



# Bassett Creek Watershed Management Commission

Public Hearing & Regular Meeting

Thursday September 21, 2017

8:30 – 11:00 a.m.

Council Conference Room, Golden Valley City Hall, Golden Valley, MN

## AGENDA

### 1. CALL TO ORDER and ROLL CALL

- 2. CITIZEN FORUM ON NON-AGENDA ITEMS** - Citizens 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 Commissions Committee for a recommendation to be brought back to the Commission for discussion/action.

### 3. APPROVAL OF AGENDA

### 4. CONSENT AGENDA

- A. Approval of Minutes – August 17, 2017 Commission Meeting
- B. Approval of September 2017 Financial Report
- C. Approval of Payment of Invoices
  - i. Keystone Waters, LLC – August Administrator Services
  - ii. Keystone Waters, LLC – August Meeting Materials Distribution Expenses
  - iii. Barr Engineering – August 2017 Engineering Services
  - iv. Triple D Espresso – September 2017 Meeting Refreshments
  - v. Wenck – August 2017 WOMP Monitoring
  - vi. Wenck – August Routine Lake Monitoring
  - vii. Lawn Chair Gardener – August 2017 Administrative and Education Services
  - viii. Kennedy & Graven – July Legal Services
  - ix. Metro Blooms – May/June Reimbursement for Harrison Neighborhood Project
  - x. Metro Blooms – July/Aug Reimbursement for Harrison Neighborhood Project
  - xi. Talbott Promotions – “Salt Cups” Educational Giveaways
- D. Approval to Reimburse City of Golden Valley for Main Stem Restoration CIP Project Expenses (CIP: 2015CR)

### 5. PUBLIC HEARING

- A. Receive Comments on Proposed 2018 CIP Project - Bassett Creek Park Pond Phase I Dredging Project: Winnetka Pond Dredging (BCP-2)

### 6. BUSINESS

- A. Consider Approval of Resolution 17-06 Ordering 2018 Improvement
  - i. Designating Member City Responsible for Construction
  - ii. Making Findings Pursuant to Minnesota Statutes Section 103B.251
  - iii. Certifying Costs to Hennepin County
  - iv. Approving Agreement with City of Crystal for Construction of Bassett Creek Park Pond Dredging Project Phase I: Winnetka Pond Dredging (BCP-2)
- B. Consider Approval of Proposal to Develop Aquatic Invasive Species Rapid Response Plan
- C. Consider Approval of Technical Advisory Committee Recommendations
  - i. Resolution Adopting Amended Review Fee Schedule

- D. Consider Approval of Proposals to Develop Feasibility Studies for 2019 CIP Projects
  - i. 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)
  - ii. Westwood Lake Water Quality Improvement Project (WST-2)
  - iii. Bryn Mawr Meadows Water Quality Improvement Project (BC-5)
- E. Consider Approval of Recommendations of the Aquatic Plant Management/Aquatic Invasive Species Committee

## 7. COMMUNICATIONS

- A. Administrator's Report
  - i. Update on Chloride Training Recruitment
  - ii. Report on Main Stem Project Open House
- B. Chair
- C. Commissioners
  - i. Report on Golden Valley Arts and Music Festival
- D. TAC Members
- E. Committees
- F. Legal Counsel
- G. Engineer

## 8. INFORMATION ONLY (Information online only)

- A. CIP Project Updates: Available Online <http://www.bassettcreekwmo.org/projects>
- B. Grant Tracking Summary and Spreadsheet
- C. Freshwater Society [Recruiting Master Water Stewards](#)
- D. [Governor Dayton's 25% by 2025 Clean Water Initiative](#) – Town Hall Meetings
- E. WCA Notice of Application, Plymouth
- F. Minnehaha Creek Watershed District Cottageville Park [Video](#)
- G. Freshwater Society [Newsletters and Sign Up](#)
- H. WCA Notice of Application, Golden Valley

## 9. ADJOURNMENT

### Upcoming Meetings & Events

- Public Open House on Main Stem Erosion Repair Project (2017CR-M): Tuesday September 19<sup>th</sup>, 4:00 – 6:00 p.m., Multipurpose Room at Harrison Recreation Center, 503 N. Irving Ave, Minneapolis
- 25% by 2025 Clean Water Town Hall Meeting: Wednesday September 27<sup>th</sup>, 6:30 – 8:30 p.m. Community Room at Glover Sudduth Center for Economic Development and Urban Affairs, 2100 Plymouth Ave. North, Minneapolis
- Water Resources Conference: October 17-18, St. Paul RiverCentre, [Info and Registration](#)
- City of Minnetonka City Wide Open House: Tuesday October 10<sup>th</sup>, 5:00 – 8:00 p.m., Minnetonka City Hall
- Sidewalk and Parking Lot Winter Maintenance Training Course: Friday October 13<sup>th</sup>, 8:30 a.m. – 1:30 p.m., Crystal Community Center



# Bassett Creek Watershed Management Commission

## AGENDA MEMO

Date: September 13, 2017

To: BCWMC Commissioners

From: Laura Jester, Administrator

RE: **Background Information for 9/21/17 BCWMC Meeting**

1. **CALL TO ORDER and ROLL CALL**
2. **CITIZEN FORUM ON NON-AGENDA ITEMS**
3. **APPROVAL OF AGENDA – ACTION ITEM with attachment**
  
4. **CONSENT AGENDA**
  - A. Approval of Minutes – August 17, 2017 Commission meeting- **ACTION ITEM with attachment**
  - B. Approval of September 2017 Financial Report - **ACTION ITEM with attachment**
  - C. Approval of Payment of Invoices - **ACTION ITEM with attachments (online) – I have reviewed the following invoices and recommend approval of payment.**
    - i. Keystone Waters, LLC – August Administrator Services
    - ii. Keystone Waters, LLC – August Meeting Materials Distribution Expenses
    - iii. Barr Engineering –August 2017 Engineering Services
    - iv. Triple D Espresso – September 2017 Meeting Refreshments
    - v. Wenck – August 2017 WOMP Monitoring
    - vi. Wenck – August Routine Lake Monitoring
    - vii. Lawn Chair Gardener – August 2017 Administrative and Education Services
    - viii. Kennedy & Graven – July Legal Services
    - ix. Metro Blooms – May/June Reimbursement for Harrison Neighborhood Project
    - x. Metro Blooms – July/Aug Reimbursement for Harrison Neighborhood Project
    - xi. Talbott Promotions – “Salt Cups” Educational Giveaways
  
  - D. Approval to Reimburse City of Golden Valley for Main Stem Restoration CIP Project Expenses (CIP: 2015CR) – **ACTION ITEM with attachment – At their meeting on October 16, 2014, the Commission entered an agreement with the City of Golden Valley for the construction of the [2015 Main Stem Restoration Project, 10<sup>th</sup> Avenue to Duluth Street](#). This is the final reimbursement for the construction phase of the project. The native vegetation establishment phase began last year and will continue through 2018. Staff recommends approving this reimbursement request.**
  
5. **PUBLIC HERAING**
  - A. Receive Comments on Proposed 2018 CIP Project - Bassett Creek Park Pond Phase I Dredging Project: Winnetka Pond Dredging (BCP-2) - **PUBLIC INPUT ITEM with attachment - The public hearing will be opened and the public will be asked for comments on the 2018 CIP project. All comments will be entered into the public record and will be considered before the Commission approves the resolution in 6A below.**
  
6. **BUSINESS**
  - A. Consider Approval of Resolution 17-06 Ordering 2018 Improvement - **ACTION ITEM with attachments - Pending the outcome of the public hearing in 5A, the attached resolution should be considered for approval to order the project, designate member responsible for construction, make findings pursuant to MN Statutes 103B.25, certify the costs of the 2018 project to Hennepin County, and approve an agreement with the City of Crystal for construction. Staff recommends approval of the resolution which, in turn, approves the following:**

- i. Designating Member City Responsible for Construction
  - ii. Making Findings Pursuant to Minnesota Statutes Section 103B.251
  - iii. Certifying Costs to Hennepin County - with attachment – *The attached memo shows the breakdown of estimated project costs including 2018 costs for the previously approved Main Stem Restoration Project and the Plymouth Creek Restoration Project, and recommends the Commission direct staff to certify for payment by Hennepin County in 2018 a total (final) tax levy of \$1,346,815.*
  - iv. Approving Agreement with City of Crystal for Construction of Bassett Creek Park Pond Phase I Dredging Project: Winnetka Pond Dredging (BCP-2) - with attachment - *The attached agreement between the City of Crystal and the BCWMC includes expectations and requirements of the city and the Commission for implementation of the 2018 CIP Project.*
- B. Consider Approval of Proposal to Develop Aquatic Invasive Species Rapid Response Plan – ACTION ITEM with attachment – *At their meeting on July 20<sup>th</sup>, the Commission approved a APM/AIS Committee recommendation that the Commission begin developing a rapid response action plan for key species in Priority 1 lakes using the 2017 APM/AIS budget (up to \$15,000). The Commission requested a proposal from the Commission Engineer to develop the lake-specific rapid response plans. Staff recommends approving the attached proposal.*
- C. Consider Approval of Technical Advisory Committee Recommendations – ACTION ITEM with attachments – *At their meeting on August 4<sup>th</sup>, the TAC discussed a variety of topics including FEMA modeling in the watershed, 2) communication needs regarding the XP-SWMM model and revised floodplain elevations, 3) the timing and process for updating the XP-SWMM model, and 4) revisions to the BCWMC review fees. The TAC forwards the attached recommendations for Commission consideration, which are also recommendations of Commission staff. Approval to amend the Commission’s project review fees should be by resolution.*
- i. Resolution Adopting Amended Review Fee Schedule – attached
- D. Consider Approval of Proposals to Develop Feasibility Studies for 2019 CIP Projects – ACTION ITEM with attachments – *Feasibility studies for the 2019 CIP projects should get underway this fall so that the Commission can request a 2019 maximum levy by the end of May 2018. The cities where each of the three 2019 are proposed (Golden Valley, St. Louis Park, and Minneapolis) request that the Commission Engineer prepare the feasibility studies for the projects. The Commission Engineers prepared the attached proposals which were reviewed by me and appropriate city staff. I recommend approving each proposal and directing the Commission Engineer to begin these studies.*
- i. 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) - attached
  - ii. Westwood Lake Water Quality Improvement Project (WST-2) - attached
  - iii. Bryn Mawr Meadows Water Quality Improvement Project (BC-5) – attached
- E. Consider Approval of Recommendations of the Aquatic Plant Management/Aquatic Invasive Species Committee – ACTION ITEM with attachment - *At the July 20<sup>th</sup> meeting, the Commission began reviewing and discussing recommendations by the APM/AIS committee. At that meeting, recommendations #1 - #5 were approved. If time allows at this meeting, the Commission should continue discussing committee recommendations.*

## 7. COMMUNICATIONS

- A. Administrator’s Report - **INFORMATION ITEM with attachment**
  - i. Update on Chloride Training Recruitment

- ii. Report on Main Stem Project Open House
- B. Chair
- C. Commissioners
  - i. Report on Golden Valley Arts and Music Festival
- D. TAC Members
- E. Committees
- F. Legal Counsel
- G. Engineer

**8. INFORMATION ONLY (Information online only)**

- A. CIP Project Updates: Available Online <http://www.bassettcreekwmo.org/projects>
- B. Grant Tracking Summary and Spreadsheet
- C. Freshwater Society [Recruiting Master Water Stewards](#)
- D. [Governor Dayton's 25% by 2025 Clean Water Initiative](#) – Town Hall Meetings
- E. WCA Notice of Application, Plymouth
- F. Minnehaha Creek Watershed District Cottageville Park [Video](#)
- G. Freshwater Society [Newsletters and Sign Up](#)
- H. WCA Notice of Application, Golden Valley

**9. ADJOURNMENT**

**Upcoming Meetings & Events**

- [Public Open House on Main Stem Erosion Repair Project \(2017CR-M\)](#): Tuesday September 19<sup>th</sup>, 4:00 – 6:00 p.m., Multipurpose Room at Harrison Recreation Center, 503 N. Irving Ave, Minneapolis
- [25% by 2025 Clean Water Town Hall Meeting](#): Wednesday September 27<sup>th</sup>, 6:30 – 8:30 p.m. Community Room at Glover Sudduth Center for Economic Development and Urban Affairs, 2100 Plymouth Ave. North, Minneapolis
- [Water Resources Conference](#): October 17-18, St. Paul RiverCentre, [Info and Registration](#)
- [City of Minnetonka City Wide Open House](#): Tuesday October 10<sup>th</sup>, 5:00 – 8:00 p.m., Minnetonka City Hall
- [Sidewalk and Parking Lot Winter Maintenance Training Course](#): Friday October 13<sup>th</sup>, 8:30 a.m. – 1:30 p.m., Crystal Community Center





Item 4A.  
BCWMC 9-21-17

## Bassett Creek Watershed Management Commission

**DRAFT Minutes of Regular Meeting**  
**Thursday August 17, 2017**  
**8:30 a.m.**  
**Golden Valley City Hall, Golden Valley MN**

