



Bassett Creek Watershed Management Commission

Regular Meeting
Thursday August 20, 2020
8:30 – 11:00 a.m.

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

Or join by phone: +1-408-418-9388; Use access code: 126 135 5590; Password: Bassett

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 – July 16, 2020 Commission Meeting
- B. Acceptance of August 2020 Financial Report
- C. Approval of Payment of Invoices
 - i. Keystone Waters, LLC – July 2020 Administrative Services
 - ii. Keystone Waters, LLC – July 2020 Printing Expenses
 - iii. Barr Engineering – July 2020 Engineering Services
 - iv. Lawn Chair Gardener – July 2020 Administrative and Education Services
 - v. Wenck – July WOMP Monitoring
 - vi. Kennedy & Graven – June 2020 Legal Services
- D. Approval of Rude Property Shoreline Improvement Project, Plymouth
- E. Approval of Brose Property Shoreline Improvement Project, Plymouth
- F. Approval of Administrator Attendance at Water Resources Conference

5. BUSINESS

- A. Consider Variance Request and Approval of Sanitary Sewer Replacement Project, Minneapolis (30 min)
- B. Receive Update on 2021 Tax Levy Request to Hennepin County (10 min)
- C. Consider Adopting Minor Watershed Plan Amendment (20 min)
- D. Consider Proposal to Perform Feasibility Study for Medicine Lake Rd & Winnetka Ave Long Term Flood Mitigation Plan Project: DeCola Ponds - SEA School – Wildwood Park Flood Storage Project (CIP: BC-2, 3, 8, 10) (20 min)
- E. Consider Proposal to Perform Feasibility Study for Medley Park Stormwater Treatment Facility (CIP: ML-12) (20 min)
- F. Review 2020 Operating Budget Status (10 min)
- G. Consider Approval of 2021 Operating Budget (10 min)
- H. Consider Submitting Resolution for 2021 MAWD Legislative Platform (10 min)
- I. Discuss Meeting Format for September 17th BCWMC Meeting (10 min)

6. COMMUNICATIONS (10 minutes)

- A. Administrator's Report
 - i. Bladderwort in Wirth Lake Wetland

- ii. Starry Stonewort Control, Medicine Lake
- iii. Bassett Creek Artist
- iv. Report on Salt Symposium
- B. Chair
- C. Commissioners
 - i. Report on Salt Symposium
- D. TAC Members
- E. Committees
- F. Education Consultant
 - i. [Latest Education Video on AIS](#)
- G. Legal Counsel
- H. Engineer
 - i. Status of 2020 Lake and Stream Monitoring and M-IBI Inquiry

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. [Sochacki Park Subwatershed Assessment Fact Sheet and FAQs](#)
- E. WCA Notice of Application, Plymouth
- F. WCA Notice of Decision, Plymouth

8. ADJOURNMENT

Upcoming Meetings & Events

- [Westwood Hills Nature Center Grand Opening](#): Sunday September 13th, 2:00 – 4:30 p.m.
- [Bassett Creek Watershed Mgmt Commission Meeting and Public Hearing](#): Thursday September 17th, 8:30 a.m., location TBD
- [Minnesota Water Resources Conference](#): October 20 – 21; Online <https://ccaps.umn.edu/minnesota-water-resources-conference>



Bassett Creek Watershed Management Commission

AGENDA MEMO

Date: August 13, 2020

To: BCWMC Commissioners

From: Laura Jester, Administrator

RE: Background Information for 8/20/20 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 – July 16, 2020 Commission Meeting- **ACTION ITEM with attachment**
 - B. Acceptance of August 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 – July 2020 Administrative Services
 - ii. Keystone Waters, LLC – July 2020 Printing Expenses
 - iii. Barr Engineering – July 2020 Engineering Services
 - iv. Lawn Chair Gardener – July 2020 Administrative and Education Services
 - v. Wenck – July WOMP Monitoring
 - vi. Kennedy & Graven – June 2020 Legal Services
 - D. Approval of Rude Property Shoreline Improvement Project, Plymouth – **ACTION ITEM with attachment** – *The proposed project is located on Medicine Lake in Plymouth and involves placement of fieldstone riprap along the shoreline resulting in a decrease of 64 sq. ft. of impervious surfaces. The project does not involve fill in the floodplain and is exempt from other BWCMC requirements. Staff recommends approval.*
 - E. Approval of Brose Property Shoreline Improvement Project, Plymouth – **ACTION ITEM with attachment** – *The proposed project is located on Medicine Lake in Plymouth and involves placement of fieldstone riprap along the shoreline creating approximately 50 sq. ft. of reconstructed impervious surfaces. Project plans indicate that any additional fill placed below the floodplain elevation will be balanced with excavation along the shoreline to ensure no net loss of floodplain storage. Staff recommends approval.*
 - F. Approval of Administrator Attendance at Water Resources Conference – **ACTION ITEM no attachment** – *The annual Water Resources Conference is online this year at a cost of \$85 for two days (if registered before 9/25/20). Many of the sessions are relevant to the Commission's work and I would like to attend several of them. Total cost for attendance (including my time) would be approximately \$800 funded from the Administrator budget line item.*
5. **BUSINESS**
 - A. Consider Variance Request and Approval of Sanitary Sewer Replacement Project, Minneapolis (30 min) – **ACTION ITEM with attachment and additional documents online** – *This item was first reviewed and discussed at the [June meeting](#). The city is seeking approval of a variance from the BCWMC requirement of 4-feet of separation between the bottom of the creek and the top of the sanitary sewer pipe. Since the June meeting, the Commission Engineer has been corresponding and working with Minneapolis' consultants to better understand current*

conditions, reasons and justification for a variance, and the ultimate project plans. Please see the Commission Engineer memo with recommendations and considerations, and a project memo from the city. Additional documents are included with meeting materials online.

- B. Receive Update on 2021 Tax Levy Request to Hennepin County (10 min) – INFORMATION ITEM no attachment – *At their meeting on August 11th, the Hennepin County Board unanimously approved a BCWMC maximum levy request of \$1,474,780 for 2021. I will update the Commission on the meeting with Commissioner Fernando and the discussion at the County Board Administrative Committee meeting.*

- C. Consider Adopting Minor Watershed Plan Amendment (20 min) – ACTION ITEM with attachment – *The Commission received no negative comments from member cities, Hennepin County, or review agencies on its proposed minor amendment to the watershed management plan to add projects to its CIP and revise some wetland management policies. The Commission should consider adopting all or part of the proposed amendments. Please review the attached memo for information on different alternatives for wetland management policy changes.*

- D. Consider Proposal to Perform Feasibility Study for Medicine Lake Rd & Winnetka Ave (MLRWA) Long Term Flood Mitigation Plan Project: DeCola Ponds - SEA School – Wildwood Park Flood Storage Project (CIP: BC-2, 3, 8, 10) (20 min) – ACTION ITEM with attachment – *The BCWMC CIP project encompassing the second phase of the MLRWA Long Term Flood Mitigation Plan is slated for implementation starting in 2022. As such, a feasibility study should get underway this fall so that it can be approved next spring in time to set the 2022 maximum levy for Hennepin County consideration. Please see the attached proposal for completion of the study by the Commission Engineer.*

- E. Consider Proposal to Perform Feasibility Study for Medley Park Stormwater Treatment Facility (CIP: ML-12) (20 min) – ACTION ITEM with attachment – *Similar to 5D above, the Medley Park Stormwater Treatment Facility CIP project is for implementation starting in 2022. As such, a feasibility study should get underway this fall so that it can be approved next spring in time to set the 2022 maximum levy for Hennepin County consideration. Please see the attached proposal for completion of the study by the Commission Engineer.*

- F. Review 2020 Operating Budget Status (10 min) – INFORMATION ITEM (use attachment from Item 4B) – *We are halfway through the fiscal year so it's a good time to make sure our budget is on track. There are some budget lines currently over budget and some under budget, and we have some income yet to realize including the Minneapolis 2020 assessments, WOMP grant funds, and reimbursement for project reviews over \$5,000. Staff believes that at the end of the year, expenses will be right around anticipated levels and no budget adjustments are necessary at this time.*

- G. Consider Approval of 2021 Operating Budget (10 min) – ACTION ITEM with attachment – *At the May Commission meeting, a proposed 2021 operating budget of \$668,900 and corresponding city assessments was approved for dissemination to member cities for review. Member cities received the proposed budget in June with a request for comments or questions by August 1st. No cities indicated concerns with the proposed budget. Staff recommends approval of the 2021 operating budget as approved in May and presented here.*

- H. Consider Submitting Resolution for 2021 MAWD Legislative Platform (10 min) – **DISCUSSION/ACTION ITEM (see [attachment 5D](#) from July meeting)** – *At the July meeting, the Commission briefly discussed but had no recommendations for possible resolutions for the MAWD Board to consider for the 2021 Legislative platform. Proposed resolutions are due by September 1st and will be considered at the MAWD annual meeting in December. See the memo from July’s Item 5D for more information.*
- I. Discuss Meeting Format for September 17th BCWMC Meeting (10 min) – **DISCUSSION ITEM no attachment** - *The Commission should decide how it would like to proceed with its September public hearing and meeting. Staff recommends maintaining a virtual meeting arrangement.*

6. COMMUNICATIONS (10 minutes)

- A. Administrator’s Report – **INFORMATION ITEM with attachment**
 - i. Bladderwort in Wirth Lake Wetland
 - ii. Starry Stonewort Control, Medicine Lake
 - iii. Bassett Creek Artist
 - iv. Report on Salt Symposium
- B. Chair
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Item 4A.
BCWMC 8-20-20

Bassett Creek Watershed Management Commission

DRAFT Minutes of Regular Meeting
Thursday, July 16, 2020
8:30 a.m.

Via video conference due to the COVID-19 global pandemic

1. CALL TO ORDER and ROLL CALL

On Thursday, July 16, 2020 at 8:31 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 (Treasurer)	Jane McDonald Black	Jeff Oliver, Eric Eckman
Medicine Lake	Clint Carlson	Gary Holter	<i>Absent</i>
Minneapolis	Michael Welch (Vice Chair)	<i>Vacant Position</i>	Liz Stout
Minnetonka	Mike Fruen	<i>Vacant Position</i>	Leslie Yetka
New Hope	<i>Absent</i>	Patrick Crough	Megan Hedstrom
Plymouth	James Prom	Catherine Cesnik	Ben Scharenbroich
Robbinsdale	<i>Vacant Position</i>	<i>Absent</i>	Marta Roser, Richard McCoy
St. Louis Park	Jim de Lambert	<i>Absent</i>	Erick Francis
Administrator	Laura Jester, Keystone Waters		
Engineer	Karen Chandler, Barr Engineering Meg Rattei, Barr Engineering		
Recorder	Dawn Pape, Lawn Chair Gardener		
Legal Counsel	Dave Anderson, Kennedy & Graven		
Presenters/ Guests/Public			

2. PUBLIC FORUM ON NON-AGENDA ITEMS

None.

3. APPROVAL OF AGENDA

MOTION: Commissioner Harwell moved to approve the agenda. Commissioner Welch seconded the motion. Upon a rollcall vote, the motion carried 7-0, with the cities of New Hope and Robbinsdale absent.

4. CONSENT AGENDA

The following items were approved as part of the consent agenda: June commission meeting minutes, July financial report, payment of invoices, approval of salt symposium registration reimbursement for Alternate Commissioner Cesnik, and 1230 Angelo Drive Shoreline repair project in Golden Valley.

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

Checking Account Balance	720,492.14
TOTAL GENERAL FUND BALANCE	720,492.14
TOTAL CASH & INVESTMENTS ON-HAND (7/8/20)	4,021,241.64
CIP Projects Levied – Budget Remaining	(4,542,135.65)
Closed Projects Remaining Balance	1,585,555.67
2015-2018 Anticipated Tax Levy Revenue	2,288.14
2019 Anticipated Tax Levy Revenue	4,953.76
Anticipated Closed Project Balance	1,592,797.57

MOTION: Commissioner Welch moved to approve the consent agenda with the exception of item 4E which is to be added to the business agenda as 5F. Commissioner Anderson seconded the motion. Upon a rollcall vote, the motion carried 7-0, with the cities of New Hope and Robbinsdale absent.

[Alternate Commissioner Crough, New Hope, joins meeting.]

5. BUSINESS

A. Receive Update on Main Stem Lagoon Dredging Project and Maximum Levy Discussions

Administrator Jester provided an update on recent discussions regarding the maximum levy and the Main Stem Lagoon Dredging Project. She noted that Minneapolis Park and Rec Board staff are supportive of the project, they may be able to assist with certain grant applications, that the project fits into the park’s master plan, that MPRB may be able to contribute capital funds in 2023, and that they would provide access and permits. She also noted the MPRB staff indicated they may not have the staff capacity to implement the project in the next few years and that since there is no structure to own or maintain with this project, it may be a good opportunity for the Commission to implement the project rather than a city or partner.

Administrator Jester reported on a recent discussion with Bill Emory, Hennepin County Commissioner Fernando’s Policy Aide. She noted that a meeting with Commissioner Fernando is arranged for July 30th and that Mr. Emory indicated that although Commissioner Fernando is extremely supportive of the BCWMC and its work, it would be difficult to support such an increase in levy amounts right now. She noted that many county

commissioners are hoping to have no increase in the 2021 tax levy over 2020 levels, or perhaps to even lower the levy.

Administrator Jester then reviewed another option for keeping the levy at or just below the current level, while still implementing the lagoon dredging project starting in 2021: spreading the cost of the project over 4 years instead of 3 years and using more Closed Project Account funds in 2021.

There was some discussion about grant opportunities and the fact that one state grant cannot be used to match another state grant or state funding. Commissioner Harwell stated that she liked the four-year option because it takes the financial situation into account, but also implements the project in phases.

Commissioner Welch brought up that even though Hennepin County Environmental Response Funds (ERF) haven't historically been used for this type of project, it would be worth checking with ERF staff before meeting with Commissioner Fernando. There was further discussion about logistics and talking points for the meeting with Commissioner Fernando.

MOTION: Commissioner Harwell moved to include the new option of funding the Main Stem Lagoon Dredging Project over four years, using \$500,000 of Closed Project Account funding in 2021, and keeping the levy under \$1.5M. Alternate Commissioner Crough seconded the motion.

There was further discussion about the "Plan B," or secondary option that Commissioner Fernando may be able to support, particularly for the Hennepin County Committee of the Whole meeting on August 4th. There was discussion about possibly drafting a formal statement from the Commission recognizing budget constraints and the financial crisis.

Commissioner Welch volunteered to make the presentation at the meeting with Commissioner Fernando. Chair Prom and Administrator Jester were authorized to revise the levy request. There was discussion about the contingency amount of 30% (of construction costs) included in the total project cost and the fact that spreading the cost over four years might increase the overall cost, but most likely within the contingency amount.

VOTE: Upon a rollcall vote, the motion carried 8-0, with the city of Minnetonka absent.

i. Consider Submitting Application for Clean Water Fund Competitive Grant

Administrator Jester noted that grant applications for the competitive Clean Water Fund grant are due August 17th and relayed her recent conversations with BWSR staff. She noted that dredging for BMP maintenance is not fundable, but that BWSR staff agreed this project might be considered for funding because the lagoons were not designed as BMPs. Commissioner Welch stated the Hennepin County Environmental Response Funds and the county's Opportunity Grants should be the first priority for grant applications. He noted the Clean Water Funds don't typically fund dredging projects.

Commissioner Engineer Chandler noted that DNR funding is unlikely since the dredging wouldn't decrease flooding or increase flood storage by a significant amount. There was consensus not to move forward with a Clean Water Fund grant application, but to continue looking into other grant opportunities, including working with MPRB staff on the possibility of historical preservation funds, pursuing BWSR watershed based implementation funds, and Hennepin County Opportunity grant funds. Alternate Commissioner McDonald Black noted the significance of the MPRB ranking of Theodore Wirth Park as its #1 Equity Park.

B . Review Report and Receive Presentation of North Branch Bassett Creek 2018-2019 Water Quality and Biotic Index Monitoring Results

Commission Engineer Chandler introduced Meg Rattei, a Senior Biologist at Barr Engineering. Chair Prom requested that commissioners hold questions until the end of the presentation.

Ms. Rattei gave a presentation on the results of monitoring in the North Branch Bassett Creek, noting it was the first stream to be monitored as part of the Commission's new stream monitoring program. As of 2018, the BCWMC monitoring program includes monitoring streams not only for biota, but also for water quality and flow. In order to spread out costs, only one stream is monitored at a time. The monitoring occurs over a two-year period. The North Branch Bassett Creek was monitored in 2018 and 2019 including the collection of 30 samples split between storm sampling with an automatic sampler and baseflow sampling with grab samples. Ms. Rattei presented the results.

Average stream flow was 2.9 and 5.4 cubic feet per second in 2018 and 2019, respectively. The stream met MPCA standards for temperature, metals, and stream eutrophication, but failed to meet standards for chlorides and total suspended solids. The stream also failed to meet the MPCA numerical standard for *E. coli* bacteria in 2018 and 2019, but the MPCA requires collection of a minimum number of samples within a 10-year period before determining impairment. Since the number of samples collected was less than the required minimum, not enough data was collected to determine impairment.

Between 1980 and 2018, the BCWMC collected benthic macroinvertebrates (aka bottom-dwelling organisms) from the North Branch of Bassett Creek on 11 occasions. The purpose of the sampling was to evaluate water quality and detect changes over time. The 2018 monitoring program sampled for macroinvertebrates and assessed habitat.

Three biotic indices were used to assess the macroinvertebrate data: Hilsenhoff Biotic Index (HBI), Invertebrate Community Index (ICI), and Macroinvertebrate Index of Biotic Integrity (M-IBI). The MPCA developed the M-IBI and added it to Minnesota's water quality standards to help identify biologically impaired rivers and streams.

Ms. Rattei reported that biological scores improved slightly in 2015, likely due to implementation of Commission stream restoration projects, but that the 2018 Hilsenhoff Biotic Index (HBI) and Invertebrate Community Index (ICI) scores were generally consistent with past values. She reported that none of the locations monitored from 2006 through 2018 met the MPCA M-IBI impairment standard and poorer M-IBI scores were documented at the North Branch in 2018. Thus, the North Branch of Bassett Creek would be considered biologically impaired. The 2018 decrease in score may be due to the negative impacts of increased flow and increased pollutant loading during a major precipitation event that occurred 2 weeks prior to collection of the 2018 macroinvertebrate samples.

Because the North Branch of Bassett Creek is biologically impaired and failed to meet MPCA standards for total suspended solids, chlorides, and *E. coli* bacteria from 2018 through 2019, it is recommended that BCWMC continue to assess and monitor the North Branch of Bassett Creek and continue education to reduce chloride use in the watershed.

Commissioner Welch asked about the need to analyze for parameters that don't have MPCA standards. Ms. Rattei noted those parameters are measured because the data are used to calculate values for some other parameters with standards. Chair Prom asked why more bacteria samples weren't collected in order to meet the monitoring requirements to determine impairment. Ms. Rattei noted that bacteria samples can only be done through grab sampling and that it is expensive to collect grab samples. She also noted that the *E. coli* standard is an aggregate of samples over 10 years, so there is still time to collect the appropriate number of samples within that time frame.

There was discussion about chloride state standards vs. total suspended solids standards. Commissioner Harwell asked why macroinvertebrates were collected only 2 weeks after a major flooding event. Ms. Rattei replied that early October is typically the best time to collect bug samples and there wasn't room in schedule to collect them later. Commissioner Harwell stated the need for actual projects and programs for chloride reduction in addition to education. There was a brief discussion about using volunteers for *E. coli* collection and other opportunities for collaboration.

