to address pressing flooding or water quality issues and will review the pollutant hot spot and flood potential maps, along with the CIP prioritization matrix.

Staff noted that per Commission [approved recommendations](#) from the TAC and the CIP Prioritization Committee (February 2019), commissioners and staff should be more involved in the development of the 5-year CIP.

At this time, Commissioner ideas and suggestions for future CIP projects are needed to help guide further discussions by the TAC and staff on 5-year CIP development.

- Are there significant water quality or flooding issues that have not been addressed by Commission projects or planned projects?
- What do you view as the most pressing challenges that could be addressed by Commission CIP projects?
- Are there criteria that are not typically considered for selecting CIP projects but which should be included? (e.g. climate resiliency, equity, etc.)



Bassett Creek Watershed Management

Item 6A.
BCWMC 10-15-20

MEMO

Date: October 6, 2020
From: Laura Jester, Administrator
To: BCWMC Commissioners
RE: **Administrator's Report**

Aside from this month's agenda items, the Commission Engineers, city staff, committee members, and I continue to work on the following Commission projects and issues.

CIP Projects (more resources at <http://www.bassettcreekwmo.org/projects.>)

2019 Medicine Lake Road and Winnetka Avenue Area Long Term Flood Mitigation Plan Implementation Phase I: DeCola Ponds B & C Improvement Project (BC-2, BC-3 & BC-8) Golden Valley (no change since July): A feasibility study for this project was completed in May 2018 after months of study, development of concepts and input from residents at two public open houses. At the May 2018 meeting, the Commission approved Concept 3 and set a maximum 2019 levy. Also in May 2018, the Minnesota Legislature passed the bonding bill and the MDNR has since committed \$2.3M for the project. The Hennepin County Board approved a maximum 2019 levy request at their meeting in July 2018. A BCWMC public hearing on this project was held on August 16, 2018 with no comments being received. Also at that meeting the Commission officially ordered the project and entered an agreement with the City of Golden Valley to design and construct the project. In September 2018, the City of Golden Valley approved the agreement with the BCWMC. The [Sun Post](#) ran an article on this project October 2018. Another public open house and presentation of 50% designs was held February 6, 2019. An EAW report was completed and available for public review and comment December 17 – January 16, 2019. At their meeting in February 2019, the Commission approved the 50% design plans. Another public open house was held April 10th and a public hearing on the water level drawdown was held April 16th. 90% Design Plans were approved at the April Commission meeting. It was determined a Phase 1 investigation of the site is not required. The City awarded a contract to Dahn Construction for the first phase of the project, which involves earthwork, utilities, and trail paving and extends through June 2020. Dewatering began late summer 2019. Tree removal was completed in early winter; excavation was ongoing through the winter. As of early June 2020, earth work and infrastructure work by Dahn Construction is nearly complete and trail paving is complete. Vegetative restoration by AES is underway including soil prep and seeding. Plants, shrubs, and trees will begin soon along with placement to goose protection fencing to help ensure successful restoration. The restoration work is nearly complete. Bare root trees will be planted in September. Project website: <http://www.bassettcreekwmo.org/index.php?cID=433>.

2020 Bryn Mawr Meadows Water Quality Improvement Project (BC-5), Minneapolis: (No change since September) A feasibility study by the Commission Engineer began last fall and included wetland delineations, soil borings, public open houses held in conjunction with MPRB's Bryn Mawr Meadows Park improvement project, and input from MPRB's staff and design consultants. At their meeting in April, the Commission approved a TAC and staff recommendation to move this project from implementation in 2019 to design in 2020 and construction in 2021 to better coincide with the MPRB's planning and implementation of significant improvements and redevelopment Bryn Mawr Meadows Park where the project will be located. The final feasibility study was approved at the January 2019 Commission meeting. Staff discussed the maintenance of Penn Pond with MnDOT and received written confirmation that pond maintenance will occur prior to the park's reconstruction project with coordination among the BCWMC, MPRB, and MnDOT. A public hearing for this project was held September 19, 2019. The project was officially ordered at that meeting. An agreement with the MPRB and the city of Minneapolis will be considered at a future meeting. In January 2020 this project was awarded a \$400,000 Clean Water Fund grant from BWSR; a grant work plan was completed and the grant with BWSR was fully executed in early May. The project and the grant award was the subject of an article in the Southwest Journal in February: <https://www.southwestjournal.com/voices/green-digest/2020/02/state-awards-grant-to-bryn-mawr-runoff-project/>. In early September, Minneapolis and MPRB staff met to review the implementation agreement and maintenance roles. There are some additional items to discuss including which entity will be designing and constructing portions of the project outside of

park property. Another meeting will be scheduled soon. Design is still slated for 2021 and construction in 2022. Project website: <http://www.bassettcreekwmo.org/projects/all-projects/bryn-mawr-meadows-water-quality-improvement-project>