**Commissioners and city staff present:**

City	Commissioner	Alternate Commissioner	Technical Advisory Committee Members (City Staff)
Crystal	Guy Mueller, Vice Chair	Tim Wodarski	Mark Ray
Golden Valley	Stacy Harwell, Treasurer	Jane McDonald Black	Tom Hoffman
Medicine Lake	Clint Carlson [arrived at 8:37]	<i>Absent</i>	<i>Absent</i>
Minneapolis	<i>Absent</i>	NA (vacant)	Liz Stout
Minnetonka	Mike Fruen	<i>Absent</i>	Tom Dietrich
New Hope	<i>Absent</i>	Pat Crough	Megan Albert
Plymouth	Jim Prom	John Byrnes	Derek Asche
Robbinsdale	Michael Scanlan	<i>Absent</i>	Richard McCoy, Marta Roser
St. Louis Park	Jim de Lambert	Patrick Noon	Erick Francis
<b>Administrator</b>	Laura Jester, Keystone Waters		
<b>Engineer</b>	Karen Chandler & Jeff Weiss, Barr Engineering		
<b>Recorder</b>	Dawn Pape, Lawn Chair Gardener		
<b>Legal Counsel</b>	Troy Gilchrist, Kennedy & Graven		
<b>Presenters/ Guests/Public</b>	Steve Christopher (BWSR), Kim Chapman (AES), Dave Filipiak (SRF), Jim Toulouse & David Davies (Metro Transit), Lucius Jonett & Ed Matthiesen (Wenck), John and Jeanne Starr (Plymouth residents), Steve Gebauer and Nathan Warner (Solution Blue), Apurva Patel (Rock Hill Management)		

**1. CALL TO ORDER AND ROLL CALL**

On Thursday August 17, 2017 at 8:31 a.m. in the Council Conference Room at Golden Valley City Hall (7800 Golden Valley Rd.), Chair de Lambert called to order the meeting of the Bassett Creek Watershed Management Commission (BCWMC) and asked for roll call to be taken.

**2. CITIZEN FORUM ON NON-AGENDA ITEMS**

None.

**3. APPROVAL OF AGENDA**

The agenda was reviewed.

**MOTION:** Commissioner Prom moved to approve the agenda. Commissioner Harwell seconded the motion. Upon a vote, the motion carried 7-0 [Cities of Medicine Lake and Minneapolis absent from vote].

**4. CONSENT AGENDA**

Administrator Jester distributed a revised financial report for consideration within the consent agenda.

**MOTION:** Alternate Commissioner Crough moved to approve the consent agenda as amended and Commissioner Prom seconded the motion. Upon a vote, the motion carried 7-0 [Cities of Medicine Lake & Minneapolis absent from vote].

The following items were approved as part of the consent agenda: the July 20, 2017 Commission Meeting Minutes, the August 2017 Financial Report (as revised), the payment of invoices, approval of Northwood East Ballfield Improvements in New Hope, approval to reimburse Commissioner Scanlan for Water Resources Conference registration.

The general and construction account balances reported in the August 2017 Financial Report are as follows:

Checking Account Balance	\$600,769.68
<hr/>	
TOTAL GENERAL FUND BALANCE	\$600,769.68
<hr/>	
TOTAL CASH & INVESTMENTS ON-HAND (7/12/17)	\$3,452,309.40
<hr/>	
CIP Projects Levied – Budget Remaining	(4,465,355.61)
<hr/>	
Closed Projects Remaining Balance	(\$1,013,046.21)
<hr/>	
2012-2016 Anticipated Tax Levy Revenue	\$10,014.74
<hr/>	
2017 Anticipated Tax Levy Revenue	\$643,220.55
<hr/>	
Anticipated Closed Project Balance	(\$359,810.92)
<hr/>	

**5. BUSINESS****A. Receive Presentation on METRO Blue Line Extension (Bottineau) Light Rail Transit Project**

Administrator Jester introduced Jim Toulouse from the Blue Line Project Office and Dave Filipiak with SRF to give an overview of the Blue Line Extension Project that runs along Bassett Creek in Minneapolis and Golden Valley.

[Commissioner Carlson arrived.]



Mr. Toulouse gave an overview of the METRO Blue Line Extension (Bottineau) Light Rail Transit Project, indicating that the rail line should be operational in 2022 and that it's currently in the engineering phase. Mr. Filipiak stated that the total project length is 13.5 miles, which includes four watershed jurisdictions. For the last year and a half, studies and discussions with watersheds and cities have taken place. In reviewing stormwater best management practices, they are meeting the BCWMC water quality requirements for linear projects as well as peak discharge rates.

Next floodplain impacts and mitigation were presented. Floodplain fill is approximately 20,000 cu. yards and the floodplain mitigation site is within Theodore Wirth Regional Park. Excavation of the mitigation site will include contaminated materials, so disposal will be guided by an MPCA approved response plan.

A few locations along the project corridor were covered in more detail as they impact the creek, including the Plymouth Ave. Bridge where there are multiple constraints and complications. This will be the site of a station, the creek needing realignment here and there is a pedestrian/trail crossing.

The Kewanee Way Outfall was discussed next. This site has many constraints and a future variance request is anticipated. The France Avenue Outfall, on the other hand, has more space to work with and the design can exceed the BCWMC requirements. Here, it's expected the project will expand an existing stormwater pond constructed by the City of Robbinsdale.

It was noted that the Project Office has been in close coordination with the Commission and member cities about balancing floodplain impacts and meeting overall requirements. Some areas will go beyond BCWMC requirements, other areas will not be able to meet BCWMC requirements. It was noted that infiltration of stormwater is not being considered in most areas due to high groundwater and contaminated soils.

The early bid package project components will include: floodplain mitigation site, Theodore Wirth Parkway Bridge, and MCES sanitary sewer work. They expect to submit these components for review/approval at the BCWMC's October 2017 meeting, with construction planned for 2018. The rest of the project is slated to be presented to the Commission in 2018 for 2019 construction.

**B. Consider Approval of 90% Design Plans for Plymouth Creek Restoration Project (CIP 2017CR-P)**

Commission Engineer Chandler gave an overview of previous meetings and previous reviews of this project. She reported that the issue of a rise in the floodplain elevation on park property was not resolved in the revised 90% plans and would require a variance from the Commission. City of Plymouth staff, Derek Asche, reported that the plans will be changed to remove the structure causing a rise in the floodplain because it would require a Letter of Map Revision (LOMR) by the Department of Natural Resources. Therefore, the variance request to the Commission was withdrawn. Engineer Chandler further explained that comments on the original 90% plans were addressed by the city's consultant, Wenck. She noted the tree survey was revised to reflect consensus reached at the onsite meeting with the landowners. There was further discussion about tree removals. Mr. Asche reassured the Commission that no more trees than necessary would be removed and that no trees are being taken out for the sole purpose of using the material for bank stabilization. He noted the reason that more trees are slated for removal in this updated version of the plans is because access is needed to the site that does not cross private property.

Regarding the upstream half of the project, Commissioner Prom reported he is not comfortable with the disc stop poles that are meant to protect the trees in the disc golf course. He appreciated that the number of poles was reduced to bring down the cost, but he wondered if a net or tall vegetation, like bushes, could be used instead. In response, Mr. Asche reminded the Commission that poles are costly to install, but the long-term benefit is that they require less maintenance. He then offered an alternative idea of planting trees and shrubs close together to control foot traffic. Commissioners generally liked the idea of netting or vegetation rather than stop poles. There was also discussion about re-routing the fairways and holes, either temporarily or permanently. City staff was directed to continue to coordinate with the Parks Department on possible temporary or permanent changes to fairways to help protect trees and the creek during and after construction.

There was also consensus that “stop poles” in the budget and within the plans be changed to “tree protection” for the not to exceed amount of \$42,000.

Administrator Jester added that she would like to see educational signs added to the budget. Commissioner Mueller suggested \$4,000 be allocated for educational signs.

Mr. John Starr, a landowner adjacent to the project, commented that he was surprised that there is no blanket of leaves, only black dirt and a significant amount of erosion within the project area adjacent to his home. He reported that Hennepin County staff visited the site and discussed project components and possible effects of the project with himself and his wife. He was concerned about the grasses to be planted as part of the project because they need direct sunlight, but after finding out that low light vegetation would be used, he felt more comfortable. Mr. Starr also stated concerns about too many trees being removed, that the project is open ended, and that he doesn't fully understand the terms of the conservation agreement. There was discussion about how the project is expected to be maintained by the city into perpetuity but that additional trees aren't expected to be removed in the future unless they pose a threat to property or the creek.

Commissioner Prom stated that special care to consider each and every tree was taken and that the Commission should proceed with the project. Alternate Commissioner McDonald Black questioned the \$42,000 figure, noting that money for “tree protection” seems to be solely to improve the course, not the project.

**MOTION:** Commissioner Prom moved to approve the 90% plans with the Commission Engineer's comments as revised (removing comments B and D), with allotment for “tree protection” rather than stop poles and adding \$4,000 for educational signs. Staff are also to work with Plymouth Parks Department to consider temporary or permanent fairway realignment. Commissioner Mueller seconded the motion. Upon a vote, the motion carried 8-0 [City of Minneapolis absent from vote].

### **C. Consider Approval of 90% Design Plans for Four Seasons Mall Area Water Quality Project (Agora Development) (2013 CIP NL-2)**

Commission Engineer Chandler introduced the project by letting the commission know that this is the first time the Commission has seen these plans for the CIP portion of the Agora redevelopment. The location of the project is southwest of the intersection of Rockford Road and Highway 169. According to an agreement between the Commission and the developer, Rock Hill Management, the project would need to provide 100 pounds of phosphorus removal above and beyond removals required by the BCWMC for the development project. Engineer Chandler reported that Commission Engineers have been working with the team of developers, engineers, and others. Commission Engineers reviewed stormwater management techniques to be used, including an iron-enhanced sand filter to remove more phosphorus from the stormwater pond to the north of the wetland and reported that, as designed, the whole project will remove 100.76 pounds of phosphorus above and beyond the BCWMC requirements for the development. Commission Engineer Chandler reviewed her comments on the plans including that an Operations and Maintenance Plan needs to be completed that includes a chloride management plan. She reported the estimated costs of the stormwater best management practices are \$1.6 million and that the Commission pledged up to \$848,000 in CIP funds. She recommended conditional approval with the comments noted in the review memo.

Administrator Jester asked how the wetland is removing pollutants. Engineer Chandler explained that micro pools are being created in the wetland to lengthen the flow path and slow down the water into a longer flow path to allow suspended sediments to settle out. In addition, she noted that a better plant community within the wetland will be established that can help mitigate pollutants.

Commissioner Prom asked about maintenance of the wetland and Mr. Gebauer with Solution Blue responded that an agreement will be in place for the city to maintain (dredge) small ponding areas on the west side of the wetland. Commissioner Mueller inquired about plant uptake in the wetland walk and how total phosphorus

removal is calculated. Engineer Chandler explained that plants in the wetland walk will be removed annually. Mr. Gebauer added that plant uptake within the large wetland is not included in the calculations.

Commissioner Carlson asked about the project's timeline. Mr. Patel with Rock Hill Management reported that they are closer to closing on the property and hoped to demo this fall, but they still have title hurdles to overcome. Commissioner Harwell raised the issue of winter maintenance and chloride. Mr. Patel replied that he has been working on reducing chlorides on all properties and he plans to use non-chloride deicers.

Alternate Commissioner McDonald Black asked about per pound phosphorus removal cost compared to other projects. Administrator Jester noted that this project has similar cost per pound removal figures as the original Four Seasons Mall water quality project in terms of the CIP funding provided by BCWMC.

**MOTION:** Commissioner Prom moved to approve the 90% plans for the CIP portion of the Agora Project with the Commission Engineer's comments. Commissioner Scanlan seconded the motion. Upon a vote, the motion carried 8-0 [City of Minneapolis absent from vote].

**D. Consider Approval of 50% Design Plans for Main Stem Erosion Repair Project (CIP 2017CR-M)**

Liz Stout with the City of Minneapolis provided a brief overview of the project and introduced Jeff Weiss from Barr Engineering who is designing the project on behalf of the city. Mr. Weiss gave a PowerPoint presentation showing photos of existing conditions along the project reaches and techniques to be used at each section to fix eroding streambanks.

[Prom and Harwell depart. Byrnes and McDonald Black assume voting for Plymouth and Golden Valley, respectively.]

Mr. Wiess noted that the project will not impact floodplain levels. Ms. Stout added that concrete removal and the installation of restoration measures on the Fruen Mill side of the creek will not happen unless it is in conjunction with redevelopment at Fruen Mill. Mr. Weiss also reported that the approximately 115 trees that will be removed are mainly scrubby, un-valuable, volunteer trees. He noted that 60-70 trees and 150-175 shrubs will be replanted.