C. Review Report and Receive Presentation of Main Stem Bassett Creek Biotic Index Monitoring Results

Ms. Rattei continued with a presentation on the biological monitoring of the Main Stem of Bassett Creek. Administrator Jester noted that the Commission relies on the water quality and flow data from the WOMP station, which is reported by Met Council and not included here.

Between 1980 and 2018, the BCWMC has collected data on biota and habitat from the Main Stem of Bassett Creek on 11 occasions in order to evaluate water quality and detect changes. In 2018, the BCWMC monitored the Main Stem of Bassett Creek at two locations: 1) east of Brookridge Avenue, and 2) at Rhode Island Avenue. The Met Council monitored the Main Stem at Irving Avenue in 2018 for both water quality (through the WOMP program) and biota/habitat.

In 2018, a statistically significant trend toward improving HBI scores (indicating improving oxygen conditions) was documented at the Main Stem Irving Avenue location. The improved HBI score at this location appears to have resulted from a Commission 2015 Main Stem stream restoration project which stabilized the stream and reduced sediment from Golden Valley Road to Glenwood Avenue. Sediment contains organic matter, which consumes oxygen during degradation, lowering oxygen levels in the stream. The significant improvement in HBI score documents the improved quality due to the sediment reductions in the stream following completion of the project. The 2018 ICI score from the Main Stem at Irving Avenue and the 2018 HBI and ICI scores from all other Main Stem sampling locations were consistent with past scores.

Improved M-IBI scores were documented at all Main Stem locations in 2018. Consistently improving M-IBI scores were documented at the east of Brookridge location since 2012 and at the Irving Avenue location since 2008. The long-term improvements appear to show the positive impacts of multiple Commission stream restoration projects completed from 2012 through 2018.

Commissioner Welch asked what does this all mean for the Commission's work; how can the data be used to develop policy decisions? Ms. Rattei agreed that it is disappointing that biological standards still aren't met, but that at least the trend is going upwards rather than downwards. The Commission work has been successful, it's just that this is a challenging stream and it is not yet "over the finish line."

Administrator Jester agreed that the Commission should work to better use its data to pinpoint needs and projects.

There was discussion about how the M-IBI standard was developed and where in the state the standard is being met. Commissioners wondered if meeting the standard is even attainable in an urban stream. Ms. Rattei noted that the M-IBI was introduced by the MPCA in 2015 and approved by the EPA in 2018 but that explanations for how it was developed remain unanswered and that outside entities weren't allowed to give input in developing the standards. She did note that biotic scores are very tied to good habitat and that the Commission should continue to find opportunities to improve habitat.

There was further discussion about understanding where the M-IBI standard is being met and the relationship between the Commission's monitoring results and how it does or does not inform projects and policies. Ms. Rattei noted that other watersheds are still trying to determine if investing in biotic assessments is the right thing to do. She offered to gather information on where the M-IBI is being measured and where it's being met or not met across the state.

D. Consider Submitting Resolution for 2021 MAWD Legislative Platform

Administrator Jester gave an overview of the MAWD request for resolutions and informed the Commission that the proposed resolutions are due September 1st. She asked if any Commissioners have ideas.

Commissioner Welch said there is an existing limited liability chloride resolution and we should consider asking for that to be pursued. Commissioner Welch also mentioned considering the Commission's levy structure, noting the MWMO was added to the list of organizations that can levy taxes. Chair Prom indicated his belief that only elected officials should be able to levy taxes.

Alternate Commissioner McDonald Black asked if MAWD could create a database of M-IBI scores across all watersheds. Commissioner Welch said that idea could be brought to Metro MAWD meeting next week. Commissioner Harwell noted that the Commission should not advocate for lowering a standard, but is interested in a comparison among watersheds.

4E. From Consent Agenda: Approval of Bassett's Creek Park (North) Phase 1 Improvement Project, Minneapolis

Commissioner Welch asked the identity of the applicant and wondered why there are impervious surfaces in a park. Commission Engineer Chandler noted the Minneapolis Park and Rec Board is the applicant and pointed out that the summary information in the memo states that the impervious surfaces are the trails and sidewalks.

MOTION: Commissioner Welch moved to approve the Bassett's Creek Park (North) Phase I Improvement Project. Commissioner Harwell seconded the motion. Upon a rollcall vote, the motion carried 8-0, with the city of Minnetonka absent from the vote.

F. Discuss Meeting Format for August 20th BCWMC Meeting

Chair Prom shared that he is comfortable with going back to meeting in person. Commissioner Harwell shared that the DNR directive is to work from home. Chair Prom listened to other members and sensed that the majority would like to continue meeting virtually. The August meeting will be via web conference.

6. COMMUNICATIONS

A. Administrator's Report

i. Medicine Lake Mapping AIS with Drone

Through contract with Hennepin County, a private company is flying specialized drones in hopes of identifying and delineating different AIS in Medicine Lake. So far, results are encouraging. Administrator Jester will keep the Commission apprised of results, when available.

ii. Potential Restoration Partnership with Friends of the Mississippi River

Administrator Jester and Commissioner Welch met with members of a Bryn Mawr neighborhood group hoping to better organize restoration near the creek in Bassett's Creek Park including invasive species removal and native plantings. Friends of the Mississippi River (FMR) may also get involved by developing a restoration plan, in cooperation with the MPRB. Administrator Jester reported on a recent meeting with FMR staff on this possibility and will keep the Commission apprised if and when things move forward.

ii. Diversity, Equity, and Inclusion Work

Administrator Jester reported that she recently participated in a Metro Watershed Partners meeting on this topic and is working to better understand how the Commission can provide for more inclusion, diversity and equity to address environmental injustices in the watershed.

Administrator Jester also noted that due to Boundary Waters trip, the August meeting packet may be sent/posted one day late. She also reminded commissioners about her agenda memo in the meeting packet which provides a good overview of agenda items.

B. Chair

Chair Prom commended the Commission for still getting its work done despite the pandemic and holding virtual meetings.

C. Commissioners

Commissioner Harwell asked if there is anything that can be done to block the spam to her email since she is listed as treasurer. Administrator Jester will look into the possibility of using BCWMC-specific email addresses on the website.

Commissioner Carlson noted that the staff gage at the Medicine Lake dam is missing and asked about the survey of the dam performed by the city last year. Ben Scharenbroich with city of Plymouth said he would investigate the staff gage and noted there wasn't a formal survey report developed but the results were filed.

D. TAC Members

Nothing to report

E. Committees

Nothing to report

F. Education Consultant

i. Latest Education Video raingardens. The videos are doing well on Facebook and the AIS video will be coming out soon.

G. Legal Counsel

Nothing to report

H. Engineer

i. Sweeney Lake Water Quality Improvement Project
The first round of carp removal was completed from Sweeney Lake and Schaper Pond. 334 carp were removed from Sweeney Lake and 82 from Schaper Pond. The nets might be left in Schaper pond for the season. There will be a fall alum treatment.

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. Letter of Support for USACE Mississippi River Drawdown
- E. 2020 Salt Symposium (online; registration reimbursement available)
- F. Lakeshore Restoration Animated Video by Anoka SWCD (<https://www.youtube.com/watch?v=dwjAoRwLrmM>)
- G. Lawns to Legumes Progress Report to BWSR
- H. WCA Notice of Decision, Plymouth
- I. WCA Notice of Application, Plymouth

8. ADJOURNMENT

Upcoming Meetings & Events

- Metro MAWD – Tuesday July 21st – Online through Go To Meeting
- 2020 Salt Symposium – August 4 – 5; online and live streamed; register at <https://fortinconsulting.com/saltsymposium/>
- Bassett Creek Watershed Mgmt Commission Meeting: Thursday August 20th, 8:30 a.m., via web conference
- Minnesota Water Resources Conference – October 20 – 21; St. Paul River Centre; <https://ccaps.umn.edu/minnesota-water-resources-conference>

Chair Prom adjourned the meeting at 10:58 a.m.

Signature/Title Date

Signature/Title Date

Bassett Creek Watershed Commision
 General Fund (Administration) Financial Report
 Fiscal Year: February 1, 2020 through January 31, 2021
 MEETING DATE: August 20, 2020

Item 4B.
 BCWMC 8-20-20

(AUDITED)

BEGINNING CASH BALANCE	8-Jul-2020	720,492.14	
Transfer to 4M Fund		(600,000.00)	
	Total Cash Balance		120,492.14
 BEGINNING INVESTMENT BALANCE		 0.00	
Transfer from Cash		600,000.00	
	Total Investment Balance		600,000.00
	 Total Cash and Investments		 720,492.14
ADD:			
General Fund Revenue:			
Interest less Bank Fees-Wells Fargo		(5.23)	
Interest Earnings - 4M Funds		0.00	
Total Interst Earnings		(5.23)	
Permits:			
Retro Companies	BCWMC 2020-20	1,500.00	
Spear's Landscape	BCWMC 2020-19	500.00	
Reimbursed Construction Costs		44,388.00	
	Total Revenue and Transfers In		46,382.77
DEDUCT:			
Checks:			
3322 Barr Engineering	July services	75,943.27	
3323 Kennedy & Graven	June Legal	648.78	
3324 Keystone Waters LLC	July Administrator	4,982.76	
3325 Lawn Chair Gardener	July Admin Serv / Educ	980.00	
3326 Wenck Associates	July WOMP	2,126.45	
	Total Checks/Deductions		84,681.26
Outstanding from previous month:			
3320 Metro Conservation Districts	Sponsorship	350.00	
3321 Catherine Cesnik	Training Reimbursement	160.00	
ENDING BALANCE	11-Aug-2020		682,193.65

Bassett Creek Watershed Commission
 General Fund (Administration) Financial Report
 Fiscal Year: February 1, 2020 through January 31, 2021
 MEETING DATE: August 20, 2020

(UNAUDITED)

	2020/2021 BUDGET	CURRENT MONTH	YTD 2020/2021	BALANCE
OTHER GENERAL FUND REVENUE				
ASSESSMENTS TO CITIES	550,450	0.00	512,820.00	37,630.00
PROJECT REVIEW FEES	50,000	2,000.00	38,500.00	11,500.00
WOMP REIMBURSEMENT	5,000	0.00	0.00	5,000.00
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 PRO	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	
REVENUE TOTAL	662,450	2,000.00	551,320.00	111,130.00
EXPENDITURES				
ENGINEERING & MONITORING				
TECHNICAL SERVICES	130,000	8,802.45	78,295.64	51,704.36
DEV/PROJECT REVIEWS	75,000	13,485.00	61,906.75	13,093.25
NON-FEE/PRELIM REVIEWS	20,000	2,368.00	8,995.50	11,004.50
COMMISSION AND TAC MEETINGS	12,000	748.00	4,452.20	7,547.80
SURVEYS & STUDIES	10,000	0.00	0.00	10,000.00
WATER QUALITY/MONITORING	102,600	3,709.52	49,638.91	52,961.09
WATER QUANTITY	6,500	930.00	3,396.44	3,103.56
ANNUAL FLOOD CONTROL INSPECTIONS	12,000	804.50	14,400.00	(2,400.00)
REVIEW MUNICIPAL PLANS	2,000	0.00	1,260.00	740.00
WOMP	20,500	2,834.25	10,079.33	10,420.67
APM / AIS WORK	30,000	0.00	6,634.42	23,365.58
ENGINEERING & MONITORING TOTAL	420,600	33,681.72	239,059.19	181,540.81
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	4,680.00	31,014.00	38,186.00
MN ASSOC WATERSHED DIST DUES	500	0.00	500.00	0.00
LEGAL COSTS	15,000	648.78	8,200.83	6,799.17
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	910.26	5,419.36	9,580.64
ADMINISTRATION TOTAL	122,700	6,239.04	64,041.69	58,658.31
OUTREACH & EDUCATION				
PUBLICATIONS/ANNUAL REPORT	1,300	0.00	1,000.00	300.00
WEBSITE	1,000	0.00	367.64	632.36
PUBLIC COMMUNICATIONS	1,000	0.00	484.37	515.63
EDUCATION AND PUBLIC OUTREACH	22,000	372.50	4,915.76	17,084.24
WATERSHED EDUCATION PARTNERSHIPS	15,850	0.00	9,850.00	6,000.00
OUTREACH & EDUCATION TOTAL	41,150	372.50	16,617.77	24,532.23
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	0.00	0.00	10,000.00
TMDL WORK TOTAL	10,000	0.00	0.00	10,000.00
TOTAL EXPENSES	662,450	40,293.26	319,718.65	342,731.35

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

(UNAUDITED)

Cash Balance 07/8/2020			
Cash		1,426,068.48	
Transfer to purchase investments		<u>(2,355,000.00)</u>	
	Total Cash		(928,931.52)
Investments:			
Minnesota Municipal Money Market (4M Fund)		4,950,173.16	
Dividends-Current		55.58	
	Total Investments		4,950,228.74
	Total Cash & Investments		4,021,297.22
Add:			
Interest Revenue (Bank Charges)		(17.66)	
Hennepin County - Property Tax Settlement		37,607.98	
	Total Revenue		37,590.32
Less:			
CIP Projects Levied - Current Expenses - TABLE A		(40,420.00)	
Proposed & Future CIP Projects to Be Levied - Current Expenses - TABLE B		<u>(553.50)</u>	
	Total Current Expenses		(40,973.50)
	Total Cash & Investments On Hand		4,017,914.04
	8/11/2020		4,017,914.04
Total Cash & Investments On Hand		4,017,914.04	
Current Anticipated Levy -2020 (July 20/Dec 20/Jan 21)		728,701.70	
CIP Projects Levied - Budget Remaining - TABLE A		(4,501,715.65)	
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		1,585,040.09	
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		1,592,281.99	
Proposed & Future CIP Project Amount to be Levied - TABLE B		0.00	

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	1,447,143.38	0.00	700,000		
Plymouth Creek Restoration (2017 CR-P) - FINALLED	863,573	627,329	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	162.00	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 2018 Levy 664,472	1,064,472	0.00	132,029.25	932,442.75		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	0.00	1,063,148.32	60,202.68			
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	0.00	0.00	97,687.03	814,312.97	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	40,258.00	71,868.71	73,018.71	495,061.29	4,527	325,473	218,080
	<u>9,823,375</u>	<u>40,420.00</u>	<u>1,044,597.56</u>	<u>5,321,659.83</u>	<u>4,501,715.65</u>		<u>710,060.00</u>	<u>630,080.00</u>

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)	0	553.50	32,846.50	75,041.22	(75,041.22)
Mt Olivet Stream Restoration (ML-20)	0		14,410.50	35,993.92	(35,993.92)
Parkers Lake Stream Restoration (PL-7)	0		24,564.90	57,547.12	(57,547.12)
2021 Project Totals	0	553.50	71,821.90	168,582.26	(168,582.26)
Total Proposed & Future CIP Projects to be Levied	0	553.50	71,821.90	168,582.26	(168,582.26)

BCWMC Construction Account

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

(UNAUDITED)

August 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	37,607.98	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
				<u>37,607.98</u>			<u>735,943.60</u>	

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	107,765.15	27,234.85
TOTAL TMDL Studies	135,000.00	0.00	0.00	107,765.15	27,234.85
Flood Control Long-Term					
Flood Control Long-Term Maintenance	694,573.00	3,414.50	6,502.00	415,671.91	
Less: FEMA Model		0.00	0.00	(141,846.90)	
State of MN - DNR Grants	694,573.00	3,414.50	6,502.00	273,825.01	420,747.99
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	3,414.50	17,955.70	601,960.35	1,076,263.65



Memorandum

To: Bassett Creek Watershed Management Commission (BCWMC)
From: Barr Engineering Co. (Barr)
Subject: Item 4D: Rude Property Landscaping and Shoreline Improvements – Plymouth, MN
BCWMC August 20, 2020 Meeting Agenda
Date: August 12, 2020
Project: 23270051.48 2020 2224

4D Rude Property Landscaping and Shoreline Improvements – Plymouth, MN BCWMC 2020-19

Summary:

Proposed Work: Single-family home landscaping and shoreline improvements

Basis for Review at Commission Meeting: Shoreline improvements

Impervious Surface Area: Decrease 64 square feet

Recommendation: Approval

General Project Information

The proposed project is located in the Medicine Lake Direct subwatershed at 11625 26th Avenue North in Plymouth, MN. The applicant proposes to improve the Medicine Lake shoreline along their property by placing fieldstone riprap along the shoreline as part of a larger landscaping project on the property. The proposed project creates 6,450 square feet of reconstructed impervious surfaces and a decrease of 64 square feet of impervious surfaces from 6,514 square feet (existing) to 6,450 square feet (proposed).

Floodplain

The proposed project includes work in the BCWMC (Medicine Lake) 1% (base flood elevation, 100-year) floodplain. The October 2019 BCWMC Requirements for Improvements and Development Proposals (Requirements) document states that projects within the floodplain must maintain no net loss in floodplain storage and no increase in flood level at any point along the trunk system (managed to at least a precision of 0.00 feet). The 1% (base flood elevation, 100-year) floodplain elevation of Medicine Lake is 890.4 feet NAVD88. The proposed project does not involve fill in the floodplain.

Lakes, Streams, and Wetlands

The proposed project includes the referenced shoreline improvement work along Medicine Lake that triggers review by the Commission. The applicant proposes installation of riprap and fabric along the shoreline from elevation 890 to 893 at approximately 3 to 1 (horizontal to vertical) slopes. The proposed riprap and fabric was designed generally in accordance with the Minnesota Department of Natural

To: Bassett Creek Watershed Management Commission (BCWMC)
From: Barr Engineering Co. (Barr)
Subject: Item 4D: Rude Property Landscaping and Shoreline Improvements – Plymouth, MN
Date: August 12, 2020
Page: 2

Resources' (MnDNR) approved riprap cross section, which was provided to the applicant by the Commission Engineer.

The City of Plymouth is the local government unit (LGU) responsible for administering the Wetland Conservation Act; therefore, BCWMC wetland review is not required.

Rate Control

The proposed project does not create one or more acres of new or fully reconstructed impervious surfaces; therefore, BCWMC rate control review is not required.

Water Quality

The proposed project does not create one or more acres of new or fully reconstructed impervious surfaces; therefore, BCWMC water quality review is not required.

Erosion and Sediment Control






Single family homes are exempt from BCWMC erosion and sediment control requirements.

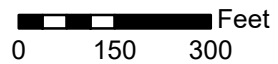
Recommendation

Approval



Project Location

-  Project Location
-  Municipality
-  BCWMC Legal Boundary
-  Major Subwatershed
-  Bassett Creek



BCWMC #2020-19
 RUDE PROPERTY
 LANDSCAPING &
 SHORELINE IMPROVEMENTS
 Plymouth, MN
 LOCATION MAP



Memorandum

To: Bassett Creek Watershed Management Commission (BCWMC)
From: Barr Engineering Co. (Barr)
Subject: Item 4E: Brose Property Landscaping and Shoreline Improvements – Plymouth, MN
BCWMC August 20, 2020 Meeting Agenda
Date: August 12, 2020
Project: 23270051.48 2020 2226

4E Brose Property Landscaping and Shoreline Improvements – Plymouth, MN BCWMC 2020-21

Summary:

Proposed Work: Single-family home landscaping and shoreline improvements

Basis for Review at Commission Meeting: Work in the floodplain and shoreline improvements

Impervious Surface Area: Decrease 64 square feet

Recommendation: Approval

General Project Information

The proposed project is located in the Medicine Lake Direct subwatershed at 10112 South Shore Drive in Plymouth, MN. The applicant proposes to improve the Medicine Lake shoreline along their property by placing fieldstone riprap along the shoreline. The proposed project creates approximately 50 square feet of reconstructed impervious surfaces at some stairs along the shoreline.