2020 Jevne Park Stormwater Improvement Project (ML-21) Medicine Lake (No change since Oct 2019): At their meeting in July 2018, the Commission approved a proposal from the Commission Engineer to prepare a feasibility study for this project. The study got underway last fall and the city's project team met on multiple occasions with the Administrator and Commission Engineer. The Administrator and Engineer also presented the draft feasibility study to the Medicine Lake City Council on February 4, 2019 and a public open house was held on February 28th. The feasibility study was approved at the April Commission meeting with intent to move forward with option 1. The city's project team is continuing to assess the project and understand its implications on city finances, infrastructure, and future management. The city received proposals from 3 engineering firms for project design and construction. At their meeting on August 5th, the Medicine Lake City Council voted to continue moving forward with the project and negotiating the terms of the agreement with BCWMC. Staff was directed to continue negotiations on the agreement and plan to order the project pending a public hearing at this meeting. Staff continues to correspond with the city's project team and city consultants regarding language in the agreement. The BCWMC held a public hearing on this project on September 19, 2019 and received comments from residents both in favor and opposed to the project. The project was officially ordered on September 19, 2019. On October 4, 2019, the Medicine Lake City Council took action not to move forward with the project. At their meeting on October 17th, the Commission moved to table discussion on the project. The project remains on the 2020 CIP list. Project webpage: <http://www.bassettcreekwmo.org/index.php?cID=467>.

2019 Westwood Lake Water Quality Improvement Project (WST-2) St. Louis Park: At their meeting in September 2017, the Commission approved a proposal from the Commission Engineer to complete a feasibility study for this project. The project will be completed in conjunction with the Westwood Hills Nature Center reconstruction project. After months of study, several meetings with city consultants and nature center staff, and a public open house, the Commission approved Concept 3 (linear water feature) and set a maximum 2019 levy at their May meeting. 50% designs were approved at the July meeting and 90% design plans were approved at the August meeting. The Hennepin County Board approved a maximum 2019 levy request at their meeting in July. A BCWMC public hearing on this project was held on August 16th with no comments being received. At that meeting the Commission officially ordered the project and entered an agreement with the City of St. Louis Park to design and construct the project and directed the Education Committee to assist with development of a BCWMC educational sign for inside the nature center. The draft sign was presented at the October 2017 meeting and was finalized over the winter. The Sun Sailor printed [an article](#) on the project in October 2018. The project is largely complete and a ribbon cutting by the city was held September 13th. The building and site are open to the public and being used to educate students. There are still punch list items which must be addressed by the contractor to finalize the work. The system is capturing stormwater runoff from roof and paving, and the runoff is being stored underground and pumped via solar or hand pumps into the engineered creek. None of the captured water is flowing over land into Westwood Lake. The educational sign indoors is installed. (See photo.) Project website: <http://www.bassettcreekwmo.org/projects/all-projects/westwood-lake-water-quality-improvement-project>.



2018 Bassett Creek Park Pond Phase I Dredging Project: Winnetka Pond, Crystal (BCP-2): The final feasibility study for this project was approved at the May 2017 meeting and is available on the project page online at <http://www.bassettcreekwmo.org/index.php?cID=403>. At the September 2017 meeting, the Commission held a public hearing on the project and adopted a resolution officially ordering the project, certifying costs to Hennepin County, and entering an agreement with the City of Crystal for design and construction. Hennepin County approved the 2018 final levy request at their meeting in November 2017. The City of Crystal hired Barr Engineering to design the project. At

their meeting in April, the Commission approved 50% design plans. A public open house on the project was held May 24th where four residents asked questions, provided comments, and expressed support. 90% design plans were approved at the June 2018 meeting. An Environmental Assessment Worksheet was recently approved and a construction company was awarded the contract. A pre-construction meeting was held December 2018 construction began in January 2019. A large area of contamination was discovered during excavation in February 2019. At their meeting February 21, 2019 the Commission approved additional funding for this project in order to properly dispose of the contamination and continue building the project as designed. An amended agreement with the city of Crystal was approved at the March 2019 Commission meeting. Pond dredging and other storm sewer work was completed in early summer 2019. Work to establish the native buffer began fall 2019 and continued through 2023. At the September meeting, the final report was approved along with a reimbursement request. The report was posted online and will be amended with information on the native buffer in 2023.