Commissioner Scanlan asked about the timing of permit approvals. The timeline is as follows: submit permit applications in August, present 90% plans at BCWMC's September board meeting. Assuming the Commission approves those plans, bidding will be in October and November. Construction is slated for December through February.

Alternate Commissioner Byrnes asked if there is a concern with Barr Engineering designing the work rather than another firm designing and Barr Engineering reviewing on behalf of the Commission. Engineer Chandler and Administrator Jester noted that there is not a conflict of interest as the Commission Engineer follows the feasibility study and understands the Commission's goals and priorities better than other firms.

**MOTION:** Commissioner Scanlan moved to approve the 50% plans for the Main Stem Erosion Repair Project (2017CR-M). Alternate Commissioner McDonald Black seconded the motion. Upon a vote, the motion carried 8-0 [City of Minneapolis absent from vote].

Administrator Jester said she and Ms. Stout will be setting a public meeting or open house to get input from the community before the 90% plans are presented at the September meeting.

**E. Consider Adopting 2018 Operating Budget**

Administrator Jester explained that the 2018 proposed budget was approved by the Commission in May and was sent to all nine city clerks. She noted that no cities provided comments on the proposed budget by the August 1<sup>st</sup> deadline and she recommends approval of the budget as presented in May.

**MOTION:** Alternate Commissioner McDonald Black moved to adopt the 2018 operating budget. Commissioner Scanlan seconded the motion. Upon a vote, the motion carried 8-0 [City of Minneapolis absent from vote].

**6. COMMUNICATIONS**

- A. Administrator’s Report
  - i. Report on Hennepin County AIS Funding – Hennepin County reimbursed the Commission for \$600 worth of zebra mussel sampler plates.
  - ii. Information on Recruiting Master Water Stewards – Recruitment is ongoing for Master Water Stewards program (worth \$2500 in tuition)
  - iii. Parking Lot and Sidewalk Winter Maintenance Training - 15 people are registered to date
- B. Chair
  - i. No reports.
- C. Commissioners
  - iv. Commissioner Carlson suggested exploring a portable PA system to be used in the meeting room for speakers that are difficult to hear.
- D. TAC Members.
  - i. No reports.
- E. Committees
  - i. No reports.
- F. Legal Counsel
  - i. Mr. Gilchrist reported that there is a group of law firms working with cities on coal tar sealant issues. There is a class action lawsuit to help with clean up costs.
- G. Engineer
  - i. Commission Engineer Chandler attended a meeting on the Minneapolis bacteria study. She noted birds are the largest source of bacteria in the city’s stormwater. The study is on-going.

**7. INFORMATION ONLY (Information online only)**

- A. CIP Project Updates: Available Online <http://www.bassettcreekwmo.org/projects>
- B. Grant Tracking Summary and Spreadsheet
- C. Freshwater Society Recruiting Master Water Stewards
- D. [Governor Dayton’s 25% by 2025 Clean Water Initiative](#) – Town Hall Meetings. Probably really important for watershed orgs to be involved. Consider attending. Sept. 26, Mpls.
- E. Met Council Water Resources 2016 Year in Review Report
- F. WCA Notice of Decision, Plymouth
- G. WCA Notice of Decision, Golden Valley

**8. ADJOURNMENT**

The meeting was adjourned at 11:07 a.m.

---

Signature/Title                      Date

---

Signature/Title                      Date

**Bassett Creek Watershed Management Commission General Account  
 General Fund (Administration) Financial Report  
 Fiscal Year: February 1, 2017 through January 31, 2018  
 MEETING DATE: September 21, 2017**

**Item 4B.  
 BCWMC 9-21-17**

**(UNAUDITED)**

<b>BEGINNING BALANCE</b>	<b>9-Aug-17</b>		<b>600,766.68</b>
<b>ADD:</b>			
	<b>General Fund Revenue:</b>		
	Interest less Bank Fees	26.72	
	Henn County-Zebra Mussel Sampler Plates Reimb	600.00	
	Met Council - Metro Blooms Project Grant	43,645.72	
	Permits:		
	City of Mpls - Unclaimed check 181736	1,100.00	
	Community Assets Foundation	1,700.00	
	Northern Gopher Ent	1,700.00	
	Reimbursed Construction Costs	83,799.52	
		<b>Total Revenue and Transfers In</b>	<b>132,571.96</b>
<b>DEDUCT:</b>			
	<b>Checks:</b>		
	2997 Barr Engineering	August Engineering	49,279.98
	2998 Kennedy & Graven	July Legal	1,244.80
	2999 Keystone Waters LLC	Aug Admin/Mtg Materials	4,071.22
	3000 Lawn Chair Gardener	Minutes/newsletter/Socia	1,642.47
	3001 Metro Blooms	Clean Water Project	48,950.77
	3002 Talbott Promotions	Stadium Cups	164.39
	3003 Triple D Espresso	September Meeting	103.98
	3004 Wenck Associates	Outlet Monitor/Lake Mon	10,172.10
	3005 City of Golden Valley	CR2015-Main Stem	57,299.09
	Wells Fargo	Check Blanks	78.26
		<b>Total Checks/Deductions</b>	<b>173,007.06</b>
<b>ENDING BALANCE</b>	<b>12-Sep-17</b>		<b>560,331.58</b>

**Bassett Creek Watershed Management Commission General Account  
 General Fund (Administration) Financial Report  
 Fiscal Year: February 1, 2017 through January 31, 2018  
 MEETING DATE: September 21, 2017**

**(UNAUDITED)**

	2017 / 2018 BUDGET	CURRENT MONTH	YTD 2017 / 2018	BALANCE
<b>OTHER GENERAL FUND REVENUE</b>				
ASSESSMENTS TO CITIES-PREPAID			0.00	
ASSESSMENTS TO CITIES	500,000	0.00	500,001.00	(1.00)
PROJECT REVIEW FEES	60,000	4,500.00	57,200.00	2,800.00
WOMP REIMBURSEMENT	5,000	0.00	4,500.00	500.00
MET COUNCIL REIMBURSEMENTS-LRT PROJECTS	7,000	0.00	9,218.17	(2,218.17)
MET COUNCIL - METRO BLOOMS	0	43,645.72	60,918.23	(60,918.23)
MISCELLANEOUS	0	600.00	2,889.50	(2,889.50)
TRANSFERS FROM LONG TERM FUND & CIP	38,072	0.00	0.00	38,072.00
<b>REVENUE TOTAL</b>	<b>610,072</b>	<b>48,745.72</b>	<b>634,726.90</b>	<b>(24,654.90)</b>
<b>EXPENDITURES</b>				
<b>ENGINEERING &amp; MONITORING</b>				
TECHNICAL SERVICES	125,000	12,958.75	81,171.25	43,828.75
DEV/PROJECT REVIEWS	65,000	3,700.88	54,211.13	10,788.87
NON-FEE/PRELIM REVIEWS	15,000	2,329.50	14,838.91	161.09
COMMISSION AND TAC MEETINGS	14,000	1,617.34	8,257.04	5,742.96
SURVEYS & STUDIES	20,000	0.00	16,347.15	3,652.85
WATER QUALITY/MONITORING	74,300	8,021.14	47,033.61	27,266.39
WATER QUANTITY	11,500	1,240.08	5,486.68	6,013.32
WATERSHED INSPECTIONS -EROSION CONTROL	1,000	0.00	0.00	1,000.00
ANNUAL FLOOD CONTROL INSPECTIONS	12,000	0.00	0.00	12,000.00
REVIEW MUNICIPAL PLANS	8,000	0.00	1,179.00	6,821.00
WOMP	15,500	2,299.96	10,918.47	4,581.53
XP-SWMM MODEL UPDATES/REVIEWS	10,000	784.00	4,019.00	5,981.00
APM / AIS WORK	35,000	0.00	19,950.45	15,049.55
<b>ENGINEERING &amp; MONITORING TOTAL</b>	<b>406,300</b>	<b>32,951.65</b>	<b>263,412.69</b>	<b>142,887.31</b>
<b>ADMINISTRATION</b>				
ADMINISTRATOR	67,200	3,850.00	33,353.11	33,846.89
LEGAL COSTS	18,500	1,244.80	10,212.03	8,287.97
AUDIT, INSURANCE & BONDING	15,500	0.00	17,304.00	(1,804.00)
FINANCIAL MANAGEMENT	3,200	0.00	40.76	3,159.24
MEETING EXPENSES	2,000	103.98	831.84	1,168.16
ADMINISTRATIVE SERVICES	18,000	1,263.69	7,455.53	10,544.47
<b>ADMINISTRATION TOTAL</b>	<b>124,400</b>	<b>6,462.47</b>	<b>69,197.27</b>	<b>55,202.73</b>
<b>OUTREACH &amp; EDUCATION</b>				
PUBLICATIONS/ANNUAL REPORT	2,500	0.00	1,138.50	1,361.50
WEBSITE	4,400	0.00	525.99	3,874.01
PUBLIC COMMUNICATIONS	2,500	0.00	511.50	1,988.50
EDUCATION AND PUBLIC OUTREACH	20,000	49,715.16	85,480.08	(65,480.08)
WATERSHED EDUCATION PARTNERSHIPS	15,500	0.00	5,794.25	9,705.75
<b>OUTREACH &amp; EDUCATION TOTAL</b>	<b>44,900</b>	<b>49,715.16</b>	<b>93,450.32</b>	<b>(48,550.32)</b>
<b>MAINTENANCE FUNDS</b>				
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
<b>MAINTENANCE FUNDS TOTAL</b>	<b>50,000</b>	<b>0.00</b>	<b>0.00</b>	<b>50,000.00</b>
<b>TMDL WORK</b>				
TMDL IMPLEMENTATION REPORTING	20,000	0.00	542.50	19,457.50
<b>TMDL WORK TOTAL</b>	<b>20,000</b>	<b>0.00</b>	<b>542.50</b>	<b>19,457.50</b>
<b>TOTAL EXPENSES</b>	<b>645,600</b>	<b>89,129.28</b>	<b>426,602.78</b>	<b>218,997.22</b>

**BCWMC Construction Account**  
**Fiscal Year: February 1, 2017 through January 31, 2018**  
**September 2017 Financial Report**

(UNAUDITED)

Cash Balance 08/09/2017				
Cash		2,460,309.40		
	Total Cash			2,460,309.40
Ally Bk Midvale Utah C/D (9/25/2017 1.25%)		248,000.00		
Capital One Bk-McLean VA C/D (9/25/2017 1.15%)		248,000.00		
Capital One Bk-Glen Allen VA C/D (9/25/2017 1.15%)		248,000.00		
Key Bk Natl Assn Ohio C/D (10/02/2017 1.15%)		248,000.00		
	Total Investments			992,000.00
	<b>Total Cash &amp; Investments</b>			<b>3,452,309.40</b>
Add:				
Interest Revenue (Bank Charges)		156.71		
	<b>Total Revenue</b>			<b>156.71</b>
Less:				
CIP Projects Levied - Current Expenses - TABLE A		(83,799.52)		
Proposed & Future CIP Projects to Be Levied - Current Expenses - TABLE B		0.00		
	<b>Total Current Expenses</b>			<b>(83,799.52)</b>
	<b>Total Cash &amp; Investments On Hand</b>		<b>09/12/17</b>	<b>3,368,666.59</b>
Total Cash & Investments On Hand		3,368,666.59		
CIP Projects Levied - Budget Remaining - TABLE A		(4,381,556.09)		
<b>Closed Projects Remaining Balance</b>		<b>(1,012,889.50)</b>		
2012 - 2016 Anticipated Tax Levy Revenue - TABLE C		10,014.74		
2017 Anticipated Tax Levy Revenue - TABLE C		643,220.55		
<b>Anticipated Closed Project Balance</b>		<b>(359,654.21)</b>		
Proposed & Future CIP Project Amount to be Levied - TABLE B		0.00		

**TABLE A - CIP PROJECTS LEVIED**

	Approved Budget	Current Expenses	2017 YTD Expenses	INCEPTION To Date Expenses	Remaining Budget	Grant Funds Received
Lakeview Park Pond (ML-8) (2013)	196,000	0.00	0.00	11,589.50	184,410.50	
Four Seasons Mall Area Water Quality Proj (NL-2)	990,000	5,296.00	20,953.50	162,805.34	827,194.66	
<b>2014</b>						
Schaper Pond Enhance Feasibility/Project (SL-1)(SL-3)	612,000	17,373.93	26,353.46	329,616.91	282,383.09	
Briarwood / Dawnview Nature Area (BC-7)	250,000	0.00	0.00	250,000.00	0.00	
Twin Lake Alum Treatment Project (TW-2)	163,000	0.00	0.00	91,037.82	71,962.18	
<b>2015</b>						
Main Stem 10th to Duluth (CR2015)	1,503,000	57,299.09	57,299.09	1,003,746.24	499,253.76	
<b>2016</b>						
Honeywell Pond Expansion (BC-4) <sup>1</sup>	810,930	0.00	0.00	25,307.00	785,623.00	
Northwood Lake Pond (NL-1) <sup>2</sup>	822,140					
Budget Amendment	611,600	1,433,740	0.00	416.00	1,438,689.98	(4,949.98)
<b>2017</b>						
Main Stem Cedar Lk Rd-Dupont (2017CR-M)	2017 Levy 400,000	1,064,472	0.00	196.00	114,757.79	949,714.21
	2018 Levy 664,472					
Plymouth Creek Restoration (2017 CR-P)	2017 Levy 580,930	863,573	3,830.50	12,004.20	77,608.33	785,964.67
	2018 Levy 282,643					267,298
		7,886,715	83,799.52	117,222.25	3,505,158.91	4,381,556.09