Floodplain

The proposed project includes work in the BCWMC (Medicine Lake) 1% (base flood elevation, 100-year) floodplain. The October 2019 BCWMC Requirements for Improvements and Development Proposals (Requirements) document states that projects within the floodplain must maintain no net loss in floodplain storage and no increase in flood level at any point along the trunk system (managed to at least a precision of 0.00 feet). The 1% (base flood elevation, 100-year) floodplain elevation of Medicine Lake is 890.4 feet NAVD88. The proposed project includes a note on the plans that states "*any additional fill (soil or rock) placed below the floodplain elevation will be balanced with excavation along the shoreline to ensure no net loss of floodplain storage.*"

Lakes, Streams, and Wetlands

The proposed project includes the referenced shoreline improvements along Medicine Lake that triggers review by the Commission. As part of the proposed project, geotextile, 6 inches of granular filter, and

To: Bassett Creek Watershed Management Commission (BCWMC)
From: Barr Engineering Co. (Barr)
Subject: Item 4E: Brose Property Landscaping and Shoreline Improvements – Plymouth, MN
Date: August 12, 2020
Page: 2

18-30" fieldstone riprap will be installed along the shoreline from elevation 887.1 to 891.17. The fieldstone riprap will be installed at approximately 3 to 1 (horizontal to vertical) slopes.

The City of Plymouth is the local government unit (LGU) responsible for administering the Wetland Conservation Act; therefore, BCWMC wetland review is not required.

Rate Control

The proposed project does not create one or more acres of new or fully reconstructed impervious surfaces; therefore, BCWMC rate control review is not required.

Water Quality

The proposed project does not create one or more acres of new or fully reconstructed impervious surfaces; therefore, BCWMC water quality review is not required.





Erosion and Sediment Control

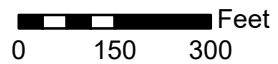
Single family homes are exempt from BCWMC erosion and sediment control requirements.

Recommendation

Approval



-  Project Location
-  Municipality
-  BCWMC Legal Boundary
-  Major Subwatershed



BCWMC #2020-21
 BROSE PROPERTY
 LANDSCAPING &
 SHORELINE IMPROVEMENTS
 Plymouth, MN
 LOCATION MAP



Memorandum

To: Bassett Creek Watershed Management Commission (BCWMC)
From: Barr Engineering Co. (Barr)
Subject: Item 5A: Irving Avenue Sanitary Sewer Replacement – Minneapolis, MN
BCWMC August 20, 2020 Meeting Agenda
Date: August 13, 2020
Project: 23270051 2020 2221

5A Irving Avenue Sanitary Sewer Replacement – Minneapolis, MN BCWMC 2020-16

Summary:

Proposed Work: Sanitary sewer replacement

Basis for Review at Commission Meeting: Work in floodplain; utility crossing that disturbs the bed or banks of the creek; variance request for installing new utility pipe crossing with less than 4 feet of cover.

Impervious Surface Area: N/A

Recommendations:

- A. Consider approval of a variance to Section 8.3 of the BCWMC Requirements document for utility crossing requirement of a minimum depth of 4.0 feet below the channel invert.
- B. Conditional approval of the project.
- C. Require that a separate BCWMC application must be submitted for the diversion and dewatering plan. Consider authorizing Commission Engineer to review and approve application without bringing back to the BCWMC.

General Project Information

The proposed linear project is located in the Bassett Creek Main Stem subwatershed, within the Irving Avenue right of way, the Minneapolis impound lot, and Bryn Mawr Meadows Park in Minneapolis (note: per the definitions in the October 2019 BCWMC Requirements for Improvements and Development Proposals (Requirements) document, utility installations are linear projects). The City presented information regarding the project at the June 11, 2020 BCWMC meeting. The proposed linear project includes replacement of 2,300 linear feet of sanitary sewer, including 75 linear feet under Bassett Creek. Recent pipe inspections have revealed that at least a portion of the system is compromised. The proposed linear project results in 0.92 acres of grading (disturbance) and no change in impervious surfaces from the 2.04 acres of impervious within the project limits in existing conditions. A new 24-inch diameter ductile iron pipe will be installed across Bassett Creek in the location of the existing Irving Avenue Bridge. The existing 48-inch diameter and 52-inch equivalent diameter pipes will continue to convey wastewater until the new pipe is constructed. Due to unfavorable soils in the area, the new pipe must be installed on piles via open cut construction. Once the new pipe is in service, the existing pipe will be abandoned in place

and filled with a flowable cementitious fill. The BCWMC administrator and technical staff have been involved in several preliminary and follow-up coordination meetings and communications regarding this project. Anticipated construction schedule is from September 2020 through September 2021. Construction of the Bassett Creek crossing will be performed during low-flow periods in the winter of 2020-2021. The City of Minneapolis' July 29, 2020 letter to the Commission and variance request is attached.

Floodplain

The proposed linear project includes work in the Bassett Creek floodplain. The Requirements document ... *requires that projects within the floodplain must maintain no net loss in floodplain storage and no increase in flood level at any point along the trunk system* (managed to at least a precision of 0.00 feet). The floodplain elevation of Bassett Creek is 811.2 feet NAVD88 downstream of Irving Avenue, and 811.3 feet NAVD88 upstream of Irving Avenue.

The Irving Avenue wooden bridge and abutments are no longer maintained and will be removed as part of the project, in advance of the sanitary pipe installation. The Metropolitan Council WOMP station, including the flow meter operated by BCWMC, will be relocated and the stairs adjacent to the bridge will be removed.

Barr evaluated the impact to Bassett Creek of removing the Irving Avenue Bridge and abutments and determined that this change does not increase flood elevations for the 2-year, 10-year, and 100-year events. Barr also evaluated the impact of raising the creek profile to increase cover over the proposed sanitary sewer pipe and the modeling indicates that filling to 802.6 feet NAVD88 (per the extent shown in Attachment G of the city's July 29, 2020 letter) to increase cover will not increase flood elevations for the 2-year, 10-year and 100-year events.

Rate Control

The proposed linear project does not create one or more acres of net new impervious surfaces; therefore, BCWMC rate control review is not required.

Water Quality

The proposed linear project does not create one or more acres of net new impervious surfaces; therefore, BCWMC water quality review is not required.

Erosion and Sediment Control

The proposed linear project does not result in one or more acres of land disturbance; therefore, BCWMC erosion and sediment control review is not required. However, proposed temporary erosion and sediment control features include rock construction entrances, sediment control logs, silt fence, and catch basin inlet protection. Proposed permanent erosion and sediment control features include stabilization with seeding, erosion control blanket, and other features within the creek as noted below.

Lakes, Streams, and Wetlands

The proposed linear project includes bridge removal and pipe installation that will affect the Bassett Creek streambed and streambanks. As noted earlier, open cut construction is necessary to install the piles and pipe, which will result in disturbance of the creek bed and banks. The open cut construction will also

require the temporary diversion of Bassett Creek. The applicant proposes to construct a temporary channel on the south side of Bassett Creek, approximately 225 feet long. Sheet 7 of the applicant's drawings include the following notes:

Contractor shall submit a creek diversion plan for review by the city of Minneapolis and BCWMC at least 45 days in advance of starting the work. At a minimum, the plan must address the following:

- a. Bridge removal
- b. Capacity of the gravity flow channel and/or piping used to divert the flow around the work area.
- c. A contingency plan in the event the creek flows are greater than the diverted system.
- d. The design of watertight embankments upstream and downstream of the work area.
- e. Dewatering plan during pipe installation within the creek area.
- f. Prevention of contaminants from entering the creek through the soils or groundwater.
- g. Detailed survey of the creek bed and banks within the work area per the requirements of SP-8.
- h. Soils management plan; soils segregation, storage, disposal, and import.
- i. Method to attenuate flow at the discharge.
- j. Proposed schedule for the work.

Sheet 7 also includes the following note under Regulatory Requirements:

- i. Temporary Diversion plan shall include provisions to prevent erosion of the existing channel excavation and passing material downstream.

The applicant proposes to complete work during months with normally lower flows (i.e., in the winter) to reduce land use and environmental impacts. The applicant reviewed twenty years of Bassett Creek flow data collected by the BCWMC/MCES at the Irving Avenue WOMP station to gain a better understanding of the diversion requirements. The applicant anticipates it will take two to three months to complete the work within the creek.

The cross-section of the creek will be restored to match the existing elevations and grades, except in the vicinity of the pipe crossing, where the creek bed will be raised to provide additional cover and rip rap protection over the pipe. The applicant used the City of Minneapolis/BCWMC CIP Bassett Creek Main Stem Stabilization Project as the basis for the proposed creek restoration. Proposed stream restoration measures include riprap on the stream bed and banks (toe protection), rock cross vanes, and seeding.

The City of Minneapolis is the local government unit (LGU) responsible for administering the Wetland Conservation Act; therefore, BCWMC wetland review is not required. However, the applicant provided an exhibit identifying a 50-ft. buffer from the edge of the Bassett Creek wetland and noted the areas within the buffer that will be restored.

Water Resources

Soil contamination has been identified within the project area. Excavation, removal and disposal of contaminated soils will be managed in accordance with the Phase 2 Investigation Report and Response Action Plan (RAP). Soil excavated in the vicinity of Bassett Creek has chemical concentrations above MPCA industrial limits and will be disposed of at a landfill and replaced with clean fill. Barr prepared the RAP for the City of Minneapolis.

Utility Crossings

As noted, a new 24-inch diameter ductile iron pipe will be installed across Bassett Creek in the location of the existing Irving Avenue bridge. Section 8.3 of the Requirements document includes a requirement that utility crossings maintain a minimum depth of 4.0 feet below the channel invert. The City of Minneapolis provided a variance request for providing less than 4.0 feet of cover over the top of the pipe.

Variance Request

The City of Minneapolis requested a variance to Section 8.3 of the Requirements document for the utility crossing requirement of a minimum depth of 4.0 feet below the channel invert. According to the city, the existing sanitary sewer was installed in 1905 and has less than 4 feet of cover. The existing top of pipe elevation is at 796.8 ft. with a cover of 3.0 ft. The proposed top of pipe is at 800.1 ft. with 2.4 ft. of cover beneath the creek invert of 802.6 ft. The pipe cannot be lowered to accommodate the minimum cover requirement because it is a gravity sewer that has a controlled grade at the intersection of Irving Avenue and Currie Avenue.

The Commission Engineer coordinated closely with the City on this project and informed the City several weeks ago that we would support 3 ft. of cover over the proposed pipe (which is consistent with the Recommended Standards for Wastewater Facilities, 2014 Edition – also known as the Ten State Standards). The City revised its design by increasing the cover over the pipe to approximately 2.4 ft., as noted above, and increasing the size of the riprap in the channel bed over the pipe to minimize potential scour. A sheet pile weir across the creek channel, located downstream of the pipe crossing (installed as part of the Bassett Creek Flood Control Project) will also protect the pipe from scour. The sheet pile weir will remain as part of the project. Based on modifications (including the increased cover and larger riprap) and the sheet pile weir, the Commission Engineer supports the variance request, providing the City's operation and maintenance procedures includes future inspection and maintenance of the proposed cover, in the event the pipe becomes exposed.

Section 3.3 of the BCWMC Requirements document indicates that in granting variances, the Commission shall make a finding showing that all of the following conditions exist. The attached July 29, 2020 letter from the City addressed these conditions, as follows.

Condition #1: There are special circumstances or conditions affecting the property such that the strict application of the provisions of these standards and criteria would deprive the applicant of the reasonable use of the applicant's land.

- The City has carefully evaluated lowering the crown of the new 24-inch diameter pipe to increase the cover at the crossing. Due to project limitation, sewershed challenges such as flat slopes and future improvements needed to the MCEs Interceptor 1-MN-320 at Currie and Irving, it is deemed necessary to install the pipe at the proposed invert elevation. The proposed pipe crown is set at an elevation closely matching the crown of the existing sewer at the intersection of Irving and Currie Avenue. This approach will provide flexibility for the sewershed alternatives development in the future. Please see justification provided on July 29, 2020, included in Attachment E.

Condition #2: The variance is necessary for the preservation and enjoyment of a substantial property right of the applicant.

- The City of Minneapolis is committed to providing reliable and sustainable sanitary sewer service to its residents. As such, the City evaluated several options for the reconstruction of the sewer. Eight alternatives were developed in advance of the design development; four lift station options and four gravity options following different alignments in the area were considered. Through that evaluation, it was determined that the reconstruction of the sanitary in its current location was that the most efficient and reliable way to provide service to the project area.

Condition #3: The granting of the variance will not be detrimental to the public welfare or injurious to the other property in the territory in which the property is situated.

- Although temporary excavation is required in the Creek, the new sewer will not alter any conditions with the stream or floodplain (please see Condition #4 for further details). Where feasible, bank grading will be more gradual in the area of the bridge removal and provide a 2H:1V slope once construction is complete (see Sheet 43 for bank restoration.)

Condition #4: In applications relating to a use in the 1% (base flood elevation, 100-year flood) floodplain set forth in Table 2-9 of the Watershed Management Plan, the variance shall not allow a lower degree of flood protection than the current flood protection.

- The City contracted with Barr to perform the analysis needed to confirm that the bridge removal would not adversely impact the water surface elevations for Bassett Creek for the 2-, 10-, and 100-year 24-hour storm events. Findings from the additional modeling activities performed utilizing the existing BCWMC XP-SWMM model and concluded the following (see email from Sarah Stratton, CFM, Barr Engineering in Attachment F):
 - Modeling indicates removing the Irving Avenue Bridge and associated abutments does not increase flood elevations for the 2-yr, 10-yr and 100-yr events
 - Modeling indicates filling to 802.6 ft NAVD88 (per the extent shown in Attachment G) to increase cover will not increase flood elevations for the 2-yr, 10-yr and 100-yr events

Updated Model Velocity Table			
Event	Velocity (fps)	Flow Depth (ft)	Flow (cfs)
2-year	7.2	3.4	420.8
10-year	8.6	4.2	683.4
100-year	5.2	7.4	1,400

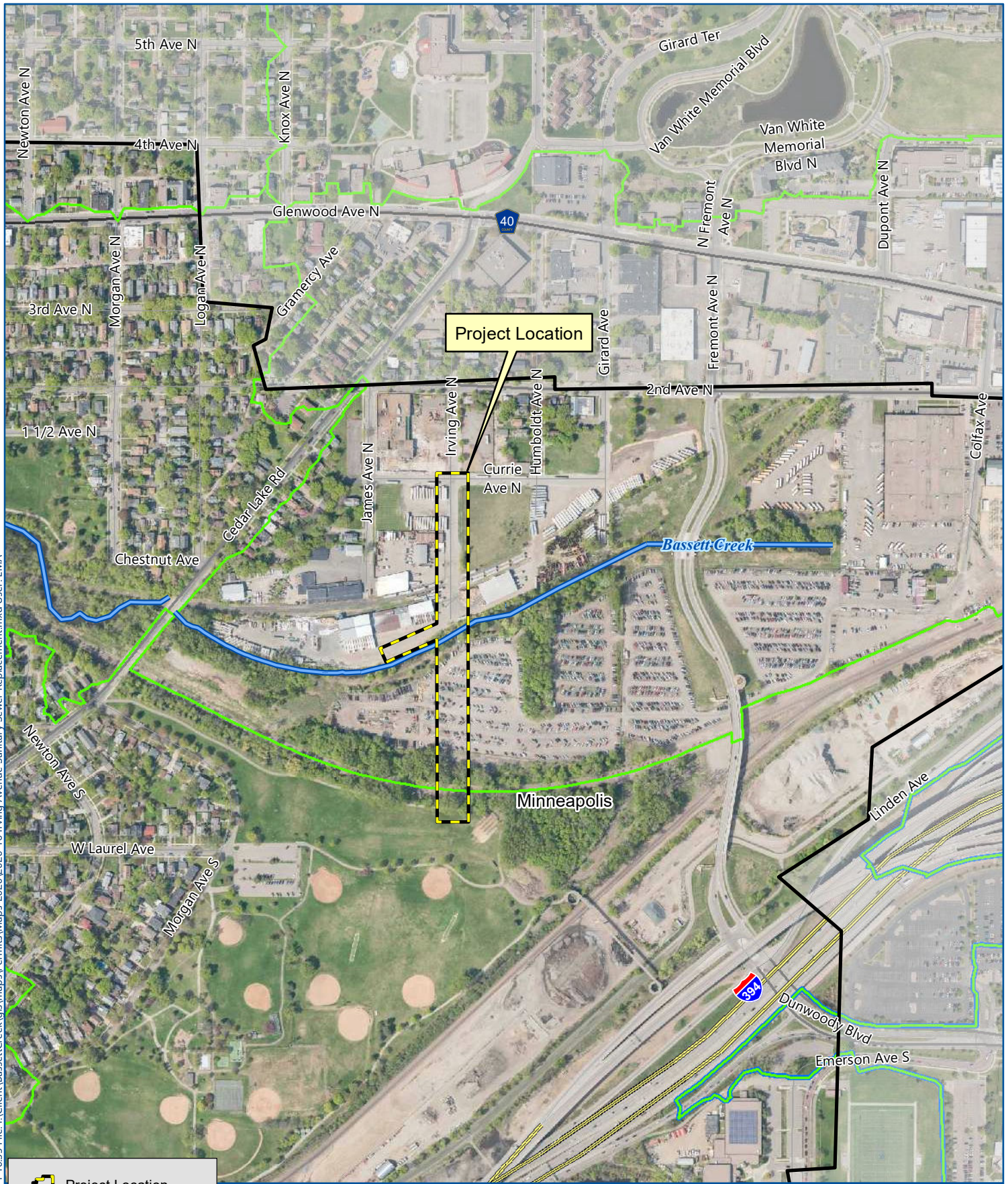
- Modeling indicates a critical velocity of 8.6 ft/s in the project area based on the 10-yr event (which is the critical event)
- Furthermore, and as noted in Item 6 above, a temporary diversion channel will be provided. Should an event occur which would cause the flows to increase beyond the designed channel diversion capacity, the flow will be allowed to overtop the temporary embankments and flow through the work site, i.e. the existing stream bed.







Condition #5: The granting of the variance will not be contrary to the intent of taking all reasonable and practical steps to improve water quality within the watershed.

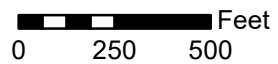
- Although there will be temporary impacts, it is expected the long-term effects of the project will be favorable to the overall water quality in the watershed while considering two main contributing factors:
 - Contaminated soils excavated during construction will be removed and properly disposed of at a regulated landfill. New fill will be brought in.
 - The new ductile iron pipe sewer will provide a more reliable watertight system, preventing infiltration or exfiltration.

Recommendation

- A) Consider approval of the City of Minneapolis' variance to Section 8.3 of the BCWMC Requirements document for the utility crossing requirement of a minimum depth of 4.0 feet below the channel invert with the following condition:
 - The City shall inform the BCWMC of its operations plan to monitor the cover on the pipe and its maintenance procedure if the pipe becomes exposed.
- B) Conditional approval of the project based on the following comments:
 1. Sheet 15: We recommend using Class II riprap for boulder vane bedding material—it is difficult to bed boulders in larger Class III riprap (also for consistency with the City's Main Stem project).
 2. Sheet 43: the limits of where the creek is restored at a 2H:1V cross section (per detail on Sheet 15) must be clarified on the drawings.
 3. Sheet 43: the plans show full-channel riprap at the downstream extents of the construction limits in Bassett Creek. Unless this is needed for a stream crossing during construction or for other design considerations, it is recommended removing the mid-channel riprap and showing only toe protection (both sides) at the downstream end (also for consistency with the City's Main Stem project).
 4. Revised Drawings (paper and final electronic files) and supplemental documentation must be provided to the BCWMC Engineer for final review and approval.
- C) A separate BCWMC application shall be submitted for review of the creek diversion and dewatering plan. The plan must include adequate erosion and scour protection during potential overflow events. The Commission could consider authorizing the Commission Engineer to review and approve the application without bringing the application back to the BCWMC.