2017 Main Stem Bassett Creek Streambank Erosion Repair Project (2017CR-M) (No change since June): The feasibility study for this project was approved at the April Commission meeting and the final document is available on the project page at: <http://www.bassettcreekwmo.org/index.php?cID=281>. A Response Action Plan to address contaminated soils in the project area was completed by Barr Engineering with funding from Hennepin County and was reviewed and approved by the MPCA. The Commission was awarded an Environmental Response Fund grant from Hennepin County for \$150,300 and a grant agreement is in the process of being signed by the county. A subgrant agreement with the City will be developed. The City hired Barr Engineering to design and construct the project. Fifty-percent and 90% designs were approved at the August and October Commission meetings, respectively. In September 2017, design plans were presented by Commission and city staff to the Harrison Neighborhood Association's Glenwood Revitalization Team committee and through a public open house on the project. Bidding for construction is complete and a pre-construction meeting was recently held. Construction was to begin summer of 2018 but will be delayed until summer 2019 due to the unanticipated need for a field based cultural and historical survey of the project area required by the Army Corps of Engineers and the preference for Pioneer Paper (a significant landowner and access grantor) for a spring/summer construction window. The cultural and historical survey fieldwork is complete and a final report was sent to the State Historical Preservation Office (SHPO) in February. The Hennepin County ERF grant agreement was amended to extend the term. Construction was scheduled to begin in September but will be pushed to late November. City staff updated the Commission on the latest developments with this project at the Sept 19 and Oct 17, 2019 meetings (see memos in those meeting packets). The section along Pioneer Paper will no longer be stabilized/restored due to lack of access and cooperation from Pioneer Paper. For various reasons the project did not get underway in late 2019 as planned. Currently, city and consultant staff are working to complete some permitting requirements and plan to implement the project starting in September 2020. The prolonged schedule and additional requirements resulted in an increase in the design budget of \$32,500, and the construction contractor will have a rate increase as well. The city is hoping to gain access to the Pioneer Paper property so that they can complete the entire project as originally planned. The ERF grant has been recommended for extension and is in the approval process.

2014 Schaper Pond Diversion Project, Golden Valley (SL-3) (No change since Oct 2019): Repairs to the baffle structure were made in 2017 after anchor weights pulled away from the bottom of the pond and some vandalism occurred in 2016. The city continues to monitor the baffle and check the anchors, as needed. Vegetation around the pond was planted in 2016 and a final inspection of the vegetation was completed last fall. Once final vegetation has been completed, erosion control will be pulled and the contract will be closed. The Commission Engineer began the Schaper Pond Effectiveness Monitoring Project last summer and presented results and recommendations at the May 2018 meeting. Additional effectiveness monitoring is being performed this summer. At the July meeting the Commission Engineer reported that over 200 carp were discovered in the pond during a recent carp survey. At the September meeting the Commission approved the Engineer's recommendation to perform a more in-depth survey of carp including transmitters to learn where and when carp are moving through the system. A Federal 319 grant for management of carp in relation to Schaper Pond and Sweeney Lake was recently approved by the MPCA and the grant agreement may be available by the December Commission meeting. At the October 17th meeting, the Commission received a report on the carp surveys and recommendations for carp removal and management. Project webpage: <http://www.bassettcreekwmo.org/index.php?cID=277>.

Sweeney Lake Water Quality Improvement Project, Golden Valley (SL-8) (See Item 5A): This project was added to the 2020 CIP list after receiving a federal 319 grant from the MPCA. It is partially a result of the carp surveys completed through the Schaper Pond Diversion Project and a study of the year-round aeration on Sweeney Lake. This project will

treat curly-leaf pondweed in spring 2020, will remove carp in summer 2020, and will perform an alum treatment on Sweeney Lake in late summer 2020. The project was officially ordered by the Commission after a public hearing in September 2019. A public open house on this project was held via Webex on April 8th with approximately 20 people joining. The open house presentation and a question and answer document is available online. The curly-leaf pondweed herbicide treatment was completed in May. Carp Solutions performed carp tracking and setting nets in early June. The first round of netting resulted in 334 carp removed from Sweeney Lake (mean length 620 mm, mean weight 3.1 kg), representing an estimated 29% of the total population. From Schaper Pond 82 carp removed which likely represents about 17% of the initial population. After another round of carp removals in late July, 118 additional carp were netted from Sweeney. Based on preliminary estimates, approximately 40% of the carp population was removed from Sweeney this summer. The carp biomass was reduced from approximately 129 kg/ha to 79 kg/ha, which is below the threshold where adverse impacts on water quality are expected. All nets have been removed from Sweeney. The nets in Schaper remain in place as carp removals continue there. The first round of alum treatment is slated for this fall. This month's consent agenda includes approval to direct staff to finalize bid documents and to advertise for bids for the alum treatment. At this meeting, the Commission should take action awarding a contract for the alum treatment (bid opening scheduled for Oct 9th.) The project website is continually updated to keep lake residents informed: [Sweeney Lake Water Quality Improvement Project, SL-8](http://www.bassettcreekwmo.org/index.php?clD=278)).