**TABLE B - PROPOSED & FUTURE CIP PROJECTS TO BE LEVIED**

	Approved Budget - To Be Levied	Current Expenses	2017 YTD Expenses	INCEPTION To Date Expenses	Remaining Budget
<b>2018</b>					
Bassett Creek Park & Winnetka Ponds Dredging (BCP-2)		0.00	29,441.20	60,760.25	(60,760.25)
2018 Project Totals	0	0.00	29,441.20	60,760.25	(60,760.25)
<b>2019</b>					
Bryn Mawr Meadows (BC-5)	0	0.00	0.00	5,282.80	(5,282.80)
2019 Project Totals	0	0.00	0.00	5,282.80	(5,282.80)
Total Proposed & Future CIP Projects to be Levied	0	0.00	29,441.20	66,043.05	(66,043.05)

**BCWMC Construction Account**

Fiscal Year: February 1, 2017 through January 31, 2018

(UNAUDITED)

September 2017 Financial Report

**TABLE C - TAX LEVY REVENUES**

	County Levy	Abatements / Adjustments	Adjusted Levy	Current Received	Year to Date Received	Inception to Date Received	Balance to be Collected	BCWMO Levy
2017 Tax Levy	1,303,600.00		1,303,600.00	0.00	0.00	660,379.45	643,220.55	1,303,600.00
2016 Tax Levy	1,222,000.00	(6,075.91)	1,215,924.09	0.00	0.00	1,211,989.75	3,934.34	1,222,000.00
2015 Tax Levy	1,000,000.00	1,935.37	1,001,935.37	0.00	0.00	998,801.29	3,134.08	1,000,000.00
2014 Tax Levy	895,000.00	(7,436.49)	887,563.51	0.00	0.00	885,449.96	2,113.55	895,000.00
2013 Tax Levy	986,000.00	(10,440.29)	975,559.71	0.00	0.00	974,888.42	671.29	986,000.00
2012 Tax Levy	762,010.00	(7,488.24)	754,521.76	0.00	0.00	754,360.28	161.48	762,010.00
				<u>0.00</u>			<u>653,235.29</u>	

**OTHER PROJECTS:**

	Approved Budget	Current Expenses / (Revenue)	2017 YTD Expenses / (Revenue)	INCEPTION To Date Expenses / (Revenue)	Remaining Budget
<b>TMDL Studies</b>					
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
<b>Flood Control Long-Term</b>					
Flood Control Long-Term Maintenance	673,373.00	0.00	14,912.00	320,742.41	
Less: State of MN - DNR Grants			(9,300.00)	(93,000.00)	
	673,373.00	0.00	5,612.00	227,742.41	445,630.59
<b>Annual Flood Control Projects:</b>					
Flood Control Emergency Maintenance	500,000.00	0.00	0.00	0.00	500,000.00
<b>Annual Water Quality</b>					
Channel Maintenance Fund	350,000.00	0.00	35,915.00	157,157.95	192,842.05
Total Other Projects	1,658,373.00	0.00	41,527.00	492,665.51	1,165,707.49

Cash Balance 08/09/2017 **1,063,206.44**

Add:

Transfer from GF 0.00

Less:

Current (Expenses)/Revenue 0.00

**Ending Cash Balance 09/12/17 1,063,206.44**

**Additional Capital Needed (102,501)**



CIP Projects Levied											
	Total	2013	2013	2014	2014	2014	2015	2016	2016	2017	2017
	CIP Projects Levied	Lakeview Park Pond (ML-8)	Four Seasons Mall Area Water Quality Project (NL-2)	Schaper Pond Enhancement Feasibility / Project (SL-1) (SL-3)	Briarwood / Dawnview Water Quality Improve Proj (BC-7)	Twin Lake In-Lake Alum Treatment Project (TW-2)	Main Stem - 10th Ave to Duluth (CR2015)	Honeywell Pond Expansion (BC-4)	Northwood Lake Pond (NL-1)	Main Stem-Cedar Lk Rd to Dupont (2017 CR-M)	Plymouth Creek Restoration (2017 CR-P)
<b>Original Budget</b>	<b>7,275,115</b>	<b>196,000</b>	<b>990,000</b>	<b>612,000</b>	<b>250,000</b>	<b>163,000</b>	<b>1,503,000</b>	<b>810,930</b>	<b>822,140</b>	<b>1,064,472</b>	<b>863,573</b>
Added to Budget	611,600								611,600		
<b>Expenditures:</b>											
Feb 2004 - Jan 2014	269,971.68	11,589.50	101,635.49	89,594.90	19,598.09	23,793.65	11,179.35	7,461.95	5,118.75		
Feb 2015-Jan 2016	313,510.98		25,866.35			432.00	93,862.65	6,442.53	94,823.44	42,671.88	49,412.13
Feb 2016-Jan 2017	2,804,454.00		14,350.00	213,668.55	230,401.91	66,812.17	841,405.15	11,402.52	1,338,331.79	71,889.91	16,192.00
Feb 2017-Jan 2018	117,222.25		20,953.50	26,353.46			57,299.09		416.00	196.00	12,004.20
<b>Total Expenditures:</b>	<b>3,505,158.91</b>	<b>11,589.50</b>	<b>162,805.34</b>	<b>329,616.91</b>	<b>250,000.00</b>	<b>91,037.82</b>	<b>1,003,746.24</b>	<b>25,307.00</b>	<b>1,438,689.98</b>	<b>114,757.79</b>	<b>77,608.33</b>
<b>Project Balance</b>	<b>4,381,556.09</b>	<b>184,410.50</b>	<b>827,194.66</b>	<b>282,383.09</b>		<b>71,962.18</b>	<b>499,253.76</b>	<b>785,623.00</b>	<b>(4,949.98)</b>	<b>949,714.21</b>	<b>785,964.67</b>
CIP Projects Levied											
	Total	2013	2013	2014	2014	2014	2015	2016	2016	2017	2017
	CIP Projects Levied	Lakeview Park Pond (ML-8)	Four Seasons Mall Area Water Quality Project (NL-2)	Schaper Pond Enhancement Feasibility / Project (SL-1) (SL-3)	Briarwood / Dawnview Water Quality Improve Proj (BC-7)	Twin Lake In-Lake Alum Treatment Project (TW-2)	Main Stem - 10th Ave to Duluth (CR2015)	Honeywell Pond Expansion (BC-4)	Northwood Lake Pond (NL-1)	Main Stem-Cedar Lk Rd to Dupont (2017 CR-M)	Plymouth Creek Restoration (2017 CR-P)
<b>Project Totals By Vendor</b>											
Barr Engineering	437,057.19	6,338.95	63,974.04	101,604.96	13,089.74	15,712.00	15,825.00	13,157.98	17,966.00	111,939.39	77,449.13
Kennedy & Graven	11,961.70	1,200.55	2,471.95	993.40	1,038.35	1,058.65	2,223.75	796.00	1,701.45	318.40	159.20
City of Golden Valley	1,471,580.12			213,668.55	230,401.91	66,812.17	960,697.49				
City of Minneapolis											
City of Plymouth	75,759.35		75,759.35								
City of New Hope	1,413,267.55								1,413,267.55		
City of Crystal											
MPCA	2,500.00									2,500.00	
Blue Water Science	3,900.00					3,900.00					
Misc											
2.5% Admin Transfer	83,378.02	4,050.00	20,600.00	13,350.00	5,470.00	3,555.00	25,000.00	11,353.02			
Transfer to General Fun											
<b>Total Expenditures</b>	<b>3,499,403.93</b>	<b>11,589.50</b>	<b>162,805.34</b>	<b>329,616.91</b>	<b>250,000.00</b>	<b>91,037.82</b>	<b>1,003,746.24</b>	<b>25,307.00</b>	<b>1,432,935.00</b>	<b>114,757.79</b>	<b>77,608.33</b>
CIP Projects Levied											
	Total	2013	2013	2014	2014	2014	2015	2016	2016	2017	2017
	CIP Projects Levied	Lakeview Park Pond (ML-8)	Four Seasons Mall Area Water Quality Project (NL-2)	Schaper Pond Enhancement Feasibility / Project (SL-1) (SL-3)	Briarwood / Dawnview Water Quality Improve Proj (BC-7)	Twin Lake In-Lake Alum Treatment Project (TW-2)	Main Stem - 10th Ave to Duluth (CR2015)	Honeywell Pond Expansion (BC-4)	Northwood Lake Pond (NL-1)	Main Stem-Cedar Lk Rd to Dupont (2017 CR-M)	Plymouth Creek Restoration (2017 CR-P)
<b>Levy/Grant Details</b>											
2010 - 2014 Levies	1,881,000	162,000	824,000	534,000	218,800	142,200					
2014/2015 Levy	1,000,000						1,000,000				
2015-2016 Levy	1,222,000							810,930	411,070		
2016-2017 Levy	1,303,600								322,670	580,930	400,000
2017-2018 Levy	947,115									282,643	664,472
Construction Fund Balance	703,000	34,000	166,000				503,000				
BWSR Grant- BCWMO	470,000								470,000		
DNR Grants-LT Maint											
Total Levy/Grants	7,526,715	196,000	990,000	534,000	218,800	142,200	1,503,000	810,930	1,203,740	863,573	1,064,472
BWSR Grants Received									670,000		267,298
MPCA Grant-CWP (Total \$300,000)									75,000.00		
									19,932.80		

### Bassett Creek Construction Project Details

Proposed & Future CIP Projects (to be Levied)				Other Projects					Totals - All Projects
Total Proposed & Future CIP Projects (to be Levied)	2018 Bassett Cr Pk & Winnetka Ponds Dredging (2018 BCP-2)	2019 Bryn Mawr Meadows	DNR Grant From GF	Total Other Projects	TMDL Studies	Flood Control Emergency Maint	Flood Control Long- Term Maint	Channel Maint	
<b>Original Budget</b>				<b>1,278,373.00</b>	<b>105,000.00</b>	<b>500,000.00</b>	<b>748,373.00</b>	<b>175,000.00</b>	<b>8,553,488.00</b>
Added to Budget				(250,000.00)			(250,000.00)		361,600.00
				93,000.00			93,000.00		93,000.00
				<b>380,000.00</b>	<b>30,000.00</b>		<b>175,000.00</b>	<b>175,000.00</b>	<b>380,000.00</b>
<b>Expenditures:</b>				<b>245,426.23</b>	<b>107,765.15</b>		<b>43,195.48</b>	<b>94,465.60</b>	<b>520,680.71</b>
Feb 2004 - Jan 2014	5,282.80		5,282.80	137,357.54			110,580.19	26,777.35	450,868.52
Feb 2015-Jan 2016				152,070.74			152,070.74		2,987,843.79
Feb 2016-Jan 2017	31,319.05	31,319.05		50,811.00			14,896.00	35,915.00	197,474.45
Feb 2017-Jan 2018	29,441.20	29,441.20							
<b>Total Expenditures:</b>	<b>66,043.05</b>	<b>60,760.25</b>	<b>5,282.80</b>	<b>585,665.51</b>	<b>107,765.15</b>		<b>320,742.41</b>	<b>157,157.95</b>	<b>4,156,867.47</b>
<b>Project Balance</b>	<b>(66,043.05)</b>	<b>(60,760.25)</b>	<b>(5,282.80)</b>	<b>1,165,707.49</b>	<b>27,234.85</b>	<b>500,000.00</b>	<b>445,630.59</b>	<b>192,842.05</b>	<b>5,481,220.53</b>
<b>Project Totals By Vendor</b>									
Barr Engineering	66,043.05	60,760.25	5,282.80	387,939.50	104,888.70		283,050.80		891,039.74
Kennedy & Graven				2,648.25	1,164.30		1,099.35	384.60	14,609.95
City of Golden Valley				61,962.50				61,962.50	1,533,542.62
City of Minneapolis				38,823.35				38,823.35	38,823.35
City of Plymouth				26,747.50				26,747.50	102,506.85
City of New Hope								29,240.00	1,413,267.55
City of Crystal									
MPCA									2,500.00
Blue Water Science									3,900.00
Misc				5,704.41	1,712.15		3,992.26		5,704.41
2.5% Admin Transfer									83,378.02
Transfer to General Fund				32,600.00			32,600.00		32,600.00
<b>Total Expenditures</b>	<b>66,043.05</b>	<b>60,760.25</b>	<b>5,282.80</b>	<b>585,665.51</b>	<b>107,765.15</b>		<b>320,742.41</b>	<b>157,157.95</b>	<b>4,121,872.49</b>
<b>Levy/Grant Details</b>									
2010 -2014 Levies					30,000		100,000	100,000	1,881,000
2014/2015 Levy				50,000.00			25,000	25,000	1,050,000
2015-2016 Levy									
2016-2017 Levy									
2017-2018 Levy									
Construction Fund Balance				50,000.00			25,000	25,000	753,000
BWSR Grant- BCWMO				50,000.00			25,000	25,000	520,000
DNR Grants-LT Maint				93,000.00			93,000		
<b>Total Levy/Grants</b>				<b>473,000.00</b>	<b>30,000</b>		<b>268,000</b>	<b>175,000</b>	<b>4,204,000</b>

Item 4D.  
BCWMC 9-21-17  
Full documentation online.