-  Project Location
-  Municipality
-  BCWMC Legal Boundary
-  Major Subwatershed
-  BCWMC Hydrologic Boundary
-  Bassett Creek



BCWMC #2020-16
 IRVING AVENUE SANITARY
 SEWER REPLACEMENT
 Minneapolis, MN

LOCATION MAP

July 29, 2020

Bassett Creek Watershed Management Commission
c/o Barr Engineering Co.
Attn: Jim Herbert, P.E.
4300 MarketPointe Drive, Suite 200
Minneapolis, MN 55435-5422

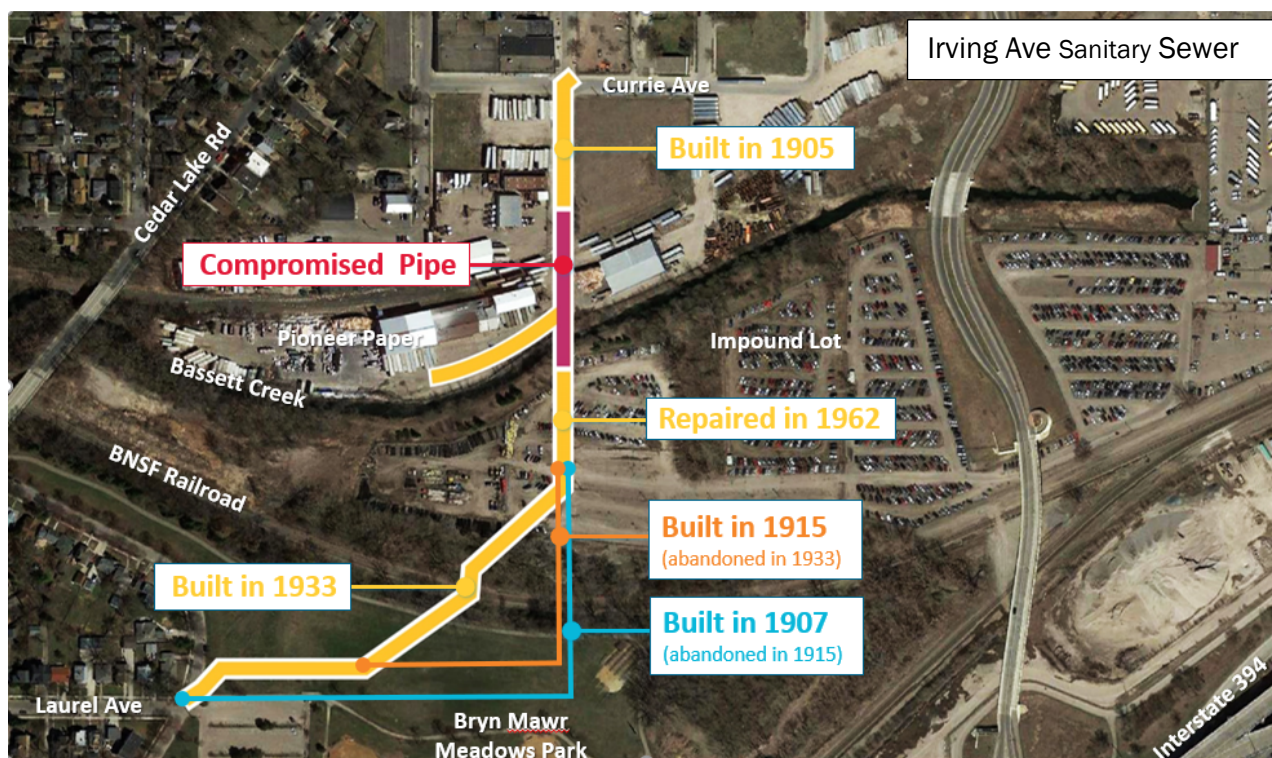
**Subject: Irving Avenue Sanitary Sewer Reconstruction Project – Project Approval and Variance Request
Reconstruction Project, BCWMC #2020-16**

Dear Mr. Herbert:

As we have been discussing over the past few months, the City of Minneapolis (City) Surface Water and Sewers (SWS) Division is seeking a Variance Request and an overall Project Approval from the Bassett Creek Watershed Management Commission (BCWMC) for the reconstruction of the Irving Avenue Sanitary Sewer. This letter summarizes the work to be undertaken in and around Bassett Creek, and proposed measures to mitigate impacts on the creek and overall watershed.

Project Summary

SWS owns and operates an existing 48- and 52-inch equivalent diameter sanitary sewer located within the Irving Ave right-of-way, the Minneapolis Impound Lot and Bryn Mawr Meadows Park. Recent pipe inspections have revealed that at least a portion of the system is compromised in the Creek area (see figure below). Accordingly, the City needs to move forward with the replacement of the pipe as soon as possible. Overall, approximately 2,300 linear feet of sanitary sewer will be replaced, including a 75 linear foot section located under Bassett Creek. The first phase of the project extends from Currie Avenue to the south side of the BNSF right of way. The second phase is in the Bryn Mawr Meadows Park and is scheduled to be constructed as a separate contract in 2022.



A new 24-inch diameter ductile iron pipe will be installed parallel to the existing sanitary sewer pipe along the Irving Avenue right of way corridor and across Bassett Creek, in the location of the existing Irving Avenue Bridge. The new pipe will be installed on piles using open cut construction. The existing 48-inch diameter pipe will continue to convey wastewater until the new pipe is constructed. Once the new pipe is in service, the existing pipe will be abandoned in place with high density controlled low strength material (CLSM).

The following information and attachments summarize the major project components and have been prepared for your review and consideration of this Variance Request and overall Project Approval.

1. Permit Applications – BCWMC, DNR and USACE

The BCWMC Application for Development Proposals was submitted by the City on May 27, 2020 - see Attachment A.

The following Minnesota Department of Natural Resources (DNR) permits are also required for work in and or around the Creek:

1. Work in Public Waters (temporary diversion of the Creek for pipe installation)
2. Water Appropriation (construction dewatering), and
3. License to Cross

The permit applications for Work in Public Waters and Water Appropriation have been submitted to the DNR through their water permitting and reporting system, MPARS, and are currently under review.

We understand through discussions with Mr. Lucas Yougsma of the DNR, that the City's application through the MPARS system also serves as a notification to the United States Army Corps of Engineers (USACE) and that the USACE will contact the City if there are any outstanding issues or further actions are needed. Please note that the USACE has also separately been notified of the project and permit application through the USACE notification system.

2. Irving Avenue Bridge Removal

An existing bridge was constructed across the Creek along Irving Avenue in the 1980's and is no longer maintained or inspected. With the installation of the new pipe within the bridge footprint, the City has elected to remove the bridge as part of this Project. Accordingly, the wooden bridge and abutments will be removed in advance of the new pipe installation. Pictures of the existing bridge deck and abutment are provided below. The Metropolitan Council WOMP station and flow meter (operated by BCWMC) will be relocated and the stairs adjacent to the bridge will be removed. Impacts of the bridge removal on the streambed, streambanks, and floodplain are discussed in Item 6 below.



Irving Ave Bridge Deck



North Bridge Abutment

3. Rate Control

The proposed project will not create any new impervious surfaces. Accordingly, a Rate Control Review is not required.

4. Water Quality

The proposed project will not create any new impervious surfaces. Accordingly, a Water Quality Review is not required.

5. Erosion and Sediment Control

Work in and around Bassett Creek will be performed in accordance with the Stormwater Pollution Prevention Plan (SWPPP) and best management practices (BMP) outlined in Sheets 23 and 24 of the contract documents included in Attachment B. Proposed temporary erosion and sediment control features include rock construction entrances, sediment control logs, silt fence, and catch basin inlet protection. The work site will be protected by redundant erosion control measures as shown in

Sheets 27 and 28, using the details provided on Sheet 24. Proposed permanent erosion and sediment control features include stabilization with seeding, erosion control blanket, and other features within the creek (see Sheets 43 & 44). All erosion and sediment control will be completed per City of Minneapolis and/or MnDOT Specifications. Overall, the proposed project will result in less than one acre of land disturbance.

6. Utility Crossings: Installation of new Sanitary Sewer Pipe

The pipe and pile installation will require the temporary diversion of Bassett Creek. It is proposed a temporary channel be constructed on the south side of the Creek (see Sheet 16 in Attachment B). As presented, the proposed channel will be approximately 225 linear feet in length; its width and depth will be determined by the Contractor based on his/her method of construction. The Contractor will be required to construct watertight embankments both upstream and downstream of the work area. Once the creek area is dry, it is anticipated the work will be completed within sheeting and shoring in the bridge area. If the flows were to become greater than the diversion channel capacity, the flows would overtop the embankment and allowed through the work area.

It is proposed the work be completed during the normally lower flow, i.e. in the winter months, to reduce land use and environmental impacts. Overall, it is anticipated the work within the Creek will take two to three months to complete. To get a better understanding of the diversion requirements and provide information to the bidding contractors, a review of Bassett Creek flows was performed. Twenty years of data collected at the Irving Avenue WOMP station was reviewed. A summary of the Creek flows is provided Attachment C and summarized in a table on Sheet 7 of the contract documents. As noted in the contract documents, the Contractor will be required to submit his/her diversion channel design to the City and BCWMC for review and approval prior to installation (see Sheet 7: WORK WITHIN BASSETT CREEK).

7. Contamination – Soils and Groundwater

A Phase 2 Environmental Site Assessment (ESA) conducted during design revealed that groundwater and soil contamination were present in the project area. Accordingly, excavation, removal and disposal of contaminated soils will be managed in accordance with the Phase 2 Investigation Report and Response Action Plan (RAP) prepared by Barr Engineering (see Attachment D). Highlights of the project regulatory requirements, including RAP requirements is provided on Sheet 7, REGULATORY REQUIREMENTS GENERAL NOTES.

8. Variance Request: Depth of Cover under Creek

A variance from BCWMC is requested due to lack of available pipe cover. Below are responses to the conditions outlined in Section 3.3.3 of the BCWMC Requirements for Improvements and Development Proposals and additional information requested:

Condition #1: There are special circumstances or conditions affecting the property such that the strict application of the provisions of these standards and criteria would deprive the applicant of the reasonable use of the applicant's land.

- The City has carefully evaluated lowering the crown of the new 24-inch diameter pipe to increase the cover at the crossing. Due to project limitation, sewershed challenges such as flat slopes and future improvements needed to the MCES Interceptor 1-MN-320 at Currie and Irving, it is deemed necessary to install the pipe at the proposed invert elevation. The proposed pipe crown is set at an elevation closely matching the crown of the existing sewer at the intersection of Irving and Currie Avenue. This approach will provide flexibility for the sewershed alternatives development in the future. Please see justification provided on July 24, 2020, included in Attachment E.

Condition #2: The variance is necessary for the preservation and enjoyment of a substantial property right of the applicant.

- The City of Minneapolis is committed to providing reliable and sustainable sanitary sewer service to its residents. As such, the City evaluated several options for the reconstruction of the sewer. Eight alternatives were developed in advance of the design development; four lift station options and four gravity options following different alignments in the area were considered. Through that evaluation, it was determined that the reconstruction of the sanitary in its current location was that the most efficient and reliable way to provide service to the project area.

Condition #3: The granting of the variance will not be detrimental to the public welfare or injurious to the other property in the territory in which the property is situated.

- Although temporary excavation is required in the Creek, the new sewer will not alter any conditions with the stream or floodplain (please see Condition #4 for further details). Where feasible, bank grading will be more gradual in the area of the bridge removal and provide a 2H:1V slope once construction is complete (see Sheet 43 for bank restoration.)

Condition #4: In applications relating to a use in the 1% (base flood elevation, 100-year flood) floodplain set forth in Table 2-9 of the Watershed Management Plan, the variance shall not allow a lower degree of flood protection than the current flood protection.

- The City contracted with Barr Engineering to perform the analysis needed to confirm that the bridge removal would not adversely impact the water surface elevations for Bassett Creek for the 2-, 10-, and 100-year 24-hour storm events. Findings from the additional modeling activities performed utilizing the existing BCWMC XP-SWMM model and concluded the following (see email from Sarah Stratton, CFM, Barr Engineering in Attachment F):
 - Modeling indicates removing the Irving Avenue Bridge and associated abutments does not increase flood elevations for the 2-yr, 10-yr and 100-yr events
 - Modeling indicates filling to 802.6 ft NAVD88 (per the extent shown in Attachment G) to increase cover will not increase flood elevations for the 2-yr, 10-yr and 100-yr events
 - Modeling indicates a critical velocity of 8.6 ft/s in the project area based on the 10-yr event (which is the critical event)

Updated Model Velocity Table			
Event	Velocity (fps)	Flow Depth (ft)	Flow (cfs)
2-year	7.2	3.4	420.8
10-year	8.6	4.2	683.4
100-year	5.2	7.4	1,400

- Furthermore, and as noted in Item 6 above, a temporary diversion channel will be provided. Should an event occur which would cause the flows to increase beyond the designed channel diversion capacity, the flow will be allowed to overtop the temporary embankments and flow through the work site, i.e. the existing stream bed.

Condition #5: The granting of the variance will not be contrary to the intent of taking all reasonable and practical steps to improve water quality within the watershed.

- Although there will be temporary impacts, it is expected the long-term effects of the project will be favorable to the overall water quality in the watershed while considering two main contributing factors:
 - Contaminated soils excavated during construction will be removed and properly disposed of at a regulated landfill. New fill will be brought in.
 - The new ductile iron pipe sewer will provide a more reliable watertight system, preventing infiltration or exfiltration.

Scour Evaluation at the Pipe Crossing

The City has evaluated the potential for scour at the Creek Crossing using HEC-23. This methodology is an industry standard for the protection of embankments, streambanks and streambeds. The calculations were performed using the velocity, depth and flow extracted from the XP-SWMMM model and included in the table above. Side slopes at 1.75 horizontal to 1.0 vertical (conservative) and a factor of safety of 1.2 were assumed. Results from the analysis (presented in Attachment H), show that a 12-inch minimum blanket thickness using a D₅₀ riprap of 0.65-foot (7.8-inches, equivalent to a Class III riprap) is required to meet the critical event requirements.

Per the details on Sheet 15 of the contract documents, a minimum of 18-inches of riprap is specified. This thickness was specified to be consistent with the existing USACE as-built information (see Attachment I for USACE as-built drawings).

Based on the results, the 29-inches of cover available above the proposed pipe will be sufficient to accommodate the required pipe bedding as well as the riprap blanket thickness. Final thicknesses will be established once a detailed survey is completed. This information will be provided to BCWMC for review.

Additionally, the proposed sanitary sewer will be constructed of ductile iron pipe, supported on a steel pipe pile cap. Some of the advantages of ductile iron over other sanitary sewer pipe materials, such as HDPE, PVC, HOBAS, or others, include its overall impact resistance, abrasion resistance, and low-temperature impact resistance. The pipe is also strapped to a pile cap to prevent lateral and vertical movement of the pipe in the event channel materials were to erode and expose the pipe over time.

Bassett Creek Restoration

Restoration plans are provided on Sheets 43-46 in Attachment B. Generally, the disturbed areas will be restored to pre-existing conditions. Details from the Bassett Creek Main Stem Stabilization Project were used for the restoration of the streambed and streambanks.

1. Creek Topography: Contract documents require that a detailed Creek survey be conducted by the Contractor to document the existing Creek topography and allow restoration to its original condition. Specifications require that points be collected in a 3-foot by 3-foot grid, along with breaklines and any other changes in the topography.
2. Sheet Pile Weir: An existing sheet pile weir, located downstream of the existing sanitary sewer pipe, was installed in the Creek bed in 1990 by the USACE. The Creek survey prepared by Barr Engineering for the Bassett Creek Main STEM Stabilization Project indicates that the sheet pile is located approximately 35 feet downstream of the existing pipe, and not 20 feet downstream as depicted in the USACE as-built information. The sheet pile weir is depicted on Sheets 16, 27, 31, 37, 43 and 44. The sheet pile will be removed as needed for construction. If removed, the sheet pile will be reinstalled in its existing location; relocating the sheet pile further downstream would place the weir immediately downstream of the storm culvert outlet discharging on the north side of the creek, which may introduce turbulence upstream of the sheet pile and may negate the sheet pile's intent which is presumed be to protect the sanitary pipe.
3. Riprap at Bridge Area: Both the existing and proposed Creek cross-section within the project area are depicted on Sheet 15 (refer to Sheet 55 in Attachment I for the existing USACE as-built information). The existing and proposed cross-sections are consistent with one another and will allow riprap to be blended.
4. Riprap Toe Protection: Toe protection is shown on both sides of the Creek at the bridge removal and pipe crossing location (open cut area). However, because there are no impacts anticipated on the north banks from the construction of the diversion channel, restoration of the north banks outside of the open cut area is not anticipated (banks will remain untouched). The riprap toe protection is shown as 18-inch in depth to be consistent with existing conditions.
5. Streambanks: The banks will be restored to existing conditions, except on the south side of the bridge area where it is assumed that the banks will be restored at a more gradual slope of 2 Horiz: 1 Vert slope. This revision was discussed with Sarah Stratton of Barr, and is consistent with the revised model assumption.
6. Cross-vanes: Two cross-vanes are proposed along the channel (see Sheet 43). Final location of the cross-vanes will be coordinated with BCWMC during construction.
7. Wetland buffer: The 50-foot wetland buffer area from the edge of the Bassett Creek wetland boundary has been identified in the Wetland Buffer Exhibit (Attachment J). Areas within the buffer will be restored using the Riparian Seed Mix provided on Sheet 15.

Project Schedule

The project is currently advertised for public bidding. The City will open bids on August 17 and anticipates issuing a notice to proceed (NTP) in October, to allow for a Contractor mobilization in November 2020. Construction for the Bassett Creek crossing will start immediately thereafter to allow for construction to occur during the winter low-flow period of 2020-2021. It is anticipated, overall project construction will carry through December 2021.

We appreciate your time reviewing the attached information and are available to review with you at your earliest convenience.

Please do not hesitate to contact me if you have questions or comments. I can be reached at 612-919-4243 or Kelly.MacIntyre@minneapolismn.gov.

Sincerely,

Kelly MacIntyre, Project Manager
Professional Engineer – Public Works, Surface Water & Sewers

cc: Laura Jester, BCWMC Administrator
Elizabeth Stout, City of Minneapolis
Julie E Benadum, Brown and Caldwell

Attachments (10)

1. Attachment A: Bassett Creek Watershed Management Commission Permit Application
2. Attachment B: Preliminary Contract Drawings
3. Attachment C: Bassett Creek Flow Summary
4. Attachment D: Investigation Report and Response Action Plan (RAP)
5. Attachment E: Variance Justification and Exhibits
6. Attachment F: Modeling Results
7. Attachment G: Proposed Creek Bed Profile above the Proposed Pipe
8. Attachment H: HEC-23 Results
9. Attachment I: USACE Bassett Creek As-Builts Extracts
10. Attachment J: Wetland Buffer Exhibit



Bassett Creek Watershed Management Commission

MEMO

To: BCWMC Commissioners and Alternate Commissioners
From: Laura Jester, Administrator
Date: August 12, 2020

RE: Item 5C: Consider Adopting Minor Watershed Plan Amendment

BACKGROUND:

The proposed minor plan amendment for Commission consideration of approval includes the following components:

1. Capital Improvement Program Additions
 - Crane Lake Chloride Reduction Demonstration Project at Ridgedale Mall (CL-4)
 - Plymouth Creek Restoration Project Old Rockford Rd. to Vicksburg Ln. (2026-CRP)
 - Cost Sharing the Purchase of High Efficiency Street Sweeper (ML-23)

2. Revisions to Section [4.2.6 Wetland Management Policies](#)

After discussion at the February and April Commission meetings (as discussed later in this memo), the Commission approved the addition of the three projects to the CIP. However, the proposed changes to the wetland management policies were not fully discussed. To confuse matters, there were, unfortunately, two different versions of the proposed changes to wetland management policies presented to the Commission over the last few months. I apologize for this oversight and possible confusion!