2014 Twin Lake In-lake Alum Treatment, Golden Valley (TW-2): (No change since June 2018) At their March 2015 meeting, the Commission approved the project specifications and directed the city to finalize specifications and solicit bids for the project. The contract was awarded to HAB Aquatic Solutions. The alum treatment spanned two days: May 18- 19, 2015 with 15,070 gallons being applied. Water temperatures and water pH stayed within the desired ranges for the treatment. Early transparency data from before and after the treatment indicates a change in Secchi depth from 1.2 meters before the treatment to 4.8 meters on May 20th. There were no complaints or comments from residents during or since the treatment. Water monitoring continues to determine if and when a second alum treatment is necessary. Lake monitoring results from 2017 were presented at the June 2018 meeting. Commissioners agreed with staff recommendations to keep the CIP funding remaining for this project as a 2nd treatment may be needed in the future. Project webpage: <http://www.bassettcreekwmo.org/index.php?clD=278>.

2013 Four Seasons Area Water Quality Project/Agora Development (NL-2): At their meeting in December 2016, the Commission took action to contribute up to \$830,000 of Four Seasons CIP funds for stormwater management at the Agora development on the old Four Seasons Mall location. At their February 2017 meeting the Commission approved an agreement with Rock Hill Management (RHM) and an agreement with the City of Plymouth allowing the developer access to a city-owned parcel to construct a wetland restoration project and to ensure ongoing maintenance of the CIP project components. At the August 2017 meeting, the Commission approved the 90% design plans for the CIP portion of the project. At the April 2018 meeting, Commissioner Prom notified the Commission that RHM recently disbanded its efforts to purchase the property for redevelopment. In 2019, a new potential buyer/developer (Dominium) began preparing plans for redevelopment at the site. City staff, the Commission Engineer and I have met on numerous occasions with the developer and their consulting engineers to discuss stormwater management and opportunities with "above and beyond" pollutant reductions. Concurrently, the Commission attorney has been working to draft an agreement to transfer BCWMC CIP funds for the above and beyond treatment. At their meeting in December, Dominium shared preliminary project plans and the Commission discussed the redevelopment and potential "above and beyond" stormwater management techniques. At the April 2020 meeting, the Commission conditionally approved the 90% project plans. The agreements with Dominium and the city of Plymouth to construct the project were approved May 2020 and project designers coordinated with Commission Engineers to finalize plans per conditions. The redevelopment project is scheduled to be before the Plymouth City Council again on November 24th for approval of various items including final plat, the stormwater grant agreement, and site improvement performance agreement. If approved, Dominium is scheduled to close on the property in the first half of 2021 and potentially begin construction later next year. Project webpage: <http://www.bassettcreekwmo.org/index.php?clD=282>.

2020 Crane Lake Improvement Project (CL-3) (No change since June): This project was constructed in conjunction with the reconstruction of Ridgedale Drive in the City of Minnetonka. At their meeting on March 21, 2019, the BCWMC approved the project's feasibility study and chose to implement Option 3 from the study. At their meeting on May 16, 2019, the BCWMC approved the 90% design plans for the project. Construction is expected in early 2020. A public

hearing on this project was held on September 19, 2019. No persons commented on the project. The project was officially ordered and an agreement with the city of Minnetonka was approved at the same meeting. Project webpage: <http://www.bassettcreekwmo.org/index.php?cID=490>.

June 2020 update:

- Underground storm water tank was installed last fall.
- Construction of the lift station, which will pump storm water from the underground storm water tank into the rain gardens, will be completed within the next couple weeks.
- All storm sewer along Ridgedale Drive and within the area draining to the underground storm water tank is installed.
- Rain gardens are constructed (see photo; weed control needed), plantings to be installed over the next several weeks
- Underground storm water tank and pumping system to the rain gardens will be fully operational this fall.
- Educational sign design will be completed in 2020 and installation will occur in 2021.
- Additional project updates can be viewed on our City Website Project Page: <https://www.minnetonkamn.gov/services/construction-projects/street-and-utility-projects/ridgedale-drive-improvements-project>

Other Work

CIP Project Work and Technical Assistance

- Discussed Bryn Mawr and Lagoon Dredging Project implementation with Commission Engineers
- Reviewed and assisted with public engagement products for Medley Park Stormwater Improvement Project
- Attended project kick-off meeting for Medley Park Project
- Attended some MAISRC Showcase presentations
- Discussed possible redevelopment project in Bassett Creek Valley with commission staff
- Reviewed data and discussed further analysis of linear projects with Commission Engineers

Administration and Education

- Reviewed and edited education column
- Reviewed and posted latest education video
- Prepared for and attending TAC meeting
- Recorded short video on Art for Water Program for Freshwater
- Reviewed WMWA native roots display
- Discussed conflict of interest issue with commission staff and drafted memo to Commission
- Relayed information on Mississippi River drawdown and tunnel inspection to commissioners
- Visited tunnel entrance, recorded video, took photos
- Attended Watershed Based Implementation Funding convene meeting