7800 Golden Valley Road  
Golden Valley, MN 55427

August 18, 2017

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

Subject: 2015 Bassett Creek Main Stem Restoration Project (City Project No. 13-25)  
BCWMC Project #CR2015  
3rd Request for Reimbursement

Dear Ms. Jester:

Per the terms of the Cooperative Agreement for the 2015 Bassett Creek Main Stem Restoration Project, the City of Golden Valley is requesting reimbursement for expenses incurred to date for the construction phase of the creek restoration project. The amount of the request for this reimbursement is **\$57,299.09**.

Enclosed please find the following supporting documentation:

- Rachel Contracting Voucher numbers 8 and 9
- City of Golden Valley expenditure report

Following is a summary of reimbursement requests to date:

Reimbursement 1 (July 2015)	\$ 61,993.25 PAID
Reimbursement 2 (December 2016)	\$ 841,405.15 PAID
<u>Reimbursement 3 (August 2017)</u>	<u>\$ 57,299.09</u>
Total amount requested to date	\$ 960,697.49

This is the final reimbursement request for the construction phase of the project. There will be additional reimbursement requests for the Native Vegetation Establishment phase of the project which began in 2016 and runs through 2018.

If you have any questions regarding this submission, please contact me at 763-593-8084.

Sincerely,

A handwritten signature in blue ink, appearing to read "Eric Eckman".

Eric Eckman  
Project Manager

Enclosures

C: Marc Nevinski, Physical Development Director  
Jeff Oliver, PE, City Engineer  
Tom Hoffman, Water Resources Technician  
Sue Virnig, Finance Director



**BASSETT CREEK WATERSHED MANAGEMENT COMMISSION**

**NOTICE OF PUBLIC HEARING**

**Proposed Improvement Contained in the**

**Bassett Creek Watershed Management Commission's 2015 Watershed Management Plan**

NOTICE IS HEREBY GIVEN that the Bassett Creek Watershed Management Commission (BCWMC) will hold a public hearing during its regular monthly meeting on

**Thursday, September 21, 2017 at 8:30 a.m.**

**at Golden Valley City Hall, 7800 Golden Valley Road, Golden Valley, Minnesota.**

Interested persons are invited to attend. The purpose of the public hearing is to hear testimony and comments from the public and cities regarding the capital improvement proposed for 2018 contained in the BCWMC's *September 2015 Watershed Management Plan*. The proposed capital improvement involves the following:

**Bassett Creek Park Pond Dredging Project Phase I: Winnetka Pond Dredging:** (BCP-2) This project in the City of Crystal will remove approximately 18,400 cubic yards of sediment from "Winnetka Pond" on 36<sup>th</sup> Ave. N., just east of Winnetka Rd., and will increase the pond's depth to 6 feet. Project results include an increase in the pond's volume and flood control benefits, and reduced sediment and phosphorus in the North Branch of Bassett Creek by an estimated 51.7 and 1,823 lbs/year, respectively. Further, the planting of native vegetation around the pond will improve habitat for wildlife and pollinators.

This project has a total estimated cost of \$1,000,000 including the initial study, design, construction, and administration. Funding for the project is proposed to come from the BCWMC's Capital Improvement Program funds through a 2018 ad valorem property tax by Hennepin County on property within the Bassett Creek Watershed. More information is available at [www.bassettcreekwmo.org/projects](http://www.bassettcreekwmo.org/projects).

BASSETT CREEK WATERSHED MANAGEMENT COMMISSION

Jim de Lambert, Chair



BASSETT CREEK WATERSHED MANAGEMENT COMMISSION

RESOLUTION NO. 17-06

A RESOLUTION ORDERING THE 2018 IMPROVEMENT,  
DESIGNATING THE MEMBER RESPONSIBLE FOR CONSTRUCTION,  
MAKING FINDINGS PURSUANT TO MINNESOTA STATUTES, SECTION  
103B.251, CERTIFYING COSTS TO HENNEPIN COUNTY, AND APPROVING  
THE AGREEMENT FOR CONSTRUCTION OF THE IMPROVEMENT

WHEREAS, on September 17, 2015, the Commission adopted the *Bassett Creek Watershed Management Commission, Water Management Plan, September 2015* (the “Plan”);

WHEREAS, the Plan includes a Capital Improvement Program (“CIP”) listing capital projects in Table 5-3 of the Plan;

WHEREAS, the CIP includes the following capital project for the year 2018:

- (a) Bassett Creek Park Pond Dredging Project (2018 BCP-2);

WHEREAS, the Commission approved completing Phase I of the project: Winnetka Pond Dredging at its May 18, 2017 meeting (hereinafter referred to as the “2018 Project”);

WHEREAS, the Plan specifies a county tax levy under Minnesota Statutes, section 103B.251 as the source of funding for the 2018 Project;

WHEREAS, the Commission also needs to include as part of the county tax levy the costs to complete the remaining portions of the approved 2017 projects, which include the Plymouth Creek Restoration Project (2017CR-P) and the Main Stem Channel Restoration (Erosion Repair) Project (2017CR-M) (collectively, the “2017 Projects”); and

WHEREAS, on September 21, 2017, following published and mailed notice in accordance with the Commission’s Joint Power Agreement and Minnesota Statutes, section 103B.251, the Commission conducted a public hearing on the 2018 Project.

NOW, THEREFORE, BE IT RESOLVED, by the Board of Commissioners of the Bassett Creek Watershed Management Commission as follows:

1. The 2018 Project will be conducive to the public health and promote the general welfare and is in compliance with Minnesota Statutes, sections 103B.205 to 103B.255 (the “Act”) and with the Plan as adopted and amended in accordance with the Act. The 2018 Project is hereby ordered.
2. The estimated cost of the 2018 Project is One Million Dollars (\$1,000,000). Of this amount, One Million Dollars (\$1,000,000) will be paid from funds received from a county tax levy pursuant to Minnesota Statutes, section 103B.251 levied in 2017 for collection in 2018.

3. The estimated cost for the remaining portions of the 2017 Projects is Three Hundred Forty Six Thousand Eight Hundred and Fifteen Dollars (\$346,815), which is to be paid from funds received from a county tax levy pursuant to Minnesota Statutes, section 103B.251 levied in 2017 for collection in 2018.
4. The total amount certified to Hennepin County for collection in 2018 is One Million Three Hundred Forty Six Thousand Eight Hundred and Fifteen Dollars (\$1,346,815) for payment by the County in accordance with Minnesota Statutes, section 103B.251, subdivision 6.
5. The Commission has received, accepted, and approved the feasibility report for the 2018 Project.
6. The cost of the 2018 Project will be paid by the Commission up to the amount specified in paragraph 2 above from proceeds received from Hennepin County pursuant to Minnesota Statutes, section 103B.251 and grant funding, if awarded. Additional costs may be paid by the city constructing the 2018 Project, but no costs will be charged to other members of the Commission.
7. The City of Crystal is designated as the member responsible for contracting for the construction of the 2018 Project, and the engineer designated for preparation of plans and specifications is the Crystal City Engineer, or other engineers selected and retained by the City of Crystal. Contracts for construction shall be let in accordance with the requirements of law applicable to the City of Crystal. The Cooperative Agreement with the City of Crystal for the construction of the 2018 Project is approved, and the Chair and Secretary are authorized to execute the agreement on behalf of the Commission.

Adopted by the Board of Commission of the Bassett Creek Watershed Management Commission the 21<sup>st</sup> day of September, 2017.

---

Chair

ATTEST:

---

Secretary





Item 6Aiii.  
BCWMC 9-21-17

## Bassett Creek Watershed Management Commission

# MEMO

To: BCWMC Commissioners  
 From: Laura Jester, Administrator  
 Date: September 13, 2017  
**RE: Item 6Aiii Certifying Costs to Hennepin County:**

1. Direct staff to certify for payment by Hennepin County in 2018 a total tax levy request of \$1,346,815 as laid out in Resolution 17-06 and in the table below.

### Background

At their meeting in May 2017, the Commission set a maximum 2018 levy of \$1,346,815 for the projects below. I recommend certifying the same amount to the County for the final 2018 levy.

- 2018 portion of the Main Stem Erosion Repair Project (2017CR-M) (project split between 2017 & 2018 levies)
- 2018 portion of the Plymouth Creek Restoration Project (2017CR-P) (project split between 2017 & 2018 levies)
- Total costs of the Bassett Creek Park Pond Phase I Dredging Project: Winnteka Pond (BCP-2)

Item	Estimated costs 2017CR-M	Estimated costs 2017CR-P	Estimated costs BCP-2
Construction (includes project construction, construction observation, engineering and design, permitting, and contingency)	\$932,000	\$766,000	\$913,000
Feasibility study costs	\$104,600	\$62,640	\$60,000
BCWMC costs (legal, engineering review)	\$7,000	\$18,000	\$7,000
Transfer to BCWMC Administrative Fund	\$20,872 <sup>1</sup>	\$16,933 <sup>1</sup>	\$20,000
<b>TOTAL PROJECT EXPENSES</b>	<b>\$1,064,472</b>	<b>\$863,573</b>	<b>\$1,000,000</b>
Grants Received	-\$150,300	-\$450,000	-\$0
<b>BCWMC PROJECT EXPENSES</b>	<b>\$914,172</b>	<b>\$413,573</b>	<b>\$1,000,000</b>
TOTAL PROJECT EXPENSES			\$2,327,745
2017 Levy Received			-\$980,930
<b>TOTAL FINAL 2018 LEVY:</b>			<b>\$1,346,815</b>

<sup>1</sup> For transfer to Administrative Fund over 2017 and 2018



## COOPERATIVE AGREEMENT

(Basset Creek Park Pond Phase I Dredging Project: Winnetka Pond)

This Agreement is made as of this \_\_\_\_ day of September, 2017 by and between the Bassett Creek Watershed Management Commission, a joint powers watershed management organization (hereinafter the “Commission”), and the City of Crystal, a Minnesota municipal corporation (hereinafter the “City”).

WITNESSETH:

WHEREAS, the Commission adopted the Bassett Creek Watershed Management Commission Watershed Management Plan on September 17, 2015 (the “Plan”), a watershed management plan within the meaning of Minnesota Statutes, section 103B.231; and

WHEREAS, the Plan includes a capital improvement program (“CIP”) that lists a number of water quality project capital improvements; and

WHEREAS, one of the water quality projects identified in the CIP is the Bassett Creek Park Pond Phase I Dredging Project;

WHEREAS, the proposed dredging project included both the Bassett Creek Park Pond and the Winnetka Pond, but, due to cost considerations, the only portion of the proposed project approved for funding is the dredging of Winnetka Pond within the City of Crystal to a depth of 6 feet, which would result in removing approximately 18,400 cubic yards of sediment from the pond (the “Project”), as more fully described in the feasibility report for the Project prepared by Barr Engineering Company, entitled Feasibility Report for Bassett Creek Park Pond and Winnetka Pond East Dredging Project dated May 2017, which is attached and made a part hereof (the “Feasibility Report”); and

WHEREAS, the cost estimate for the Project, including design, construction and Commission costs directly related to the Project, is \$1,000,000; and

WHEREAS, the Plan specifies that the Project will be funded by a County tax levy under Minnesota Statutes, section 103B.251; and

WHEREAS, on September 21, 2017, the Commission adopted a resolution ordering the Project and directing that it be constructed by the City; and

WHEREAS, project costs were certified to Hennepin County, which will levy taxes throughout the watershed for the Project costs in 2017 for collection and settlement in 2018; and

WHEREAS, the City is willing to construct the Project in accordance with the terms and conditions hereinafter set forth.