This memo presents the proposed minor plan amendment story chronologically:

February Commission meeting: The meeting agenda included the following two items:

6B. Consider Approval of the Technical Advisory Committee Recommendations:

- i. Water Monitoring Program
- ii. 5-year Capital Improvement Program

6C. Set Public Hearing for Minor Plan Amendment

The Commission tabled and did not discuss Item 6C due to the Commission's request for more information on the TAC's recommendation to add a project to the CIP for the cost share of the Plymouth street sweeper. In the meeting packet, the part of the plan amendment related to proposed changes to wetland management policies in the Watershed Management Plan including the following language for Policy 66:

Policy 66. *The BCWMC requires member cities to develop and implement wetland protection ordinances that consider the results of wetland functions and values assessments, and are based on comprehensive wetland management plans, if available. For wetlands classified as Preserve or Manage 1 (or comparable*

classification if BWSR's Minnesota Rapid Assessment Method (MnRAM) is not used), member cities shall implementare encouraged to develop standards for bounce, inundation, and runout control that are similar to BWSR guidanceMnRAM; member cities are encouraged to apply standards for other wetland classifications.

The changes to Policy 66 were proposed by staff to 1) update the text because the MnRAM is no longer supported by BWSR; and 2) allow flexibility in the implementation of certain wetland standards.

March Commission meeting: The meeting agenda was significantly scaled back due to the last-minute switch from an in-person meeting to a conference call in response to the pandemic. The only business agenda item was to set the public hearing for the minor plan amendment, acknowledging that there would be further discussion about the CIP additions. However, likely due to the meeting format, there was no discussion about the proposed changes to wetland management policies. In the meeting materials for that meeting, my memo on the plan amendment included the following language for the proposed changes to wetland management policy 66:

Policy 66. *The BCWMC requires member cities to develop and implement wetland protection ordinances that consider the results of wetland functions and values assessments, and are based on comprehensive wetland management plans, if available. For wetlands classified as Preserve or Manage 1 (or comparable classification if BWSR's Minnesota Rapid Assessment Method (MnRAM) is not used), member cities shall implement standards for bounce, inundation, and runout control that are similar to BWSR guidanceMnRAM; member cities are encouraged to apply standards for other wetland classifications.*

If you read carefully, you'll note that while the February language proposes to change the policy from requiring to encouraging that cities implement certain standards, the language in March keeps the original requirement for cities. The change in language between the February and March meetings was in response to concerns voiced by some commissioners about the relaxation of requirements for wetland protection.

April Commission meeting: The Commission returned to the discussion from February regarding the TAC's recommended 5-year CIP and approved the addition of the Plymouth street sweeper cost share project.

With that Commission action, the pieces were in place for me to submit a minor plan amendment for its formal 30-day review. In late April, the BCWMC officially submitted a proposed minor plan amendment to the member cities, Hennepin County, the Metropolitan Council, and state review agencies. The amendment proposed to add three projects to the Commission's 10-year Capital Improvement Program (see below) and to update some wetland protection policies. Unfortunately, I inadvertently submitted the wetland policy language from the February meeting rather than the language from the March meeting materials. The complete proposed revisions submitted for review by agencies and cities are shown below.

Capital Improvement Program Additions

- Crane Lake Chloride Reduction Demonstration Project at Ridgedale Mall (CL-4)
- Plymouth Creek Restoration Project Old Rockford Rd. to Vicksburg Ln. (2026-CRP)
- Cost Sharing the Purchase of High Efficiency Street Sweeper (ML-23)

Revisions to Section 4.2.6 Wetland Management Policies

Policy 65. The BCWMC requires member cities to inventory, classify and determine the functions and values of wetlands, either through a comprehensive wetland management plan or as required by the Wetland Conservation Act (WCA).

Member cities shall maintain a database of wetland functions and values assessment results. The BCWMC encourages member cities to complete comprehensive wetland management plans as part of their local water management plan or as an implementation task identified in their local water management plan. Completed comprehensive wetland management plans shall be submitted to the BCWMC for review and comment.

Policy 66. The BCWMC requires member cities to develop and implement wetland protection ordinances that consider the results of wetland functions and values assessments, and are based on comprehensive wetland management plans, if available. For wetlands classified as Preserve or Manage 1 (or comparable classification if BWSR's Minnesota Rapid Assessment Method (MnRAM) is not used), member cities ~~shall implement~~ are encouraged to develop standards for bounce, inundation, and runout control that are similar to ~~BWSR guidance~~ MnRAM; member cities are encouraged to apply standards for other wetland classifications.

Policy 67. The BCWMC ~~adopts~~ recommends that cities use the Minnesota Rapid Assessment Method (MnRAM) (or similar) as the wetland assessment method and ~~the~~ wetland management classification system. Member cities are encouraged to use MnRAM such a method for all wetland assessment and classification, but are not required to perform reassessments ~~using the MnRAM~~ for wetlands already assessed.

Policy 68. Member cities shall maintain and enforce buffer requirements for projects containing more than one acre of new or redeveloped impervious area. Average minimum buffer widths are required according to the MnRAM classification (or similar classification system):

- An average of 75 feet and minimum of 50 feet from the edge of wetlands classified as Preserve (or comparable classification if BWSR's MnRAM is not used)
- An average of 50 feet and minimum of 30 feet from the edge of wetlands classified as Manage 1 (or comparable classification if BWSR's MnRAM is not used)
- An average of 25 feet and minimum of 15 feet from the edge of wetlands classified as Manage 2 or 3. (or comparable classification if BWSR's MnRAM is not used)

Allowable land uses and vegetative criteria for buffers are specified in the BCWMC's Requirements for Development and Redevelopment (BCWMC, 2015, as amended). Member cities may allow exemptions for public recreational facilities parallel to the shoreline (e.g. trails) up to 20 feet in width, with that width being added to the required buffer width.

Policy 72. The BCWMC requires that member cities annually inspect wetlands classified as Preserve (or comparable classification if MnRAM not used) for terrestrial and emergent aquatic invasive vegetation, such as buckthorn and purple loosestrife, and attempt to control or treat invasive species, where feasible.

COMMENTS ON PLAN AMENDMENT:

On May 21, 2020, the BCWMC held a public hearing regarding the minor plan amendment. No comments were received during the public hearing.

The Minnesota Board of Water and Soil Resources and the Department of Agriculture indicated they had no comments on the proposed minor plan amendment.

The Metropolitan Council indicated the three CIP projects are consistent with goals of the Watershed Management Plan and with Met Council policies, and that they have no substantive comments. The Met Council went on to note its interest in the Crane Lake Chloride Reduction Demonstration Project at Ridgedale Mall and requested early and active consultation with the Met Council to allow for adequate guidance from the Met Council. (See Met Council comment letter attached.)

The Hennepin County Board of Commissioners approved the minor plan amendment at their meeting on August 11th.

CONSIDER ADOPTING MINOR PLAN AMENDMENT:

At today's meeting, the Commission should discuss the two versions of the wetland management policy revisions and consider adopting a minor plan amendment. One option is for the Commission to adopt only part of the plan amendment (such as the addition of the three CIP projects) and to leave the current wetland management policies in place without any changes. Alternatively, the Commission could adopt the plan amendment with both the additions to the CIP projects, and either version of the wetland management policy revisions.

May 29, 2020

Laura Jester, Administrator
Bassett Creek Watershed Management Commission
c/o 16145 Hillcrest Lane
Eden Prairie MN 55346

RE: Bassett Creek Watershed Management Commission (BCWMC) Minor Plan Amendment
(Metropolitan Council Review File no. 21306-3)

Dear Ms. Jester:

The Metropolitan Council (Council) has completed its review of the proposed BCWMC minor amendment to its 2015 Watershed Management Plan (Plan). The amendment consists of minor, primarily wording changes to the Wetland Management Policy to ensure the policy is consistent with current state guidance, as well modifications and additions to the BCWMC 10-year Capital Improvement Program (CIP). The three added projects are consistent with the goals of the Plan and we support BCWMC's interest in supporting new projects that reflect the current needs of member communities. The proposed changes are consistent with Council policies and the 2040 Water Resources Policy Plan and we have no substantive comments.

We do want to note our specific interest in project CL-4: Crane Lake Chloride Reduction Demonstration Project at Ridgedale Mall. The Council has previously engaged in communication with the City of Minnetonka about innovative ways to reduce chloride entering Crane Lake and Bassett Creek. The fact sheet for this project specifically notes the City and BCWMC intend to continue dialogue with the Council about chloride contamination removal options in that watershed. We ask BCWMC to work with the City to ensure we are actively consulted on this project from an early date, allowing input and guidance from the Council to be included early in the process. It may be appropriate to convene a technical advisory committee around this project in which Council staff would willingly participant.

Thank you for the opportunity to comment on this plan amendment. If you would like to discuss items addressed in this letter, please contact Emily Resseger at 651-373-2999.

Sincerely,


for Judy Sventek

Judy Sventek
Manager, MCES, Water Resources Section

cc: Steve Christopher, Board of Water and Soil Resources
Judy Johnson, Metropolitan Council District 1
Christopher Ferguson, Metropolitan Council District 3
Lynnea Atlas-Ingebretson, Metropolitan Council District 6
Robert Lilligren, Metropolitan Council District 7
Freya Thamman and Michael Larson, Metropolitan Council Sector Representatives
Raya Esmaeili, Metropolitan Council Reviews Coordinator
Emily Resseger, Water Resources Section



Memorandum

To: Bassett Creek Watershed Management Commission
From: Barr Engineering Co.
Subject: Item 5D– Consider Approval of Proposal to Prepare Feasibility Study for the Medicine Lake Road and Winnetka Avenue Area Long Term Flood Mitigation Plan Project: DeCola Ponds - SEA School/Wildwood Park Flood Storage Project (2022 CIP Project BC-2, 3, 8, 10)
BCWMC August 20, 2020 Meeting Agenda
Date: August 12, 2020

5D. Consider Approval of Proposal to Prepare Feasibility Study for the Medicine Lake Road and Winnetka Avenue Area Long Term Flood Mitigation Plan Project: DeCola Ponds - SEA School/Wildwood Park Flood Storage Project (2022 CIP Project BC-2, 3, 8, 10)

Recommendations:

1. Consider approving the scope of work and \$75,300 budget presented in this memorandum and direct the BCWMC Engineer to complete the feasibility study for the DeCola Ponds - SEA School-Wildwood Park Flood Storage Project (2022 CIP Project BC- 2, 3, 8, 10), scheduled for construction in 2022 and 2023.
2. Direct the BCWMC Engineer to consult with the U.S. Army Corps of Engineers (USACE) to determine whether the Resources Management Plan Pre-application Consultation Protocols may apply for this project.
3. Direct the BCWMC Engineer to prepare a feasibility study that complies with the requirements of the USACE and BCWMC criteria.

Background

The Medicine Lake Road and Winnetka Avenue Area Long Term Flood Mitigation (MLRWA) Plan, completed in partnership by the Cities of Golden Valley, New Hope, and Crystal, identified multiple projects estimated at more than \$22M that are needed to help alleviate flooding at the low point on Medicine Lake Road and adjacent properties just east of Winnetka Avenue, and downstream at DeCola Ponds. The implementation of projects identified in the MLRWA Plan is included in the BCWMC's current CIP as BC-2, 3, 8, 10 in Table 5-3, as amended in 2018.

The DeCola Ponds - SEA School/Wildwood Park Flood Storage Project is the second project from the MLRWA Plan included in the BCWMC's CIP. (The official name in the CIP for this portion of the MLRWA Plan is "DeCola Pond F Flood Storage and Diversion Project + SEA School Flood Storage Project. However,

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the project title here “DeCola Ponds-SEA School/Wildwood Park Flood Storage Project” is more descriptive and will be used from here on.) The first project—the DeCola Ponds B & C Improvement Project—was completed in summer 2020 and provides expanded flood storage and water quality treatment volume in the Medicine Lake Road and DeCola Ponds B & C area (see Figure 1). The DeCola Ponds - SEA School-Wildwood Park Flood Storage Project is slated for implementation in 2022-2023 at an estimated BCWMC cost of \$1,300,000 (the planning level estimate for the total project is \$2,700,000, with additional funding coming from state of Minnesota Flood Damage Reduction Grant funds). Access to the Minnesota Flood Damage Reduction Grant funds for final design and construction is contingent on the passing of the state bonding bill. At this time, the Minnesota state legislature has not passed the bonding bill and it is estimated that the next opportunity for it to pass is in mid to late September. From the city’s standpoint, continuing work toward project feasibility and readiness is important; however, if the bonding bill does not pass at the session in September, it may be delayed until a session in 2021 and a discussion on if this potential delay in funding could impact the schedule for final design and construction. Depending on final cost estimates and other factors, there may be an opportunity to supplement these funds with additional funding from Hennepin County’s contribution to the long-term flood mitigation projects and the City of Golden Valley’s capital improvement program, if available. However, the availability of these additional funding sources will not be known until late 2020/early 2021.

The BCWMC’s DeCola Ponds - SEA School/Wildwood Park Flood Storage Project builds on the DeCola Ponds B & C Improvement Project and the City of Golden Valley’s project that developed flood storage and conveyance on the Liberty Crossing development site on the west side of Rhode Island Avenue.

The DeCola Ponds - SEA School/Wildwood Park Flood Storage Project area is shown on Figure 1. The proposed project will develop flood storage volumes within the project area, potentially allow for some diversion of flows away from DeCola Ponds E & F, and improve water quality of runoff from the nearby watersheds. Discharge from this area drains through Honeywell Pond and ultimately drains to the mainstem of Bassett Creek. The project will also consider modifications to the DeCola Pond D outlet to reduce flood elevations around the pond. Many of the homes around DeCola Ponds D, E, and F have experienced flooding in the past and have been identified to be at-risk of flooding.

The proposed project area is located within Wildwood Park (owned by the City of Golden Valley) and the School of Engineering and Arts (SEA school; owned by the Robbinsdale Area Schools). There are no mapped Minnesota Department of Natural Resources (MnDNR) public waters or wetlands on these properties. Additionally, the project area includes the alignment along the DeCola Pond D outlet pipes. DeCola Ponds D, E, & F are constructed ponds created when the area was developed in the 1960’s and are not mapped as MnDNR public waters. However, these ponds are mapped as wetlands as part of the National Wetlands Inventory (NWI). The proposed project would also improve ecology and wildlife habitat, enhance active and passive recreation opportunities, and provide educational opportunities.

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As is required for BCWMC CIP Projects, a feasibility study must be completed prior to BCWMC holding a hearing and ordering the project. The feasibility study will develop conceptual designs of the project, review the permitting requirements, and develop concept plans and cost estimates for the project. The City of Golden Valley is in the process of completing a planning level analysis and conducting initial outreach with project stakeholders, including Robbinsdale Area Schools, various commissions and departments within the City of Golden Valley, and the public. This preliminary input will be considered as part of this feasibility study. For more information, see the City of Golden Valley website (<https://www.goldenvalleymn.gov/stormwater/projects/2020/sea-school.php>).

This project is consistent with the goals (Section 4.1) and policies (Sections 4.2.1, 4.2.2, 4.2.8, 4.2.9, and 4.2.10) in the 2015 – 2025 BCWMC Watershed Management Plan.

The BCWMC completed a Resource Management Plan (RMP) in 2009 through which the USACE and the BCWMC agreed on a series of steps, work items, deliverables (called “protocols”) that must be accomplished and submitted to complete the RMP process and USACE review/approval process. Although this project was not included in the RMP, the USACE has allowed the RMP protocols to be applied to other projects not specifically included in the RMP. With the completion of the protocols, we expect the USACE application process to move more quickly than it would otherwise. Most of the protocols must be addressed as part of the feasibility study, in addition to the usual tasks that would be performed as part of a BCWMC feasibility study. In general, the protocols require compliance with Section 106 of the National Historic Preservation Act, compliance with Section 404 of the Clean Water Act, and Clean Water Act Section 401 Water Quality Certification. Compliance with Section 106 typically requires a cultural resources inventory.

Content and Scope of Feasibility Study

The feasibility study will address and include the feasibility study criteria adopted by the BCWMC in October 2013:

- Analysis of multiple alternatives within the context of Commission objectives, including the following for each alternative:
 - Pros and cons analysis
 - Cost estimate for construction and a “30-year cost”
 - Analysis of life expectancy
 - Summary of each alternative for the Commission to judge its merits
 - Cost estimate for annualized cost per pound of pollutant removal
- Evaluation of new and/or innovative approaches
- Identification of permitting requirements

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The BCWMC developed the above criteria when the BCWMC’s CIP was limited to water quality improvement projects, so they do not specifically address flood mitigation aspects of CIP projects.

Therefore, in addition to the criteria above, the following will also be analyzed as part of each alternative:

Evaluate the flood reduction benefits of each alternative, including acre-feet of additional flood storage provided, lowering of 2, 10, 50, and 100-yr flood elevations at key locations, and quantification of homes and other structures and infrastructure impacted (e.g., homes/households no longer within 1% annual chance floodplain, reduced inundation depth at adjacent roadways, etc.

As noted earlier, most of the RMP protocols must be addressed as part of the feasibility study. In addition to the tasks above, the feasibility study will include the identification of wetland impacts, and desktop reviews of threatened and endangered species and cultural resources to meet the RMP pre-application protocols.

In addition to the RMP protocols and specific criteria adopted by the BCMWC, it is important to gather stakeholder input. The BCWMC Engineer will work with the BCWMC Administrator and City of Golden Valley staff to identify the most-effective means to gather input from the public and other affected stakeholders. As previously mentioned, City staff have already started to inform stakeholders about the project and gather input.

Below is a summary of the work scope components for this feasibility study:

1) Project Meetings

- a) Project kick-off meeting with BCWMC staff, BCWMC commissioners representing Golden Valley, Golden Valley staff, and Robbinsdale Area Schools staff, and preparation of meeting notes.
- b) Technical Stakeholder meeting with staff from BCWMC , Golden Valley, Robbinsdale Area Schools, USACE, MnDNR, and MPCA to discuss concept alternatives and review permit requirements for project and prepare meeting minutes to confirm regulatory agencies’ discussion results.
- c) Up to two (2) additional meetings with City staff and Robbinsdale Area Schools staff

2) Field Investigations

- a) Environmental Investigations—A review of the Minnesota Pollution Control Agency’s (MPCA) “What’s in my Neighborhood?” database indicated the presence of an inactive petroleum leak site and an active underground fuel tank on SEA School property. Review of aerial photos of the site indicate that portions of the site were low land that was filled prior to the construction of the school and park. Although there may be some debris in the fill, we do not anticipate widespread contamination resulting from this site that would impact the proposed project. As part of this feasibility project, we will request and review the information in the MPCA’s file for this site. We assume that after review of the MPCA file and historic photos, a Phase I environmental site assessment will not need to be completed for this project. However, based on the observations of

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fill from the DeCola Ponds B & C improvement project, we can assume a similar percentage of the filled areas may require landfill disposal when developing the planning level cost estimates. Additionally, a contingency plan should be prepared during final design in case contamination is encountered during construction.