NOW, THEREFORE, ON THE BASIS OF THE PREMISES AND MUTUAL COVENANTS HEREINAFTER SET FORTH, THE PARTIES AGREE AS FOLLOWS:

1. Project. The Project will consist of the work identified as Alternative 3 in Section 5.2.3 of the Feasibility Report, which involves deepening the entire Winnetka Pond East to a depth of 6 feet and as is further described in the Feasibility Report.
2. Design and Plans. The City will design the Project and prepare plans and specifications for construction of the Project. The 50% and 90% plans and specifications, and any changes to such plans and specifications, shall be submitted to the Commission for approval. Minor change orders that do not materially change either the effectiveness of the Project to meet its intended purposes or the environmental impacts of the Project may be approved by the City without requiring approvals by the Commission.
3. Contract Administration. The City will advertise for bids and award contracts in accordance with the requirements of law. The City will award the contract and supervise and administer the construction of the Project to ensure that it is completed in accordance with the approved plans and specifications. The contract may only be let to a responsible contractor in accordance with Minnesota Statutes, section 16C.285 and the City will require the contractor to provide all payment and performance bonds required by law. The City will require the Contractor to name the Commission as additional insured on all liability policies required by the City of the contractor and the Commission shall be given the same notification of cancellation or non-renewal as is given to the City. The City will require the contractor to defend, indemnify, protect and hold harmless the Commission and the City, their agents, officers, and employees, from all claims or actions arising from negligent acts, errors or omissions of the contractor. The City will supervise the work of the contractor. However, the Commission may observe and review the work of the Project until it is completed. The City will display a sign at the construction site stating “Paid for by the Taxpayers of the Bassett Creek Watershed”.
4. Contract Payments. The City will pay the contractor and all other expenses related to the construction of the Project and keep and maintain complete records of such costs incurred.
5. Commission Reimbursement. The Commission will use its best efforts to secure payment from the County in accordance with Minnesota Statutes, section 103B.251 in the amount of One Million Dollars (\$1,000,000) by tax levy in 2017 for collection in 2018. The total reimbursement will not exceed One Million Dollars (\$1,000,000), less Commission expenses.

Out-of-pocket costs related to the Project, incurred and paid by the Commission including, but not limited to, feasibility studies, publication of notices, securing County tax levy, preparation of contracts, review of engineering designs, review of proposed contract documents, grant application development, grant administration,

administration of this contract, and up to a 2.5% administrative charge shall be repaid from the amount specified above from funds received in the tax settlement from Hennepin County. All such funds in excess of such expenses are available for reimbursement to the City for costs incurred by the City in the design and construction of the Project. Reimbursement to the City will be made as soon as funds are available, provided a request for payment has been received from the City that contains such detailed information as may be requested by the Commission to substantiate costs and expenses. The City shall complete and submit with its final reimbursement request to the Commission a final report on the Project using the Commission's final reporting form and providing such other information as may be requested by the Commission.

6. Limits on Reimbursement. Reimbursement to the City will not exceed the amount specified above from the amount received from the County for the Project, less any amounts retained by the Commission for Commission expenses. Reimbursement will not be increased by grants or other revenues received by the Commission for the Project. Reimbursement will not exceed the costs and expenses incurred by the City for the Project, less any amounts the City receives for the Project as grants from other sources. All costs of the Project incurred by the City in excess of such reimbursement, shall be borne by the City or secured by the City from other sources.
7. Audit. All City books, records, documents, and accounting procedures related to the Project are subject to examination by the Commission.
8. Environmental Review. The City will perform all necessary investigations of site contamination and secure all necessary local, state, or federal permits required for the construction of the Project and will not proceed with the Project until any required environmental review and remediation of site contamination is completed or a plan for remediation is approved by appropriate regulatory agencies.
9. Ongoing Maintenance. Upon completion of the Project, the City will assume responsibility for its ongoing maintenance. The parties understand and agree that the City's assumption of ongoing maintenance does not preclude this site from being included as a future CIP project, whether it is for future dredging or some other project the Commission agrees to make part of its CIP.
10. Data Practices. The City shall retain and make available data related to the letting of contracts and construction of the Project in accordance with the Minnesota Government Data Practices Act.
11. Term. This Agreement shall be in effect as of the date first written above and shall terminate once the project is completed and the Commission has completed its reimbursement payments to the City as provided herein.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized officers on behalf of the parties as of the day and date first above written.

BASSETT CREEK WATERSHED  
MANAGEMENT COMMISSION

By: \_\_\_\_\_  
Its Chair

And by: \_\_\_\_\_  
Its Secretary

Date: \_\_\_\_\_

CITY OF CRYSTAL

By: \_\_\_\_\_  
Its Mayor

And by: \_\_\_\_\_  
Its Manager

Date: \_\_\_\_\_







## Memorandum

**To:** Bassett Creek Watershed Management Commission  
**From:** Barr Engineering Co.  
**Subject:** Item 6B – Consider Approval of Proposal to Develop Aquatic Invasive Species Rapid Response Plan  
BCWMC September 21, 2017 Meeting Agenda  
**Date:** September 12, 2017

### **6B. Consider Approval of Proposal to Develop Aquatic Invasive Species Rapid Response Plan**

#### **1.0 Recommendations:**

1. Consider approving the scope of work and \$15,000 budget presented in this memorandum and direct the Engineer to develop the draft Aquatic Invasive Species (AIS) Rapid Response Plan.

#### **2.0 Background**

At their July meeting, the Commission reviewed and approved recommendations #1 - #5 of the Aquatic Plant Management/Aquatic Invasive Species (APM/AIS) Committee. One of the approved recommendations was that the Commission begin developing a rapid response action plan for key species (including zebra mussels and starry stonewort) in Priority 1 lakes using the 2017 APM/AIS budget (up to \$15,000). The committee also recommended that the Commission request a proposal from the Commission Engineer to develop lake-specific rapid response plans that consider infestation thresholds for action, consider experience and recommendations of the DNR and other organizations, assign responsible parties, and list possible funding partners for plan implementation. The committee noted that their recommendation is a high priority so that the Commission, cities, and other organizations are poised to respond to infestations efficiently and effectively.

#### **3.0 Content and Scope of AIS Rapid Response Plan**

Effective rapid response to AIS introduction is crucial to preventing establishment, minimizing ecological and economic impacts, and maximizing the effectiveness of efforts to contain, and if possible, eradicate newly introduced AIS. The proposed BCWMC AIS rapid response plan will detail the response by BCWMC and other partnering entities to key AIS detected in BCWMC waterbodies. The plan will be divided into three parts:

1. Overall framework for rapid response to AIS species detected in BCWMC water bodies
2. Rapid response to AIS species detected in BCWMC Priority 1 water bodies
3. Rapid response to zebra mussels and starry stonewort detected in BCWMC Priority 1 water bodies; rapid response to Eurasian watermilfoil (EWM) detected in Priority 1 BCWMC water bodies in which EWM is not currently present.

### **3.1 Overall framework for rapid response to AIS species detected in BCWMC water bodies**

The overall framework for rapid response to AIS species detected in BCWMC water bodies will guide the response of BCWMC for all newly detected AIS species. The framework will discuss:

- Verifying the detected AIS species
- Reporting the new AIS infestation to MnDNR, Hennepin County, City, Lake Association or lake residents, and any other appropriate entities (e.g., Three Rivers Park District, Minneapolis Park and Recreation Board)
- Publicizing the new AIS infestation to raise awareness aimed at preventing and containing spread, including signage at the public boat landing, if applicable, and contacting local media
- Determining management action, including the:
  - Risks posed by the infestation
  - Available treatment methods, and best method if more than one management method is available
  - Feasibility/need for quarantine of the new AIS infestation
  - Estimated length of time needed for management efforts
  - Appropriate entity to perform management and partner roles in the management effort
  - Funding sources for management
  - Monitoring program needed to evaluate results of management efforts
  - MnDNR permits needed for the management effort and the process for obtaining them
  - Contracting needs for the management effort and recommendations for the process and/or contents of the contract

### **3.2 Rapid Response Plan for Priority 1 Waterbodies (Medicine Lake, Northwood Lake, Parkers Lake, Sweeney Lake, Twin Lake, Westwood Lake, and Wirth Lake)**

The rapid response plan for Priority 1 waterbodies will guide the response of BCWMC when new AIS species are detected in Priority 1 waterbodies. The plan will provide additional details not found in the overall framework that will help BCWMC effectively respond to new AIS infestations in Priority 1 waterbodies. The plan will discuss:

- Thresholds for action based upon infestation area. Actions may include quarantine, manual removal (e.g., scuba divers), small scale chemical treatment, and large scale chemical treatment.
- Responsible parties and their roles in the rapid response
- Funding partners and their roles in the rapid response

During plan preparation, the BCWMC Engineer will engage in discussions with potential responsible parties and funding partners to determine appropriate roles.

**To:** Bassett Creek Watershed Management Commission  
**From:** Barr Engineering Co.  
**Subject:** Item 6B – Consider Approval of Proposal to Develop Aquatic Invasive Species Rapid Response Plan  
BCWMC September 21, 2017 Meeting Agenda  
**Date:** September 12, 2017  
**Page:** 3

---

### **3.3 Rapid Response Plan for Priority 1 Waterbodies for EWM (for waterbodies not currently infested), starry stonewort, and zebra mussel**

The rapid response plan for Priority 1 waterbodies for EWM (for lakes currently not infested – Sweeney Lake, Twin Lake, Westwood Lake, and Northwood Lake), starry stonewort, and zebra mussel will detail the management measures that will be initiated if a first time infestation is detected. The BCWMC Engineer will review existing rapid response plans, including Minneapolis Park and Recreation Board’s zebra mussel rapid response plan, and engage in discussions with researchers at the Minnesota Aquatic Invasive Species Research Center, MnDNR staff, Hennepin County staff, and Three Rivers Park District staff to identify the most effective management measures based upon the latest research information and previous experience in management efforts.

### **4.0 Cost Estimate**

The estimated cost of preparation of a draft AIS rapid response plan is \$15,000. The draft plan will be finalized in 2018 after review by the Commission (and BCWMC APM/AIS Committee, if directed by the Commission).

### **5.0 Schedule**

The draft AIS rapid response plan will be completed by the end of the Commission fiscal year (end of January of 2018).





## Bassett Creek Watershed Management Commission

### MEMO

To: Bassett Creek Watershed Management Commissioners  
From: BCWMC Technical Advisory Committee  
Date: September 13, 2017

**RE: TAC Recommendations – 8/4/17 TAC Meeting**

The BCWMC Technical Advisory Committee met on August 4<sup>th</sup> to discuss 1) FEMA modeling in the watershed, 2) communication needs regarding the XP-SWMM model and revised floodplain elevations, 3) the timing and process for updating the XP-SWMM model, and 4) possible revisions to the BCWMC review fees. They forward the following recommendations for the Commission's consideration.

TAC Members and Others at 8/4/17 TAC Meeting:

Liz Stout, Minneapolis	Rachael Crabb, MPRB
Jeff Oliver and Eric Eckman, Golden Valley	Jim de Lambert, Commission Chair
Richard McCoy and Marta Roser, Robbinsdale	Jim Prom, Plymouth Commissioner
Megan Albert, New Hope	Laura Jester, Administrator
Mark Ray, Crystal	Karen Chandler and Jim Herbert, Commission Engineers
Tom Dietrich, Minnetonka	Suzanne Jiwani, Pat Lynch and Jason Spiegel, MDNR
Ben Scharenbroich, Plymouth	
Susan Wiese, Medicine Lake	

#### 1. FEMA Modeling in the Bassett Creek Watershed

At their May meeting, the Commission directed the Commission Engineer to contact the MN Department of Natural Resources (DNR) about possible funding for the FEMA map revision process (as part of the discussion regarding the TAC's recommendations regarding the XP-SWMM model). In communications with DNR staff, the Commission Engineer learned that the DNR will be receiving a FEMA grant to develop hydrologic and hydraulic (H&H) models for the Twin Cities Mississippi River watershed, which includes the Bassett Creek watershed. Once completed, the modeling may lead to a FEMA physical map revision (i.e., official revisions to the FEMA floodplain maps).

Suzanne Jiwani with the DNR attended the TAC meeting and reported that the State of Minnesota agreed to do this work (with FEMA funding) rather than FEMA using their own consultants to perform the work. She went on to discuss the opportunity and gauge the Commission's interest in participating in the modeling effort. She reported the following information:

FEMA wants to model key watersheds in the Twin Cities area because these areas were "digitally captured" when the most recent digital Flood Insurance Rate Maps (DFIRMs) were produced. This

means FEMA took what was on the old map and placed it on the new maps, with no additional modeling, and with no use of the LiDAR data to delineate the floodplain. FEMA wants to go back and update these areas so they are supported by a new model.

The FEMA grant would cover the development of H&H models for the Bassett Creek (HUC10) watershed, along with the Coon Creek, Shingle Creek, Elm Creek, and Upper Minnehaha Creek watersheds, and parts of the Rice Creek and Vadnais Lakes area watersheds. The DNR's scope for the Bassett Creek watershed includes:

- Developing a hydrologic model
- Creating a hydraulic model for 25.4 miles of stream
- Delineating the Special Flood Hazard areas
- Developing other FEMA Flood Risk Products.

The BCWMC completed much of this work through its XP-SWMM modeling effort. (The FEMA grant cannot be used to reimburse this already-completed work.) Some additional work is needed to collect and analyze all data sought by FEMA for this effort. The TAC members discussed the pros and cons and possible costs if the Commission were to be involved with the effort. Further points of discussion included:

1. The work will be done with or without the Commission's involvement. The entire scope of the project is included in table below.
2. Although formal FEMA map updates are several years out, FEMA is likely to place a higher priority on map updates where new data (i.e., FEMA modeling) is available. It is also likely that local partners (like the BCWMC) would complete the FEMA modeling work faster than the DNR. (This, then, has added benefit of possibly getting formal map revisions completed sooner – something cities are hoping for.)
3. If the Commission does the work, Commission costs would be approximately \$2,000 for development of a scope of work and budget. These costs would not be reimbursed by the DNR or FEMA grant funds, but all other work would be reimbursed through the FEMA grant.
4. If the Commission does not do the work, the Commission would be asked to review the DNR's work, and would likely interact with DNR at various points throughout the process, which would likely cost the Commission more than developing the scope of work mentioned in #3.
5. There is likely to be better and more timely communication and coordination with cities if the Commission does the work.
6. Other benefits (identified by the DNR) for the Commission doing the work: The Commission will have more input during the modeling process; a better model will be completed because of the detail that has gone into it; and there could be extra money at the end to use for other flood risk reduction projects.

**RECOMMENDATION:**

The TAC recommends that the Commission direct the Commission Engineer to develop a scope and budget for completing the tasks laid out for the FEMA modeling work and to submit that scope and budget to the DNR to seek FEMA grant funds to complete the work. (Upon a vote among TAC members, 7 cities were in favor of this recommendation, Plymouth staff voted against the recommendation, and City of St. Louis Park was absent.)

Table 1. Tasks to Complete the FEMA Modeling Process

<ol style="list-style-type: none"><li>1. Obtain approval from the Interagency Hydrology Review Committee on the XPSWMM model hydrology and make necessary modifications to the model. (<i>The Interagency Hydrology Review Committee includes staff from the DNR, US Army Corps of Engineers, Natural Resource and Conservation Service, and United States Geological Survey.</i>)</li><li>2. Develop a set of cross-sections that associate the XPSWMM model to the FEMA streamline. These will be used as the cross-sections on the DFIRMs and will need to be used to delineate the floodplain and create the FEMA Flood Risk Products.</li><li>3. Develop the 1-percent-chance (100-year) and 0.2-percent-chance (500-year) floodplain polygons.</li><li>4. Develop the floodway polygon.</li><li>5. Format the cross-sections and floodplain/floodway polygons to FEMA standards (the DNR has templates for this).</li><li>6. Submit model hydraulics for review by the DNR. Suggested changes will most likely be minor, but they may include requiring a survey for road crossings in detailed study areas if as-built data are not available.</li><li>7. Perform the suggested corrections/updates to the XP-SWMM model.</li><li>8. Develop FEMA Flood Risk Products (Changes Since Last FIRM and Depth Grids). The DNR can provide instructions regarding the development of these products.</li><li>9. Organize all files and supporting data for uploading to FEMA's Mapping Information Platform (MIP).</li></ol>
---

## 2. Proposed Revisions to BCWMC Review Fee Schedule

At the March 27, 2017 BCWMC Budget Committee meeting, the committee discussed the discrepancy between development review expenses and fees collected for reviews. It was noted that in 2016 and 2017 there were a few large, complicated projects that required much more time to review and to coordinate with developers about the XP-SWMM model and MIDS, than was recovered in fees. The Budget Committee requested TAC input on the issue.

At this meeting, the TAC reviewed data provided by the Commission Engineers showing reviews, fees, and a comparison of fees collected with the current structure and fees that would have been collected if their proposed new structure was in place (attached). Commission Engineer Herbert noted that the current fee schedule (attached) is based on project size but that smaller parcels often have more complicated and time-consuming projects and review needs. There was consensus that it makes sense to revise the fee structure so that complicated projects end up paying a fee more commensurate with actual expenses. The Commission Engineers presented a proposed restructured fee schedule (attached) that attempts to base fees more on review effort than project size.

Commission Engineers noted that the proposed fee schedule still includes lower fees for single-family homes and municipal projects because the Commission does not intend to burden single family homeowners with high fees, and the Commission offers lower fees to municipalities that fund the operating budget of the Commission. However, it was also noted that often single-family home projects require more communication with project proposers due to their

inexperience with construction projects; and that lately municipal projects have been more complex and challenging, resulting in more time needed for review.

TAC members discussed situations where reviews take considerable time and expense including when substantial changes are made to a project after an initial review and comment letter from the Commission, requiring further review and a revised comment letter. There was consensus that escrow accounts are too complicated and time consuming to administer. Instead, the TAC recommended that, if legally appropriate, the Commission should charge project proposers for actual expenses when a project review exceeds \$5,000.

**RECOMMENDATION:**

The TAC recommends that the Commission adopt the proposed review fee structure (attached) and include a provision to charge actual costs for review expenses above a \$5,000 threshold.

The TAC recommended that the revised fee schedule take effect January 1, 2018. Commission staff recommend adopting the revised fee schedule effective October 1, 2017 to be more in-line with recent changes to the requirements document.

**3. Communication Needs for XP-SWMM/Revised Floodplain Elevations**

There was some discussion about how cities are currently communicating with residents and other city staff (such as planning departments) about recent changes to floodplain elevations and discrepancies between FEMA and BCWMC floodplain elevations. The group suggested that the Commission develop only a minor communication piece for use on the website and for communications with residents and others.

**RECOMMENDATION:**

The TAC recommends that the Commission develop a one-page explanation of why there are two different numbers for floodplain elevations and a description of the modeling effort.

**4. Timing and Process for BCWMC Model Updates**

The Commission Engineer noted that updates to the P8 and XP-SWMM models are generally based on information provided by member cities on projects constructed in the watershed. They asked for the TAC's input on a timeline and process for submitting the information needed for model updates.

**RECOMMENDATIONS:**

- The TAC recommends that the Commission direct member cities to submit all pertinent information from the calendar year to the Commission Engineer no later than March 1<sup>st</sup> of the following year.
- The TAC recommends that the Commission direct the Commission Engineer to finalize model updates no later than June 1<sup>st</sup> of each year.



**Proposed Fee Schedule**

Fee Schedule (Effective \_\_\_\_\_, 2017)

## Bassett Creek Watershed Management Commission Project Reviews

Project Review Fees (check appropriate boxes) <sup>1, 7</sup>		
<input checked="" type="checkbox"/> <b>Base Fees</b>		
<input type="checkbox"/>	Single Family Lot (No add-on fees required)	\$500
<input type="checkbox"/>	Projects Requiring Only Erosion and Sediment Control Review	\$1,500
<input type="checkbox"/>	Municipal Projects <sup>2</sup> (No add-on fees required)	\$1,500
<input type="checkbox"/>	All Other Projects	\$1,500
<input checked="" type="checkbox"/> <b>Add-On Fees<sup>3</sup></b>		
<input type="checkbox"/>	1. Projects requiring Rate Control or Treatment to MIDS Performance Goal	\$1,000
<input type="checkbox"/>	2. Projects involving work within or below the 100-year floodplain (Table 2-9, Watershed Management Plan) - select highest of following add-on fees (a or b)	
<input type="checkbox"/>	a. Work involving filling and compensating storage within or below the 100-year floodplain (identified in Table 2-9)	\$1,000
<input type="checkbox"/>	b. Work along the Bassett Creek trunk system or inundation areas involving review of, or modifying the XP-SWMM model.	\$2,000
<input type="checkbox"/>	3. Work involving creek crossings (bridges, culverts, etc.)	\$1,000
<input type="checkbox"/>	4. Projects involving review of alternative BMPs <sup>4</sup>	\$1,000
<input type="checkbox"/>	5. Project involving variance request	\$1,000
<input checked="" type="checkbox"/> <b>Wetland Fees<sup>5</sup></b>		
<input type="checkbox"/>	Wetland delineation review	Varies
<input type="checkbox"/>	Wetland replacement plan review	Varies
<input type="checkbox"/>	Monitoring and reporting	Varies
<input type="checkbox"/>	Wetland replacement escrow	Varies
<b>Total Project Review Fees <sup>6, 7</sup></b>		\$ _____
<p>1 State agencies are exempt from review fees. Other public agencies are required to pay review fees and add-on fees.</p> <p>2 Including Minneapolis Park &amp; Recreation Board projects</p> <p>3 Required in addition to base fee (except for single family lots and municipal projects).</p> <p>4 BMPs not included in <i>Minnesota Stormwater Manual</i>.</p> <p>5 Wetland fees will be billed at actual cost for projects where BCWMC acts as the LGU for the Wetland Conservation Act or when a member city requests assistance from the BCWMC for wetland-related review tasks (BCWMC is the LGU for the cities of Medicine Lake, Robbinsdale and St. Louis Park).</p> <p>6 Include check for total project review fees or other fees with application form. Check should be payable to Bassett Creek Watershed Management Commission.</p> <p>7 If the actual cost to conduct a review reaches \$5,000, the applicant shall be required to reimburse the Commission for all costs it incurs in excess of that amount. The Commission shall bill the applicant for the additional costs. If an applicant fails to fully reimburse the Commission for the additional costs, any future requests for a review from the applicant shall be deemed incomplete, and the Commission will not conduct a review, until all outstanding amounts have been paid.</p>		

p:\mpls\23 mn\27\2327051\workfiles\requirements document\april 2017 fee schedule review\application\_and\_fee\_schedule\_2017-07-27\_draft\_lj edits.pdf.docx

**Current Fee Schedule**

Fee Schedule (Effective September 17, 2015)

Bassett Creek Watershed Management Commission Project Reviews

<b>Project Review Fees (check appropriate boxes)</b>		
<b>Base Fees<sup>1</sup></b>		
	Single Family Lot	\$300
<b>Single Family Residential Development (density less than 3 units per acre)</b>		
	Total parcel size <15 acres	\$1,500
	Total parcel size 15–30 acres	\$1,800
	Total parcel size >30 acres	\$2,500
<b>All Other Development<sup>2</sup></b>		
	Total parcel size <5 acres	\$1,700
	Total parcel size 5–20 acres	\$2,200
	Total parcel size >20 acres	\$3,000
	Street/highway/trails/utility/municipal projects	\$1,100
<b>Add-On Fees<sup>3</sup></b>		
	Work within or below the 100-year floodplain (Table 2-9, Watershed Management Plan)	\$300
	Work involving creek crossings (bridges, culverts, etc.)	\$300
	Projects involving review of alternative BMPs <sup>4</sup>	\$300
<b>Other Fees</b>		
	Variance escrow	\$2,000
<b>Wetland Fees<sup>5</sup></b>		
	Wetland delineation review	Varies
	Wetland replacement plan review	Varies
	Monitoring and reporting	Varies
	Wetland replacement escrow	Varies
<b>Total Project Review Fees<sup>6</sup></b>		\$_____
<p>1 Project-review fee based on total parcel size (not disturbed area) including wetlands, buffer, right-of-way, and other nondeveloped area.</p> <p>2 State agencies are exempt from review fees.</p> <p>3 Required in addition to base fee.</p> <p>4 BMPs not included in <i>Minnesota Stormwater Manual</i>.</p> <p>5 Wetland fees will be billed at actual cost for projects where BCWMC acts as the LGU for the Wetland Conservation Act or when a member city requests assistance from the BCWMC for wetland-related review tasks (BCWMC is the LGU for the cities of Medicine Lake, Robbinsdale and St. Louis Park).</p> <p>6 Include check for total project review fees or other fees with application form. Check should be payable to Bassett Creek Watershed Management Commission.</p>		