- b) Wetland delineations—Barr will perform a wetland delineation along the south edge of DeCola Pond D near the existing outlet structure, and the north and south shores of DeCola Pond E, where storm sewer infrastructure may be modified. We assume city staff will obtain permission for access from adjacent property owners around Ponds D and E to complete this work. We will also review the project area within SEA School and Wildwood Park properties but do not anticipate any wetlands in these areas. We will perform the field wetland delineation in accordance with the Routine Level 2 procedures specified in the USACE’s 1987 Wetland Delineation Manual (“1987 Manual”, USACE, 1987), the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (USACE, 2010), and the 2013 Guidance for Submittal of Wetland Delineation Reports to the USACE and WCA LGUs in MN. We will identify/flag and record wetland boundaries using a GPS unit with sub-meter accuracy. We will develop a wetland delineation report that includes the wetland type classifications and descriptions of the delineated wetlands, a brief description of the proposed project, general environmental information, and a discussion of regulations and the administering authorities. The report will also include wetland data forms, precipitation analysis, and site photographs. Barr also will obtain a Wetland Type and Boundary Approval from the Local Government Unit (LGU). Our cost estimate includes a wetland functions and values assessment (i.e., a Minnesota Rapid Assessment Method, or MNRAM, analysis) of DeCola Ponds D and E. This effort will include review by the Technical Evaluation Panel (TEP) for concurrence on the delineation boundary.
- c) Topographic and utility location survey—We will complete a topographic and utility location survey for the project area including Wildwood Park, the northern portion of the SEA School property, and the adjacent roadways, including Pennsylvania Avenue N, Duluth Street, and Kelly Drive, and infrastructure along Duluth Street from Pennsylvania Avenue to Maryland Avenue, including the discharge to DeCola Pond E. The survey will also include the Pond D outlet structure and utilities within Winnetka Heights Drive. Storm sewer infrastructure will include survey of location, and pipe inverts, diameters, and materials. We assume city staff will obtain permission for access from adjacent property owners around Ponds D and E to complete this work. Underground utilities will be located based on the location of manhole structures in the field, as-built/construction plan drawings from the City, and utilization of a Gopher State One Call utility locate. We will conduct the survey in NAVD88 and use available City of Golden Valley benchmarks.

- d) Tree location, diameter, species, and condition survey—During the topographic survey, we will also survey all trees with a diameter of 4 inches or greater, recording the diameter, species, and condition (e.g. dead/live, shaggy/peeling/deeply furrowed bark) of the trees, working closely with the City of Golden Valley foresters. Focus will be on survey of trees within the northern portion of the school property, Wildwood Park, along the storm sewer connection from Duluth Street to DeCola Pond E, and along the DeCola Pond D outlet alignment. During an early planning effort conducted by the City, the public indicated they valued the wooded knoll in the NE corner of the park, so feasibility concepts will preserve this space. The tree survey will focus on trees around the expected disturbed elevation, including a 10-20 foot buffer beyond. In addition to helping with estimated project costs, the tree survey will help determine if the trees within the project area could provide habitat for the northern long eared bat (endangered). Consideration will be given to replace trees along portions of the project area where feasible.
- e) Threatened and endangered species desktop review—Barr will perform a desktop review of the available databases to determine the potential for adverse impacts to state and federally listed species.
- f) Cultural resources desktop review—Barr will request review of the existing database from the State Historic Preservation Office (SHPO) for information related to known historic and archaeological resources in the project vicinity and will summarize any available information in the feasibility report.
- g) Project easements—The majority of the proposed project is located on public property, within right-of-way, or within existing drainage and utility easements, so no additional easement acquisition is anticipated for work within Wildwood Park, and at the storm sewer discharge into DeCola Pond E. However, the DeCola Pond D outlet pipe does not appear to be within the platted easement so a construction easement may be needed to modify this pipe. Additionally, if the proposed feasibility project concepts extend to the south onto the SEA School property, easements would be required from Robbinsdale Area Schools. This will be identified as part of the feasibility study.

3) Evaluation and Concept Plans

- a) Develop up to 3 concepts for the expansion of flood storage at the SEA School and Wildwood Park. These concepts will also include modifications to the Pond D outlet system to lower flood elevations on DeCola Pond D.
- b) Use the BCWMC Phase 2 XP-SWMM (as modified to reflect the DeCola Ponds B & C improvement project final design) and P8 model (as modified to reflect the DeCola Ponds B & C improvement project final design) to estimate impacts to peak flood elevations and pollutant removals, respectively, as a result of the project concepts.

- c) Identify permitting requirements for the concepts, based on wetland delineations and other compiled data, and one (1) meeting with agency staff (see task 1b).
- d) Develop cost estimates for the project, including a “30-year cost,” analysis of life expectancy, and annualized cost per pound of pollutant removal for the water quality treatment portion of the project.
- e) Evaluate the flood reduction benefits of the project, including acre-feet of additional flood storage provided, lowering of flood elevations at key locations, and impact on homes in the floodplain (e.g., homes removed from the floodplain, reduced inundation depth at adjacent roadways).
- f) Develop tree removal estimates for each concept, including removals needed for construction access to implement each concept.

4) Public Engagement

- a) Coordinate with BCWMC Administrator and City staff to determine best means to gather public input, such as mailings, newspaper articles, open houses, online input, etc. The primary group for public discussions will be the nearby residents and property owners, including residents living around the DeCola Ponds, Wildwood Park, SEA School, and park users. The budget for this task includes time to prepare for and attend one public meeting, after development of the concept plans. As COVID-19 restrictions may still be in place at that time, virtual engagement platforms will be used. We assume that meeting coordination, will be largely completed by the BCWMC Administrator in close collaboration with the City.
- b) Assist with public involvement process as necessary – prepare handouts, boards, presentations, and/or other visuals, and record and compile comments.

5) Feasibility Report

- a) Prepare draft report for review by City staff, BCWMC staff/interested commissioners, and Robbinsdale Area School representatives; revise report based upon review comments.
- b) Present draft feasibility study findings at BCWMC meeting.
- c) Prepare final report for approval at BCWMC meeting and use at future project hearing.
- d) Present final feasibility study findings at BCWMC meeting.

Cost Estimate

Table 1 summarizes our cost estimate for the scope of work outlined above.

Table 1. DeCola Ponds - SEA School/Wildwood Park Flood Storage Project Costs

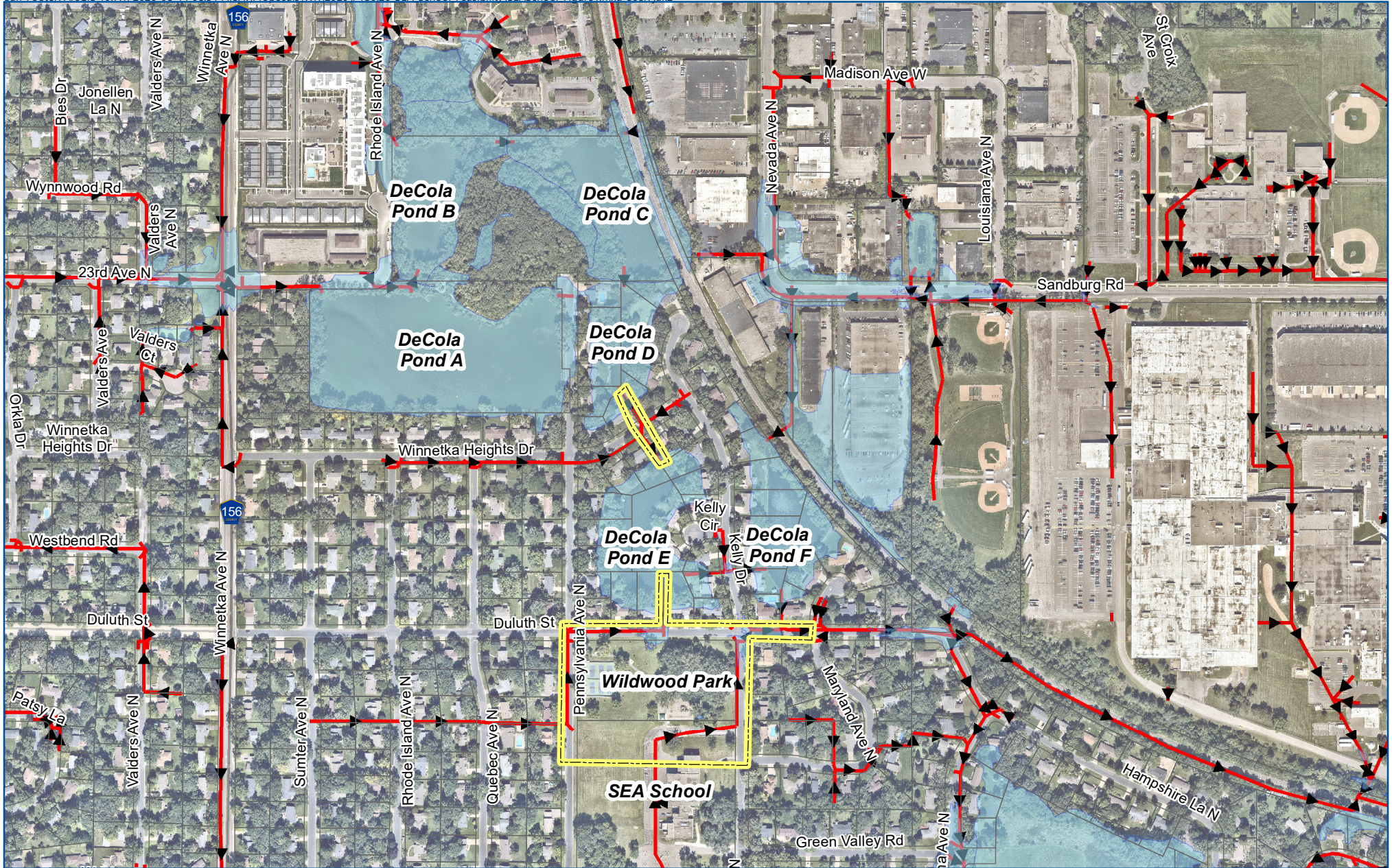
To: Bassett Creek Watershed Management Commission
From: Barr Engineering Co.
Subject: Item 5D- Consider Approval of Proposal to Prepare Feasibility Study for the Medicine Lake Road and Winnetka Avenue Area Long Term Flood Mitigation Plan Project: DeCola Ponds - SEA School/Wildwood Park Flood Storage Project (2022 CIP Project BC-2, 3, 8, 10)
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



Tasks	Estimated Total
1) Project Meetings	\$9,400
2) Field Investigations	\$20,800
3) Evaluation and Concept Plans	\$24,800
4) Public Engagement	\$5,100
5) Feasibility Report	\$15,200
Total	\$75,300

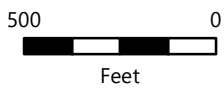
Schedule

We will complete the tasks and milestones outlined in the scope of work on the following schedule, assuming authorization at the August 2020 meeting.

Tasks and milestones	Estimated Schedule
Kick-off meeting with BCWMC and City of Golden Valley, Robbinsdale Area School staff	September 2020
Wetland delineations	August 2020
Combined agency field review/TEP review	September 2020
Topographic, utility, and tree survey	August 2020
Desktop Review – environmental, threatened and endangered species, cultural resources	August/September 2020
Meeting with BCWMC, City, USACE, MN DNR and MPCA	September/October 2020
Develop concept alternatives and cost estimates	October 2020 – January 2021
Up to two meetings with City/SEA School staff	October – December 2020
Public meeting	January/February 2021
Submit draft feasibility report for City and BCWMC staff review	March 12, 2021
City and BCWMC staff complete review	March 26, 2021
Submit draft feasibility report for BCWMC review at Commission meeting	April 7, 2021
Present draft report Commission meeting	April 15, 2021
Submit final feasibility report for BCWMC review at Commission meeting	May 12, 2021
Final Feasibility Report – BCWMC approval at Commission meeting	May 20, 2021



-  Project Area
-  Parcels
-  Atlas 14 100-yr Inundation
-  Storm Pipe



DeCola Ponds- SEA School-
Wildwood Park Flood Storage
Project
PROJECT AREA
FIGURE 1



Memorandum

To: Bassett Creek Watershed Management Commission
From: Barr Engineering Co.
Subject: Item 5E – Consider Approval of Proposal to Prepare Feasibility Study for the Medley Park Stormwater Treatment Facility (2022 CIP Project ML-12)
BCWMC August 20, 2020 Meeting Agenda
Date: August 13, 2020

5E. Consider Approval of Proposal to Prepare Feasibility Study for the Medley Park Stormwater Treatment Facility (2022 CIP Project ML-12)

Recommendations:

1. Consider approving the scope of work and \$88,200 budget presented in this memorandum and direct the BCWMC Engineer to complete the feasibility study for the Medley Park Stormwater Treatment Facility (2022 CIP Project ML-12), scheduled for construction in 2022 and 2023.
2. Direct the BCWMC Engineer to consult with the U.S. Army Corps of Engineers (USACE) to determine whether the Resources Management Plan Pre-application Consultation Protocols may apply for this project.
3. Direct the BCWMC Engineer to prepare a feasibility study that complies with the requirements of the USACE and BCWMC criteria.

Background

The Medley Park Stormwater Treatment Facility is included in the BCWMC's current CIP as ML-12 (Table 5-3, as amended in 2018). The proposed project is located in Golden Valley and would address intercommunity flooding issues and improve water quality in Medicine Lake. The feasibility study will aid in the future development of designs for anticipated construction and implementation of the project in 2022 and 2023 at an estimated BCWMC cost of \$500,000. The proposed facility would help achieve the goals of the Medicine Lake TMDL. Figure 1 shows the location of Medley Pond and the surrounding Medley Park area.

The proposed project will develop flood storage volumes within the project area (approximately 2.5 acres of existing park area) adjacent to the existing Medley Pond, develop additional water quality treatment volume for total suspended solids (TSS) and particulate phosphorus, and develop opportunities to enhance dissolved phosphorus removal. The project will address an intercommunity flooding issue and help alleviate flooding of residential structures and streets south of the park by looking at opportunities to expand the existing Medley Pond footprint, develop additional stormwater ponds within the project footprint and/or investigate subsurface storage options (Figure 2). Additionally, the project will improve

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water quality downstream by trapping sediment and suspended particulates in the expanded storage, thus minimizing sediment and solids transferred to downstream stormwater ponds and Medicine Lake. Additional stormwater features that target the removal of dissolved phosphorus will also be investigated. Furthermore, the proposed project will improve ecology and wildlife habitat, enhance active and passive recreation opportunities within the park, and provide educational opportunities to park users. The existing pond, Medley Pond, is not classified as a public water by the Minnesota Department of Natural Resources (MnDNR).

As is required for BCWMC CIP Projects, a feasibility study must be completed prior to BCWMC holding a hearing and ordering the project. The feasibility study will develop conceptual designs of the flood mitigation and water quality improvement project, review the permitting requirements, review the field investigation requirements, and develop concept plans and cost estimates for the project.

This project is consistent with the goals (Section 4.1) and policies (Sections 4.2.1, 4.2.2, 4.2.8, and 4.2.10) in the 2015 – 2025 BCWMC Watershed Management Plan.

The BCWMC completed a Resource Management Plan (RMP) in 2009 through which the USACE and the BCWMC agreed on a series of steps, work items, deliverables (called “protocols”) that must be accomplished and submitted to complete the RMP process and USACE review/approval process. Although this project was not included in the RMP, the USACE has allowed the RMP protocols to be applied to other projects not specifically included in the RMP. With the completion of the protocols, we expect the USACE application process to move more quickly than it would otherwise. Most of the protocols must be addressed as part of the feasibility study, in addition to the usual tasks that would be performed as part of a BCWMC feasibility study. In general, the protocols require compliance with Section 106 of the National Historic Preservation Act, compliance with Section 404 of the Clean Water Act, and Clean Water Act Section 401 Water Quality Certification. Compliance with Section 106 typically requires a cultural resources inventory.

As part of past street reconstruction, stream stabilization, and dredging projects within and adjacent to Medley Park, the City of Golden Valley performed geotechnical investigations (soil borings), utility surveys, tree surveys, and developed dredging plans for nearby stormwater ponds. We intend to utilize as much of this data as applicable and will build on it as needed for this feasibility study.

Content and Scope of Feasibility Study

The feasibility study will address and include the feasibility study criteria adopted by the BCWMC in October 2013:

- Analysis of multiple alternatives with the context of Commission objectives, including the following for each alternative:
 - Pros and cons analysis
 - Cost estimate for construction and a “30-year cost”
 - Analysis of life expectancy

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- Summary of each alternative for the Commission to judge its merits
- Cost estimate for annualized cost per pound of pollutant removal
- Evaluation of new and/or innovative approaches
- Identification of permitting requirements

The BCWMC developed the above criteria when the BCWMC's CIP was limited to water quality improvement projects, so they do not specifically address flood mitigation aspects of CIP projects. Therefore, in addition to the criteria above, the following will also be analyzed as part of each alternative:

- Evaluate the flood reduction benefits of each alternative, including acre-feet of additional flood storage provided, lowering of 2, 10, 50, and 100-yr flood elevations at key locations, and quantification of homes and other structures and infrastructure impacted (e.g., homes/households no longer within 1% annual chance floodplain, reduced inundation depth at adjacent roadways, etc.).

As noted earlier, most of the RMP protocols must be addressed as part of the feasibility study. In addition to the tasks above, the feasibility study will include the identification of wetland impacts to meet the RMP pre-application protocols.

In addition to the RMP protocols and specific criteria adopted by the BCMWC, it is important to gather stakeholder input. The BCWMC Engineer will work with the BCWMC Administrator, and City of Golden Valley staff to identify the most-effective means to gather input from the public and other affected stakeholders.

Figure 1 shows the project area covered by this feasibility study. As previously mentioned, the City of Golden Valley completed work in the project study area as part of earlier road reconstruction, stream stabilization, and stormwater pond dredging projects. This included the following tasks:

- Stream stabilization plans for the channel north of Medley Pond (2005).
- Pond maintenance dredging and planting plans for the two stormwater ponds (ML-2 and ML-3) south of Medley Pond (2018).
- Geotechnical investigations of surrounding streets consisting of nine SPT soil borings using a hollow stem auger and standard penetration test sampling every 2.5 feet (2019). Soil borings B-14 and B-15 are closest to Medley Park.
- Tree survey GIS data to the east of Medley Pond containing information on species, diameter, condition, and inspection dates (2010 through 2019).

For this project, we anticipate utilizing the above information and other information available from past City of Golden Valley projects and amending these documents as appropriate, based on further investigations that will be required as outlined below.

Below is a summary of the work scope components for this feasibility study:

1) Project Meetings

- a) Project kick-off meeting with BCWMC staff, BCWMC commissioners representing Golden Valley, and Golden Valley staff; and preparation of meeting notes.
- b) Technical stakeholder meeting with BCWMC, Golden Valley, USACE, MPCA, and other agency staff as necessary to discuss concept alternatives and review permit requirements for project, and prepare meeting minutes to confirm regulatory agencies' discussion results. We don't anticipate MnDNR staff to attend the meeting because Medley Pond is not classified as a MnDNR public water.

2) Field Investigations

- a) Bathymetric surveys & sediment sampling – the City of Golden Valley partially dredged Medley Pond of accumulated sediment in 2005 as part of the stream stabilization project north of the pond. We anticipate that some sediment accumulation has occurred since completion of the dredging project. Therefore, we propose to perform a bathymetric survey of Medley Pond to assess the existing pond bottom.

As part of the wetland delineation task (see (d) below), field staff will screen the sediments in Medley Pond to see if there appear to be layers of coarse sediment accumulation in the bottom. If this screening indicates that there may be accumulated sediment, we will conduct sediment sampling of up to three sediment cores to determine if the accumulated sediment is contaminated, thus restricting the use of the dredged material. The investigations will follow the Minnesota Pollution Control Agency's (MPCA) "Managing Stormwater Sediment Best Management Practice Guidance" (June 2015); we will use the investigation results to estimate the amount of sediment removal, methods, disposal requirements, and costs. Per City request, the BCWMC Engineer will notify the City at least 21 days prior to any and all pond sediment screening as part of the City's typical protocol.

- b) Geotechnical Investigations – A geotechnical investigation within the Medley Park proposed project area will be performed, specifically in locations where we anticipate incorporating water quality infiltration/filtration practices. This will help us understand the geotechnical limitations of potential infiltration/filtration practices before developing these alternatives more thoroughly. The geotechnical investigations will include SPT soil borings using a hollow stem auger and standard penetration test sampling and classifying soil type every 1-foot to a total depth of 12 feet. Any groundwater or debris-laden or contaminated soil encountered will be documented.
- c) Additional environmental investigations – Review of the Minnesota Pollution Control Agency's (MPCA) "What's in my Neighborhood?" database did not show any MPCA Sites within Medley Park. There are hazardous waste sites northwest of the park on Hillsboro Ave N. (Jewelry Works, LLC, Advanced Chiropractic Clinic, Johnson Stone & Assoc Dds Pa, Former Super America, Verizon Wireless); but they are far enough away from the park that there should be low risk of impacts to

the project area from these waste sites. Because the historic land use of the surrounding area is primarily residential, we do not anticipate widespread contamination within the park. As part of this feasibility study, we will request and review the information in the MPCA's file for these sites. We assume that after review of the MPCA files, a Phase I environmental site assessment will not be needed for this project and the final project design should proceed with a contingency plan in place should contamination be encountered during construction.

- d) Wetland delineations – The BCWMC Engineer will perform wetland delineations around Medley Pond and the northern edge of the pond located directly southwest of Medley Pond (City Pond ML-2). The field wetland delineation will be performed in accordance with the Routine Level 2 procedures specified in the USACE's 1987 Wetland Delineation Manual ("1987 Manual", USACE, 1987), the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (USACE, 2010), and the 2013 Guidance for Submittal of Wetland Delineation Reports to the USACE and WCA LGUs in MN. We will identify/flag and record wetland boundaries using a GPS unit with sub-meter accuracy. We will develop a wetland delineation report that includes the wetland type classifications and descriptions of the delineated wetlands, a brief description of the proposed project, general environmental information, and a discussion of regulations and the administering authorities. The report will also include wetland data forms, precipitation analysis, and site photographs. The BCWMC Engineer also will obtain a Wetland Type and Boundary Approval from the Local Government Unit (LGU). The cost estimate includes a wetland functions and values assessment (i.e., a Minnesota Rapid Assessment Method, or MNRAM, analysis) of Medley Pond and the pond directly southwest. This effort will include review by the Technical Evaluation Panel (TEP) for concurrence on the delineation boundary.
- e) Topographic and utility location survey – We will complete a topographic and utility location survey for the project area, including the area immediately surrounding Medley Pond and approximately 3.5 acres of Medley Park within the anticipated project area. The survey will include a detailed survey of the outlet structure at Medley Park. Underground utilities will be located based on the location of manhole structures in the field, as-built/construction plan drawings from the City, and utilization of a Gopher State One Call utility locate. We will conduct the survey in NAVD88 and use available City of Golden Valley benchmarks.
- f) Tree location, diameter, species, and condition survey – As part of the topographic survey, we will also survey all trees within the proposed project extents with a diameter of 4 inches or greater, recording the diameter, species, and condition (e.g. dead/live, shaggy/peeling/deeply furrowed bark) of the trees, working closely with the City of Golden Valley foresters. In addition to helping with estimated project costs, the tree survey will help determine if the trees within the project area could provide habitat for the northern long eared bat (endangered), are invasive, or are threatened by pests (e.g., green ash trees). Consideration will be given to replace trees along portions of the project area where feasible. Although the city has existing tree survey information

east of Medley Pond, the survey shows a majority of the trees listed in 2010 as their last inspection date. Since 10 years have elapsed since this inspection, it would be a good idea to survey these trees again along with the survey of new trees not in the existing data set.

- g) Threatened and endangered species and cultural resources desktop review – We will complete a desktop review of the available databases to determine the potential for adverse impacts to state and federally listed species. We will also complete a desktop review of the existing database from the State Historic Preservation Office (SHPO) for information related to known historic and archaeological resources in the project vicinity and will summarize any available information in the feasibility report.
- h) Project easements – The proposed project is located on two public parcels owned by the City of Golden Valley. It is anticipated that the project will be located entirely on the publicly-owned parcels. No easement acquisition is anticipated.

3) Evaluation and Concept Plans

- a) Develop up to 3 concepts for the expansion of flood mitigation volume and water quality treatment (particulate and dissolved removal options) around Medley Pond and within Medley Park.
- b) Update the BCWMC Phase 2 XP-SWMM and P8 models to include new bathymetric information for the stormwater ponds dredged by the City of Golden Valley.
- c) Use the BCWMC Phase 2 XP-SWMM and P8 models to estimate impacts to peak flood elevations and pollutant removals, respectively, as a result of the project concepts.
- d) Identify permitting requirements for the concepts, based on wetland delineations and other compiled data, and one (1) meeting with USACE, MnDNR and MPCA staff (see task 1b).
- e) Develop tree removal estimates for each concept, including removals needed for construction access to implement each concept
- f) Develop cost estimates for the project, including a “30-year cost,” analysis of life expectancy, and annualized cost per pound of pollutant removal for the water quality treatment portion of the project.
- g) Evaluate the pollutant removals (pounds of pollutants removed per year) and flood reduction benefits of the project, including acre-feet of additional flood storage provided, lowering of flood elevations at key locations, and impact on homes in the floodplain (e.g., are any homes removed from the floodplain, is inundation depth reduced at adjacent roadways).

4) Public Engagement

- a) Coordinate with BCWMC Administrator and City staff to determine best means to gather public input, such as mailings, newspaper articles, open houses, online surveys, etc. The primary group

for public discussions will be the nearby residents living around Medley Park including single family and multiple family properties such as Kings Valley Homeowners Association and its residents, Pheasant Glen condominiums, Medley Hills Apartments and Townhomes and non-local park users. The City’s Open Space and Recreation Commission and Parks and Recreation staff will also be engaged during the process. The budget for this task includes time to prepare materials for two public outreach activities, one early in the process, and one after completion of concept plans. We assume that public outreach coordination will be largely completed by the BCWMC Administrator in close collaboration with the City.

- b) Assist with public involvement process as necessary – prepare handouts, interactive GIS maps, online surveys and/or presentations, and record and compile comments. Due to Covid-19 concerns, the public involvement process may need to be virtual and we will adjust the correspondence and involvement process accordingly.

5) Feasibility Report

- a) Prepare draft report for review by City staff and BCWMC staff/interested commissioners; revise report based upon review comments.
- b) Present draft feasibility study findings at BCWMC meeting.
- c) Prepare final report for approval at BCWMC meeting and use at future project hearing.
- d) Present final feasibility study findings at BCWMC meeting.

Cost Estimate

Table 1 summarizes our cost estimate for the scope of work outlined above.

Table 1 Feasibility Evaluation Cost Estimate




Tasks	Estimated Total
1) Project Meetings	\$5,000
2) Field Investigations	\$26,100
a. Geotechnical Investigation	\$4,700
3) Evaluation and Concept Plans	\$29,200
4) Public Engagement	\$10,100
5) Feasibility Report	\$13,100
Total	\$88,200

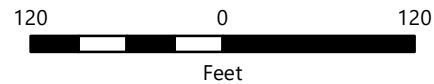
Schedule

We will complete the tasks and milestones outlined in the scope of work on the following schedule.

Component	Tasks and Milestones	Estimated Schedule
Field Investigations	Wetland delineation	August 2020
	Bathymetric survey and sediment sampling	August/September 2020
	Topographic, utility, and tree survey	August/September 2020
	Review of MPCA files	August/September 2020
	Desktop review – threatened and endangered species, cultural resources	August/September 2020
Project Meetings	Kick-off meeting with BCWMC and City of Golden Valley staff	September 2020
Field Investigations	Combined agency field review/TEP review	September 2020
Project Meetings	Meeting with BCWMC, Golden Valley, USACE, MnDNR, and MPCA staff	September/October 2020
Field Investigations	Geotechnical investigations (soil borings)	September 2020
	Environmental investigations (if needed)	September 2020
Public Engagement	Public meeting (virtual boards and online survey)	October 2020
Evaluation and Concept Plans	Develop concept alternatives, perform hydraulic and water quality modeling, and develop cost estimates	October 2020 – January 2021
Public Engagement	Public meeting (virtual PowerPoint)	January/February 2021
Feasibility Report	Submit draft feasibility report for BCWMC and City of Golden Valley staff review	March 12, 2021
	BCWMC and City of Golden Valley staff complete review and provide comments for draft feasibility report	March 26, 2021
	Submit draft feasibility report for BCWMC review at Commission meeting	April 7, 2021
	Present draft report at Commission Meeting	April 15, 2021
	Submit final feasibility report for BCWMC review at Commission meeting	May 12, 2021
	Final Feasibility Report – BCWMC approval at Commission meeting	May 20, 2021

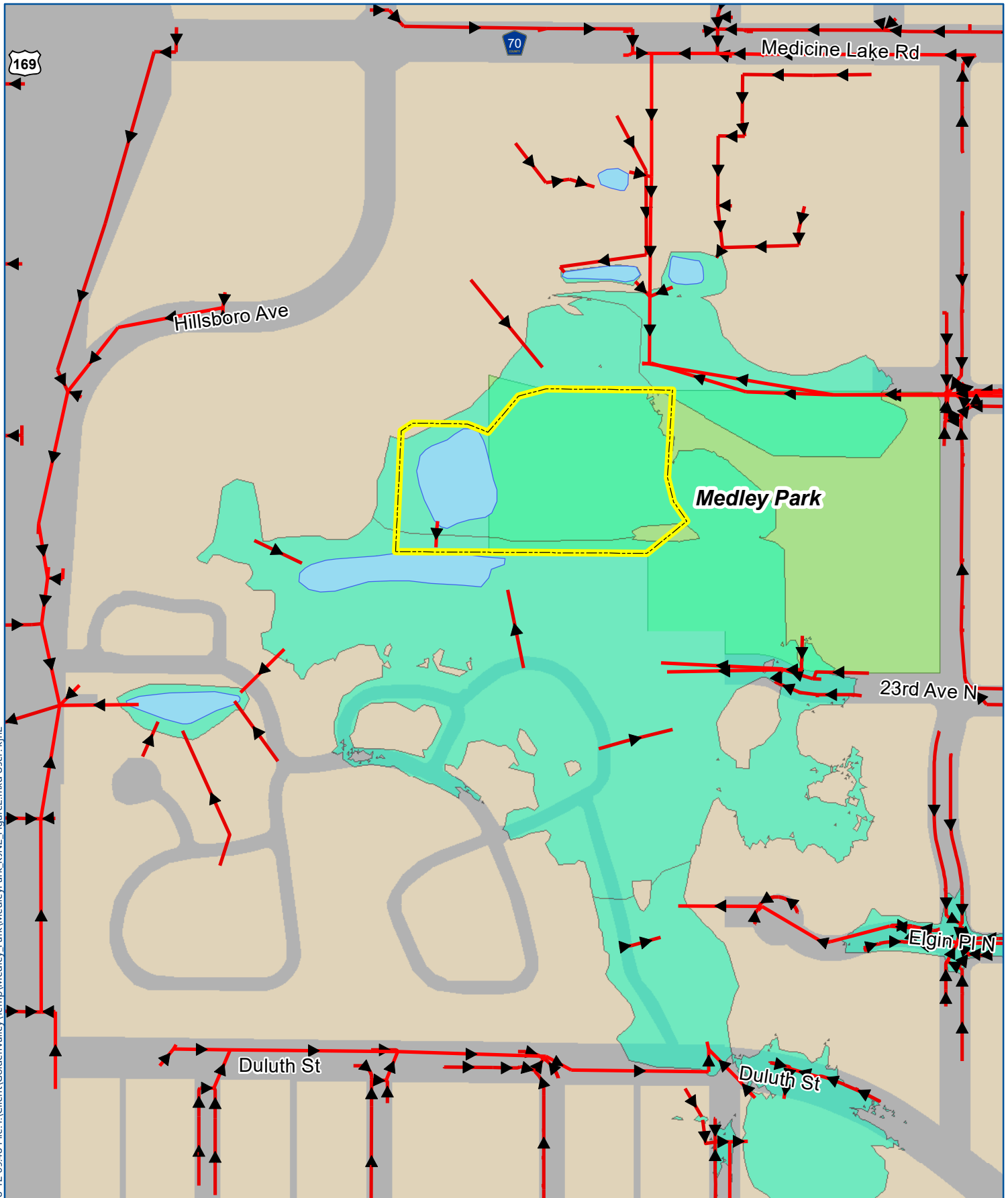






-  Proposed Project Boundary
-  Streams
-  Ponds & Wetlands



**MEDLEY PARK
FLOOD MITIGATION &
WATER QUALITY IMPROVEMENTS
PROJECT AREA**

FIGURE 1



-  Proposed Project Boundary
-  Ponds & Wetlands
-  Atlas-14 100-year Inundation
-  Storm Pipe

MEDLEY PARK
FLOOD MITIGATION &
WATER QUALITY IMPROVEMENTS
EXISTING INUNDATION
FIGURE 2

Item 5G.
BCWMC 8-20-20

PROPOSED BCWMC 2021 OPERATING BUDGET									
	2017 Budget	2017 Actual	2018 Budget	2018 Actual	2019 Budget	2019 Actual	2020 Budget	Proposed 2021 Budget	See Notes
ENGINEERING & MONITORING									
Technical Services	125,000	140,702	125,000	126,154	130,000	156,941	130,000	134,000	(A1)
Development/Project Reviews	65,000	71,791	75,000	45,070	80,000	56,420	75,000	68,000	(A)
Non-fee and Preliminary Reviews	15,000	20,906	10,000	23,073	15,000	32,937	20,000	24,000	(B)
Commission and TAC Meetings	14,000	11,753	12,000	10,575	12,000	13,207	12,000	12,000	(C)
Surveys and Studies	20,000	16,347	12,000	-	20,000	16,316	10,000	9,000	(D)
Water Quality / Monitoring	74,300	70,855	80,700	120,728	78,000	76,754	102,600	129,000	(E)
Water Quantity	11,500	8,570	6,300	5,678	10,000	9,998	6,500	7,000	(F)
Assistance on Erosion Control Inspections	1,000	-	1,000	-	-	-	-	-	(G)
Annual Flood Control Project Inspections	12,000	7,678	48,000	20,279	48,000	26,744	12,000	12,000	(H)
Municipal Plan Review	8,000	1,835	8,000	26,779	4,000	5,406	2,000	2,000	(I)
Watershed Outlet Monitoring Program	15,500	19,994	20,500	18,145	20,500	19,530	20,500	23,000	(J)
Annual XP-SWMM Model Updates/Reviews	10,000	5,650	10,000	8,918	-	-	-	-	(K)
APM/AIS Work	35,000	34,920	32,000	35,977	32,000	21,246	30,000	14,000	(L)
Subtotal Engineering & Monitoring	\$406,300	\$411,001	\$440,500	\$441,376	\$449,500	\$435,499	\$420,600	\$434,000	
PLANNING									
Next Generation Plan Development	-				12,000	12,000	18,000	18,000	(M)
Subtotal Planning	\$0		\$0	\$0	\$12,000	\$12,000	\$18,000	\$18,000	

Item	2017 Budget	2017 Actual	2018 Budget	2018 Actual	2019 Budget	2019 Gross Expenses	2020 Budget	Proposed 2021 Budget	See Notes
ADMINISTRATION									
Administrator	67,200	60,559	67,200	59,955	69,200	64,926	69,200	67,400	(N)
MAWD Dues							500	3,750	(O)
Legal	18,500	16,249	17,000	13,313	17,000	14,428	15,000	15,000	(P)
Financial Management	3,200	3,200	3,200	3,200	3,500	3,500	3,500	4,000	(Q)
Audit, Insurance & Bond	15,500	17,304	15,500	17,648	18,000	15,892	18,000	18,000	(R)
Meeting Catering	2,000	1,198	1,600	1,295	1,500	1,341	1,500	1,300	(S)
Administrative Services	18,000	13,346	15,000	14,240	15,000	12,992	15,000	8,000	(T)
Subtotal Administration	\$124,400	\$111,856	\$119,500	\$109,651	\$124,200	\$113,079	\$122,700	\$117,450	
OUTREACH & EDUCATION									
Publications / Annual Report	2,500	1,138	1,500	937	1,300	1,263	1,300	1,300	(U)
Website	4,400	1,228	4,200	443	3,000	1,617	1,000	1,800	(V)
Watershed Education Partnerships	15,500	12,354	13,850	13,454	15,850	13,810	15,850	17,350	(W)
Education and Public Outreach	20,000	19,302	22,000	18,585	25,000	23,588	22,000	26,000	(X)
Public Communications	2,500	732	2,500	563	1,000	878	1,000	1,000	(Y)
Subtotal Outreach & Education	\$44,900	\$34,754	\$44,050	\$33,982	\$46,150	\$41,156	\$41,150	\$47,450	
MAINTENANCE FUNDS									
Channel Maintenance Fund	25,000	25,000	25,000	25,000	25,000	25,000	25,000	20,000	(Z)
Flood Control Project Long-Term Maint.	25,000	25,000	25,000	4,000	25,000	25,000	25,000	25,000	(AA)
Subtotal Maintenance Funds	\$50,000	\$50,000	\$50,000	\$29,000	\$50,000	\$50,000	\$50,000	\$45,000	
TMDL WORK									
TMDL Implementation Reporting	20,000	19,209	10,000	4,668	10,000	215	10,000	7,000	(BB)
Subtotal TMDL Work	\$20,000	\$19,209	\$10,000	\$ 4,668	\$10,000	\$10,000	\$10,000	\$7,000	
GRAND TOTAL	\$645,600	\$626,820	\$664,050	\$618,677	\$691,850	\$661,734	\$662,450	\$668,900	

Proposed 2021 Revenues	
Expected Income	<u>Proposed</u>
Assessments to cities	\$ 554,900
Use of fund balance	\$ 5,000
CIP Administrative Funds (2.0% of est. requested levy of \$1.5M)	\$ 30,000
Project review fees	\$ 62,000
Transfer from Long-term Maint Fund for Flood Control Proj Inspections	\$ 12,000
WOMP reimbursement	\$ 5,000
Expected reimbursement for Blue Line LRT work	\$ -
Interest income in 2021	\$ -
	\$ 668,900
DRAFT Expenses	
Total operating budget	\$ 672,650
Fund Balance Details	
Est. Beginning Fund Balance (Jan 31, 2021)	\$ 393,676
Use of Fund Balance	\$ 5,000
Est. Remaining Fund Balance (Jan 31, 2022)	\$ 388,676

Community	For Taxes Payable in 2020	2019 Percent of	Area Watershed	Percent of	Average	2015	2016	2017	2018	2019	2020	Proposed 2021
	Net Tax Capacity	Valuation	in Acres	of Area	Percent	\$490,345	\$490,345	\$500,000	\$515,050	\$529,850	\$550,450	\$554,900
Crystal	\$10,060,219	5.69	1,264	5.09	5.39	\$25,868	\$25,771	\$25,704	\$26,904	\$27,877	\$29,062	\$29,898
Golden Valley	\$45,484,227	25.72	6,615	26.63	26.17	\$121,964	\$127,675	\$131,270	\$134,649	\$138,553	\$144,693	\$145,228
Medicine Lake	\$1,087,200	0.61	199	0.80	0.71	\$3,543	\$3,600	\$3,561	\$3,783	\$3,846	\$3,975	\$3,928
Minneapolis	\$12,181,159	6.89	1,690	6.80	6.84	\$33,235	\$32,885	\$33,609	\$34,763	\$35,805	\$37,631	\$37,983
Minnetonka	\$10,994,799	6.22	1,108	4.46	5.34	\$28,121	\$27,536	\$28,199	\$28,053	\$28,989	\$29,967	\$29,622
New Hope	\$9,869,052	5.58	1,252	5.04	5.31	\$25,681	\$25,627	\$25,917	\$26,740	\$27,987	\$28,987	\$29,464
Plymouth	\$75,291,555	42.57	11,618	46.77	44.67	\$225,159	\$220,974	\$224,531	\$231,682	\$237,986	\$245,942	\$247,860
Robbinsdale	\$3,471,941	1.96	345	1.39	1.68	\$7,587	\$7,843	\$7,747	\$8,189	\$8,523	\$8,937	\$9,299
St. Louis Park	\$8,427,361	4.76	752	3.03	3.90	\$19,184	\$18,433	\$19,463	\$20,287	\$20,284	\$21,257	\$21,618
TOTAL	\$176,867,513	100.00	24,843	100.00	100.00	\$490,345	\$490,345	\$500,000	\$515,050	\$529,850	\$550,450	\$554,900

NOTES

(A1) General technical services by Barr Engineering; amount similar to previous years; increased slightly based on 2019 actuals.

(A) Partially funded by application fees; with the creation of the preliminary and non-fee budget category, most of the review costs will be covered by application fees. 2021 budget assumes 30 submittals at average cost of \$2,000 - \$2,500 per review.

(B) Assumes a slight increase in non-fee reviews in 2021 based on recent activity. This was a new line item in 2015 used to cover reviews for which either we do not receive an application fee or it's too early in the process for us to have received an application fee. Includes DNR application reviews, MnDOT project reviews, Met Council light rail transit, and other prelim reviews requested by administrator and member cities. Through agreements with Met Council, \$66,400 of these costs have been reimbursed since 2015.

(C) Includes attendance at BCWMC meetings, TAC meetings, Administrative Services Committee meetings, Budget Committee meetings and other meetings. 2017 budget increased to allow for additional BCWMC Engineer staff to attend Commission/TAC meetings (total of 3 assumed). 2018 - 2020 budgets were reduced from 2017 and assumed 12 BCWMC meetings and 5 other meetings (TAC, etc.). 2021 budget also assumes 17 meetings including BCWMC meetings (12), TAC meetings (3), Administrative Services Committee meetings (1), Budget Cmte meetings & other meetings (1).

(D) For Commission-directed surveys and studies not identified in other categories - e.g., past work has included watershed tours, Medicine Lake outlet work, Flood Control Project Maintenance and Responsibilities, Sweeney Lake sediment monitoring, stream monitoring equipment purchase. 2018 budget was reduced from previous years for overall budget savings. 2019 budget is more in line with previous years and gives Commission flexibility to investigate or tackle unforeseen issues that arise. Lowered again in 2020 to allow for higher monitoring budget. Remaining low for overall budget savings.

(E) Routine lake and stream monitoring. See details on next page.

(F) Water Quantity (lake level) monitoring. 2018 budget lowered for budget savings and resulted in fewer data points. 2019 budget back to earlier budget levels. 2020 budget lowered again for budget savings. In 2021 Engineer requests slight increase for unforeseen events, checking benchmarks, etc. This amount still may not cover unforeseen events.

(G) After recommendations from the TAC and Budget Committee, the Commission ended the erosion and sediment control inspection program (Watershed Inspection) in 2014 due to duplication with activities required by the member cities. Some budget remained here to provide, as requested by the Commission, some oversight of city inspection activities (reports of inspections are available from each city). However, little or no expenses have been incurred since 2014. In 2019 it was removed from budget. If inspections are needed they can be charged to general technical services.

(H) 2021 budget includes annual typical inspection of Flood Control Project (FCP) features without tunnel inspections. Budget varies widely by year depending on the FCP features being inspected. New FCP policies and inspection schedules were adopted in 2016. (See link below)

http://www.bassettcreekwmo.org/application/files/4514/9637/1815/2016_FCP_Policies.pdf

(I) Municipal plan approvals completed in 2019; however, this task has also included review of adjacent WMO plan amendments, and review of city ordinances; \$2,000 budget recommended in 2021 for these types of reviews.

(J) Monitoring at the Watershed Outlet Monitoring Program site in Minneapolis through an agreement with Met Council. Commission is reimbursed \$5,000 from Met Council. Met Council pays for equipment, maintenance, power, cell service, and lab analyses. Monitoring protocol changed in 2017 with collection of bi-monthly samples (up from once-per-month sampling). The station will be temporarily moved in 2020 to accommodate a city sanitary sewer project and is likely to be moved back to its original location in 2021, hence the higher amount. \$23,500 includes \$18,500 for Wenck or similar contractor + \$4,500 for Barr's flow measurements, data management and some analyses

(K) This item is used to make updates to the XP-SWMM model, coordinate with P8 model updates, and assist cities with model use. However, no XP-SWMM updates are expected in 2019 - 2021 due to work on the grant funded FEMA modeling project. This line item will return in the 2022 operating budget

(L) Funds to implement recommendations of Aquatic Plant Management/Aquatic Invasive Species Committee likely including curly-leaf pondweed control in Medicine Lake and small grant program for launch inspectors, education/outreach, etc. by other organizations including TRPD, AMLAC, others. 2019 net expenses were only \$11,400 due to grant funding and cost sharing with TRPD. Propose lowering amount in 2021 to be in line with actual expected costs that will only cover curly-leaf pondweed control and expanded boat launch inspections for Medicine Lake.

(M) Funding that will be set aside and accrued over next 5 years to pay for 2025 Watershed Plan development which will start in 2023.

(N) Typically includes \$72/hour for average of 80 hours per month. (Reduced from 80 hours per month budgeted since 2013 but in line with actual expenses.)

(O) MN Association of Watershed District Annual dues. New budget item. 2019 and 2020 dues were \$500 because WMOs were newly allowed to join the organization. 2021 dues expected to be \$3,750. In 2022 dues are expected to be \$7,500 similar to other Metro watersheds.

(P) For Commission attorney. No changes in expenditures expected for 2021.

(Q) Funding for City of GV staff's monthly accounting activities and coordination of annual audit. Increase is at GV's request for 70 hrs of work per year. Monthly tasks (approx 5 hours per mo) = Prepare financial reports, write checks, deposit checks, file reports, monitor investments; annual tasks (approx 10 hours per year) = work with auditors on financial statements, prepare confirmations, review draft audit, submit annual financial report to State Auditor

(R) Insurance and audit costs have risen considerably in the last few years.

(S) Meeting catering expenses from Triple D Espresso (includes delivery). Budget reduced slightly; plan to order less food.

(T) Recording Secretary \$45/hr rate * 8 hrs/mo for meeting attendance and minutes (\$4,320 total) + \$290 annual mileage + \$250/mo meeting packet printing/mailling + \$390 contingency. Budget is lowered because social media and education column writing was moved to Education & Outreach budget (X)

(U) Budget was decreased in last few years to be more in line with actual expenses. Costs associated with Commission Engineer assistance with annual report

(V) Based on 2017-2019 agreement with HDR for website hosting and maintenance activities and closer to actual funds spent in 2019.

(W) Includes CAMP (\$7,000), River Watch (\$2,000), Metro Watershed Partners (\$3,500), Metro Blooms Workshops (\$1,500; a decrease from previous years), Children's Water Festival (\$350). Does not allow for additional partnerships or increases in contributions. CAMP costs set by Met Council increased significantly in 2019 (after 16 years w/o increases). In 2021 moved \$4,000 in annual support to Metro Blooms for resident engagement in Harrison Neighborhood, MPLS from Education & Outreach line item (X) 2021 Budget reflects reducing Metro Watershed Partners and Metro Blooms Harrison Neighborhood funding by \$500 each.

(X) Includes funding for West Metro Water Alliance at \$13,000 and \$7,310 for other educational supplies and materials including educational signage, display materials, Commissioner training, etc. In 2021, moved social media (\$480 FB ads + \$3,510 for 1.5 hr/week*52 wks*\$45/hour) and moved educational newspaper column writing (\$2,700 for 5 hr/mo*12 months*\$45/hour) from Administrative Services line item (T)

(Y) Public Communications covers required public notices for public hearings, etc.

(Z) Will be transferred to Channel Maintenance Fund for use by cities with smaller projects along the BCWMC Trunk System streams. Reduced for 2021 for overall budget savings.

(AA) Will be transferred to Long-Term Maintenance Fund (less actual costs of FCP inspections in line (H).

(BB) Budget reduced since 2018 for overall budget savings. Task includes reporting on TMDL implementation and updating P8 model to include new BMPs. Reduced again in 2021 for overall budget savings.

Monitoring Notes

2021 Monitoring/Reporting on 2020 Monitoring	Total budget	2021 proposed budget	2022 proposed budget
Year 2 Sweeney Branch water quality monitoring and reporting	\$45,000	\$38,000	\$7,000
Reporting on 2020 Sweeney Branch biotic index monitoring	\$7,000	\$0	\$7,000
Reporting on 2020 Sweeney and Twin Lakes monitoring	\$11,000	\$11,000	--
Reporting on 2020 Medicine Lake monitoring	\$9,000	\$9,000	--
2021 Lake Monitoring:			
Parkers Lake	\$24,000	\$18,000	\$6,000
Westwood Lake	\$28,000	\$22,000	\$6,000
Crane Lake	\$29,000	\$23,000	\$6,000
Wirth—aquatic plants only; MPRB will perform survey along with their usual water quality monitoring	\$0	\$0	\$0
2021 General Water Quality	\$8,000	\$8,000	TBD
Total	\$163,000	\$129,000	

Monitoring Notes

Budget item	Item description	Estimated cost															
2021 Westwood Lake (St. Louis Park) and Crane Lake (Minnetonka) detailed lake monitoring	Detailed lake monitoring includes monitoring one location at each Lake on six occasions for selected parameters (total phosphorus, soluble reactive phosphorus, total nitrogen, nitrate +nitrite, chlorophyll a, chloride, Secchi disc, temperature, pH, DO, specific conductance, and oxidation reduction potential), plus parameters associated with AIS vulnerability (calcium, alkalinity, hardness, sodium, magnesium, and potassium), sample analysis, phytoplankton and zooplankton collection and analysis, an aquatic plant survey (two occasions), calculation of aquatic plant IBIs, preparation of a presentation and preparation of a final report (following template of recent reports). Final report preparation and presentation costs deferred to 2021.	Total = \$57,000															
	Westwood Hills Nature Center (WHNS) staff will collect Westwood Lake samples. Barr staff will train WHNS staff and provide technical support throughout the sample period. Technical support would include preparing bottles and paperwork (field note forms, lab paperwork), training WHNS staff, calibrating and couriering field measurement meter to WHNS staff for each sample event, arranging for courier to pick up samples from WHNS and deliver to Pace, providing technical support for each sample event including answering questions about sampling and completing lab paperwork.	2021 = \$45,000															
		2022 = \$12,000															
2021 Parkers Lake (Plymouth) detailed lake monitoring	Detailed lake monitoring includes monitoring one location on Parkers Lake on 6 occasions for selected parameters (total phosphorus, soluble reactive phosphorus, total nitrogen, nitrate +nitrite, chlorophyll a, chloride, Secchi disc, temperature, pH, DO, specific conductance, and oxidation reduction potential), plus parameters associated with AIS vulnerability (calcium, alkalinity, hardness, sodium, magnesium, and potassium), sample analysis, phytoplankton and zooplankton collection and analysis, an aquatic plant survey (two occasions), calculation of aquatic plant IBIs, preparation of a presentation and preparation of a final report (following template of recent reports). Final report preparation and presentation costs deferred to 2021.	Total = \$24,000															
	Three Rivers Park District staff will collect water quality, phytoplankton, and zooplankton samples, perform aquatic plant surveys, and complete lab analysis of samples at a reduced cost to BCWMC.	2021 = \$18,000															
		2022 = \$6,000															
Second year of two-year stream water quality/ quantity monitoring effort (automatic sampling) on the Sweeney Branch	The stream water quality monitoring program is designed to approximate the Metropolitan Council's Watershed Outlet Monitoring Program (WOMP) design for the Sweeney Branch (note: Plymouth Creek will be monitored in years 5-6). The 2021 costs include collecting 7 grab samples and 8 storm samples. This approximates the change to the WOMP sampling protocols from monthly to bi-monthly samples (some WOMP stations do not collect grab samples in the winter).	Total = \$45,000															
	Parameters to be monitored include (revised per BCWMC-approved 2020 monitoring program revisions):	2021 = \$38,000															
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Total Phosphorus</td> <td style="width: 33%;">Dissolved Phosphorus</td> <td style="width: 33%;">Nitrate/Nitrite</td> </tr> <tr> <td>Ortho Phosphorus</td> <td>TKN</td> <td>Ammonia N</td> </tr> <tr> <td>Chloride</td> <td>TSS</td> <td>VSS</td> </tr> <tr> <td>E. Coli</td> <td>Chl-a</td> <td>Metals</td> </tr> <tr> <td>Hardness</td> <td>Instantaneous pH</td> <td>Dissolved oxygen</td> </tr> </table>	Total Phosphorus	Dissolved Phosphorus	Nitrate/Nitrite	Ortho Phosphorus	TKN	Ammonia N	Chloride	TSS	VSS	E. Coli	Chl-a	Metals	Hardness	Instantaneous pH	Dissolved oxygen	2022 = \$7,000
	Total Phosphorus	Dissolved Phosphorus	Nitrate/Nitrite														
	Ortho Phosphorus	TKN	Ammonia N														
	Chloride	TSS	VSS														
	E. Coli	Chl-a	Metals														
	Hardness	Instantaneous pH	Dissolved oxygen														
4-day continuous dissolved oxygen on one occasion in summer																	
Draft report preparation included in 2021 budget; final report preparation and presentation deferred to 2022.																	
Reporting on 2020 Biotic index monitoring of the Sweeney Branch	Report preparation and presentation costs deferred to 2022, to coincide with final stream water quality reporting.	Total = \$7,000¹ 2021 = \$0 2022 = \$7,000															
Reports on 2020 monitoring	2020 reporting to be completed in 2021 – Sweeney Lake and Twin Lake (\$11,000), Medicine Lake (\$9,000)	\$20,000															
General Water Quality Task	Potential items/issues include: Inventorying chloride sources and/or improvement measures; Preparing for TMDL studies on Northwood Lake and the Bassett Creek fish impairments; Internal load assessments and/or investigation(s) of alternative chemical treatments for Medicine Lake, Lost Lake, etc.; Addressing new AIS species; Implementing additional carp control issue measures at Sweeney Lake, such as an electric barrier(s); Address other water quality concerns that come up during the year (harmful algal blooms, etc.)	\$8,000															
Total Estimated 2021 Budget		\$129,000															

Notes:

¹ The BCWMC revised the biotic index monitoring schedule to line up with the stream monitoring schedule. This changes the frequency of the biotic index monitoring so that it is no longer consistent with the BCWMC Plan, which calls for biotic index monitoring every 3 years in Priority Streams. The most recent monitoring of all biotic index stations occurred in 2015. In 2018, biotic index monitoring occurred on the Main Stem and North Branch. By waiting to align stream monitoring with biotic index monitoring it will be 5 to 7 years between the 2015 and next monitoring events for Sweeney Lake Branch (2020) and Plymouth Creek (2022). Going forward, BCWMC will have a 6 year frequency between biotic index monitoring events. The BCWMC should consider revising the monitoring plan (Appendix A of the Plan) to reflect the changes to the stream monitoring and biotic index monitoring programs.



Bassett Creek Watershed Management

Item 6A.
BCWMC 8-20-20

MEMO

Date: July 8, 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 May): 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 recently the subject of an article in the Southwest Journal: <https://www.southwestjournal.com/voices/green-digest/2020/02/state-awards-grant-to-bryn-mawr-runoff-project/>. 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 (No change since June): 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 meeting and was finalized over the winter.

Construction on the new building started this spring. The Sun Sailor printed [an article](#) on the project in October 2018. All educational signs were finalized and are currently in production. Some slight modifications to the project plans were made late in 2019 at the request of city inspectors. Building and project construction is well underway. The bog was installed this spring and construction is getting close to completion. The building received an occupancy permit last week and the first kids camp was hosted in the building this week. The bog sign is installed and the bog is already providing habitat for birds, duck, and frogs. The small pond areas and stream connecting the ponds are completed (see photo of construction). The pumps and pump patio area will be installed in the coming weeks. The grand opening celebration is scheduled for September 13th. 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 14th and construction began in January. 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 Commission meeting. Pond dredging and other storm sewer work was completed in early summer 2019. Work to establish the native buffer began last fall and continued through this growing season. Weeds seems to be currently dominating the area but native plants should become well established next year. The buffer specialists are under contract with the city through 2023. A final report of the project (minus the native buffer work) is expected at the September 2020 Commission meeting.

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): 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 project website is continually updated to keep lake residents informed: [Sweeney Lake Water Quality Improvement Project, SL-8](#)).

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?cID=278>.

2013 Four Seasons Area Water Quality Project/Agora Development (NL-2) (No change since June): 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 are coordinating with Commission Engineers to finalize plans per conditions. Project webpage: <http://www.bassettcreekwmo.org/index.php?cID=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

- Tracked work on Sweeney Lake Improvement Project and disseminated information to lake association and updated website
- Picked up CAMP samples from volunteers across watershed
- Communicated with residents and BCWMC engineers regarding bacteria monitoring in lakes and possible bacteria in Twin Lake
- Attended climate adaptation webinar and salt symposium
- Received report on starry stonewort condition in Medicine Lake, drafted and disseminated email to stakeholders regarding current status and DNR recommendations
- Assisted with developing final report for Winnetka Pond Dredging Project
- Checked on condition of native buffer at Winnetka Pond; corresponded with city consultants on status
- Checked on condition of Northwood Lake Improvement Project raingardens; took photos
- Reviewed and commented on proposals for feasibility studies for 2022 CIP projects
- Coordinated with BCWMC engineer and DNR to submit comments on groundwater pumping permit application

Administration and Education

- Communicated with county staff re: max levy request; prepared for and participated in meeting with Commissioner Fernando; prepared for and attended County Board committee meeting
- Reviewed education column and videos; posted latest video online
- Prepared and submitted invoice and interim report for Sweeney Lake Improvement Project 319 grant
- Prepared and submitted invoice to DNR for FEMA Floodrisk Mapping Project
- Met with artist developing coloring book of Bassett Creek
- Drafted memo on minor plan amendment
- Drafted and submitted public hearing announcement to cities
- Entered project information into Watershed Based Implementation Funds spreadsheet
- Worked with website consultant to set up BCWMC emails for officers
- Drafted and distributed meetings and events email to commissioners