## BCWMC Fee Schedule Comparison and Analysis (Select FY 2016 Applications)

Application Form No.	Task #	Project Name	City	Application Fee (Current Fee Schedule)	Application Fee (Proposed Fee Schedule)	Application Fee Change	Review Cost	Application Fee Review Cost (Current Fee Schedule)	Application Fee Review Cost (Proposed Fee Schedule)
2016-01	2067	Theodore Wirth Adventure and Welcome Ctr	GV	\$1,100	\$2,500	\$1,400	\$4,002	(\$2,902)	(\$1,502)
2016-02	2068	2016 Northwood Lake Improvements <sup>1</sup>	NH	\$1,400	\$1,500	\$100	\$2,250	(\$850)	(\$750)
2016-03	2069	2016 Northwood South Area Infrastructure <sup>1</sup>	NH	\$1,100	\$1,500	\$400	\$5,540	(\$4,440)	(\$4,040)
2016-04	2070	Three Rivers PD BC Regional Trail	NH	\$1,400	\$2,500	\$1,100	\$4,402	(\$3,002)	(\$1,902)
2016-05	2071	Arlington Row East Apts	SLP	\$1,700	\$1,500	(\$200)	\$1,531	\$169	(\$31)
2016-06	2072	GV 2016 PMP STH 169-Plymouth Ave <sup>1</sup>	GV	\$1,100	\$1,500	\$400	\$3,404	(\$2,304)	(\$1,904)
2016-07	2073	Gardendale Development	CRY	\$1,500	\$1,500	\$0	\$873	\$627	\$627
2016-09	2075	Four Seasons Mall Demo	PLY	\$2,200	\$1,500	(\$700)	\$1,376	\$824	\$124
2016-10	2076	Old Rockford Rd Overlay & Trail	PLY	\$1,100	\$1,500	\$400	\$1,115	(\$15)	\$385
2016-11	2077	Armstrong HS Baseball Field Imp.	PLY	\$2,200	\$1,500	(\$700)	\$1,071	\$1,129	\$429
2016-12	2078	Pilgrim Lane Elementary Additions	PLY	\$2,200	\$2,500	\$300	\$2,279	(\$79)	\$221
2016-13	2079	Little Newtons Addition	PLY	\$1,700	\$2,500	\$800	\$738	\$962	\$1,762
2016-14	2080	Mortenson Hdqtrs Addition <sup>2</sup>	GV	\$2,200	\$2,500	\$300	\$1,529	\$671	\$971
2016-15A	3009	SP 2772-104 TH 169 16th St/Ramp Closure <sup>3</sup>	SLP	\$0	\$0	\$0	\$762	(\$762)	(\$762)
2016-15B	3010	SP 2772-105 TH 169 Pavement Project <sup>3</sup>	SLP (GV, Ply, Mtk)	\$0	\$0	\$0	\$1,199	(\$1,199)	(\$1,199)
2016-17	2083	SWLRT Minneapolis <sup>4</sup>	MPLS	-	-	-	-	-	-
2016-18	2084	Beacon Academy	CRY	\$2,200	\$2,500	\$300	\$1,498	\$702	\$1,002
2016-19	2085	Ply PW Campus Facility Add	PLY	\$1,100	\$2,500	\$1,400	\$1,367	(\$267)	\$1,133
2016-20	2086	Cherrywood Pointe <sup>2</sup>	MTKA	\$1,700	\$2,500	\$800	\$2,183	(\$483)	\$317
2016-22	2088	Theo Wirth Utility Improvements	GV	\$1,100	\$1,500	\$400	\$1,498	(\$398)	\$2
2016-23	2089	Daugherty 2860 Evergreen Ln	PLY	\$600	\$500	(\$100)	\$1,482	(\$882)	(\$982)
2016-24	2090	Luther Support Center	GV	\$2,200	\$2,500	\$300	\$2,699	(\$499)	(\$199)
2016-25	2092	Hutton House (10715 S Shore Dr)	ML	\$1,700	\$2,500	\$800	\$3,042	(\$1,342)	(\$542)
2016-26	2094	226 Peninsula Road	ML	\$600	\$500	(\$100)	\$1,474	(\$874)	(\$974)
2016-27	2095	Brookview Community Ctr <sup>2</sup>	GV	\$1,100	\$1,500	\$400	\$1,772	(\$672)	(\$272)
2016-28	2096	Liberty Crossing Fld Mitigation	GV	\$1,100	\$1,500	\$400	\$1,128	(\$28)	\$372
2016-29	2097	@glenwood Campus	MPLS	\$2,000	\$5,500	\$3,500	\$9,370	(\$7,370)	(\$3,870)
2016-31	2099	GV Tank Mound Project	GV	\$2,200	\$1,500	(\$700)	\$702	\$1,498	\$798
2016-33	2101	Twin City Outdoor Services	PLY	\$1,700	\$1,500	(\$200)	\$517	\$1,183	\$983
2016-34	2102	Ridgedale Corner Shoppes	MKTA	\$1,700	\$2,500	\$800	\$3,075	(\$1,375)	(\$575)
2016-35	2103	Mpls Marriott West	SLP	\$2,200	\$1,500	(\$700)	\$701	\$1,499	\$799
2016-36	2104	Berger Financial Group Addition <sup>2</sup>	PLY	\$1,700	\$1,500	(\$200)	\$740	\$960	\$760
2016-37	2105	Crest Ridge Senior Housing	MTKA	\$2,200	\$2,500	\$300	\$1,519	\$681	\$981
2016-38	2106	Northwood N. Infrastructure Imp	NH	\$1,100	\$1,500	\$400	\$2,357	(\$1,257)	(\$857)
2016-39	2107	French Regional Park Pavement	PLY	\$1,400	\$1,500	\$100	\$2,061	(\$661)	(\$561)
<b>Totals:</b>				<b>\$50,500</b>	<b>\$62,000</b>	<b>\$11,500</b>	<b>\$71,256</b>	<b>(\$20,756)</b>	<b>(\$9,256)</b>

<sup>1</sup> Municipal Applicant; no add-on fees

<sup>2</sup> Review in Progress

<sup>3</sup> State Agency Applicant; exempt from review fees

<sup>4</sup> Separate Agreement was Established with the BCWMC for Review

Does not factor in recouping expenses for reviews over \$5,000. This figure would drop to (\$4,346) if footnote "7" in proposed schedule is approved.



BASSETT CREEK WATERSHED MANAGEMENT COMMISSION

RESOLUTION NO. 17-07

A RESOLUTION ADOPTING A REVISED FEE SCHEDULE

WHEREAS, the Board of Commissioners (“Board”) of the Bassett Creek Watershed Management Commission (“Commission”) is authorized by the joint powers agreement that established the Commission, Minnesota Statutes, sections 103B.201 through 103B.251, and the adopted Watershed Management Plan to perform certain project reviews and to serve as the local government unit for reviews under the Minnesota Wetland Conservation Act in the cities of Medicine Lake, Robbinsdale, and St. Louis Park;

WHEREAS, the Board charges fees in attempt to defray the administrative and professional costs the Commission incurs to conduct the reviews;

WHEREAS, the last fee schedule was adopted in 2015 and the Board determines there is a need to update the fees to more effectively defray the costs it actually incurs for the reviews;

WHEREAS, because the actual costs of some reviews far exceed the amount of fees collected for the review, the Board determines there is a need to require applicants to reimburse the Commission for actual costs it incurs for the review in excess of \$5,000; and

WHEREAS, the Board determines the fees established on the attached fee schedule are fair, reasonable, proportionate, and reasonably reflect the actual costs the Commission incurs to provide the review services.

NOW, THEREFORE, BE IT RESOLVED, by the Board of Commissioners as follows:

1. The attached fee schedule is hereby adopted for the Commission, including the requirement that an applicant reimburse the Commission for any actual costs the Commission incurs to conduct a review that exceeds \$5,000.
2. The attached fee schedule is effective October 1, 2017, it applies to any applications submitted on or after that date, and it supersedes and replaces the previous fee schedule.

Adopted this \_\_\_ day of \_\_\_\_\_, 2017.

**BY THE BOARD OF  
COMMISSIONERS**

\_\_\_\_\_  
Chairperson

Attest: \_\_\_\_\_  
Secretary





## Memorandum

**To:** Bassett Creek Watershed Management Commission  
**From:** Barr Engineering Co.  
**Subject:** Item 6Di – Consider Approval of Proposal to Prepare Feasibility Study for the Medicine Lake Road and Winnetka Avenue Area Long Term Flood Mitigation Plan Implementation Phase I: DeCola Ponds B & C Improvement Project (2019 CIP Project BC-2, BC-3 & BC-8)  
BCWMC September 21, 2017 Meeting Agenda  
**Date:** September 13, 2017

### **6Di. Consider Approval of Proposal to Prepare Feasibility Study for the Medicine Lake Road and Winnetka Avenue Area Long Term Flood Mitigation Plan Implementation Phase I: DeCola Ponds B & C Improvement Project (2019 CIP Project BC-2, BC-3 & BC-8)**

#### **Recommendations:**

1. Consider approving the scope of work and \$86,000 budget presented in this memorandum and direct the Engineer to complete the feasibility study for the DeCola Ponds B & C Improvement Project (2019 CIP Project BC-2, BC-3 & BC-8), scheduled for construction in 2019 and 2020.
2. Direct the 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 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, BC-3, BC-8, and BC-10 in Table 5-3, as amended in July 2017. The proposed DeCola Ponds B & C Improvement Project was identified as a priority in the MLRWA Plan and is proposed as "Phase I" of this CIP project to mitigate flooding and improve water quality in the Medicine Lake Road and DeCola Ponds area. It would encompass CIP projects BC-2, BC-3 & BC-8 for implementation in 2019-2020 at a BCWMC cost of \$1,600,000. CIP project BC-10 would be a second phase in implementing the MLRWA Plan in 2022-2023 at a cost of \$1,300,000 and is not a part of this proposal.

**To:** Bassett Creek Watershed Management Commission  
**From:** Barr Engineering Co.  
**Subject:** Item 6Di – Consider Approval of Proposal to Prepare Feasibility Study for the Medicine Lake Road and Winnetka Avenue Area Long Term Flood Mitigation Plan Implementation Phase I: DeCola Ponds B & C Improvement Project (2019 CIP Project BC-2, BC-3 & BC-8)  
BCWMC September 21, 2017 Meeting Agenda  
**Date:** September 13, 2017  
**Page:** 2

---

The City of Golden Valley implemented the first MLRWA project, which included the development of flood storage and conveyance on the Liberty Crossing development site on the west side of Rhode Island Avenue. The BCWMC's BC-2, BC-3 & BC-8 project builds on the Liberty Crossing project and includes the DeCola Ponds B & C and Pennsylvania Woods project identified in the MLRWA Plan. In addition to expanding flood storage volumes in the Pennsylvania Woods and around DeCola Ponds B & C (all within the City of Golden Valley), there is an opportunity for the BC-2, BC-3 & BC-8 project to improve water quality treatment by expanding water quality treatment volumes. DeCola Ponds B & C are Minnesota Department of Natural Resources (MnDNR) public waters (27-0647P). Although minimal impact to DeCola Pond A is expected during this project, this pond is also a MnDNR public water (27-0630P). Figure 1 shows the location of the ponds.

The proposed project will develop flood storage volumes within the project area, develop additional water quality treatment volume, and remove accumulated sediment that has collected in the north end of DeCola Pond B. The project will alleviate local flooding around Medicine Lake Road, and downstream at DeCola Ponds A and D, and will improve water quality downstream by trapping sediment in the ponds and expanded storage, thus minimizing sediment passing downstream to Bassett Creek. The proposed project will also improve ecology and wildlife habitat, enhance active and passive recreation opportunities, and provide educational opportunities.

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, estimate the amount of accumulated material to be dredged from DeCola Pond B along with methods and disposal requirements, review the permitting 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, 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.



**To:** Bassett Creek Watershed Management Commission  
**From:** Barr Engineering Co.  
**Subject:** Item 6Di – Consider Approval of Proposal to Prepare Feasibility Study for the Medicine Lake Road and Winnetka Avenue Area Long Term Flood Mitigation Plan Implementation Phase I: DeCola Ponds B & C Improvement Project (2019 CIP Project BC-2, BC-3 & BC-8)  
BCWMC September 21, 2017 Meeting Agenda  
**Date:** September 13, 2017  
**Page:** 3

---

As part of the Liberty Crossing project, the City of Golden Valley performed wetland delineations, Phase 1 and Phase 2 environmental site assessments, bathymetric surveys and sediment sampling, and reviews of threatened and endangered species databases completed. We intend to utilize as much of this data as applicable and will build on it as needed for the feasibility study for this project.

## 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
  - Summarize 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.

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 some of the work for this project area as part of the earlier flood mitigation work on the Liberty Crossing development site. This included the following tasks:

- Wetland delineation (2015) of the Pennsylvania Woods and DeCola Pond B
- Phase 1 Environmental Site Assessment and Phase 2 investigations and Response Action Plan (RAP) (2015)
- Bathymetric survey and sediment characterization of DeCola Ponds A, B, and C (2015)
- Threatened and endangered species database review (2016)

**To:** Bassett Creek Watershed Management Commission  
**From:** Barr Engineering Co.  
**Subject:** Item 6Di – Consider Approval of Proposal to Prepare Feasibility Study for the Medicine Lake Road and Winnetka Avenue Area Long Term Flood Mitigation Plan Implementation Phase I: DeCola Ponds B & C Improvement Project (2019 CIP Project BC-2, BC-3 & BC-8)  
BCWMC September 21, 2017 Meeting Agenda  
**Date:** September 13, 2017  
**Page:** 4

---

For this project, we anticipated utilizing and amending the above information and other information available from the Liberty Crossing project 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, commissioners, and Golden Valley and preparation of meeting notes. New Hope and Crystal staff will also be invited to attend.
- b) Meeting with BCWMC staff, Golden Valley, New Hope, and Crystal staff, USACE, MnDNR, and MPCA to discuss concept alternatives and review permit requirements for project, and prepare meeting minutes to confirm regulatory agencies' discussion results.

## 2) Field Investigations

- a) Bathymetric surveys & sediment sampling – We will utilize the pond bathymetric survey and sediment characterization memo completed in 2015 for the City of Golden Valley's flood mitigation project on the Liberty Crossing development site. This investigation followed 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. No additional work is anticipated.
- b) Additional environmental investigations – We will utilize the Phase II environmental investigations and Response Action Plan/Construction Contingency Plan (RAP/CCC) developed in 2015 for the City of Golden Valley's flood mitigation project on the Liberty Crossing development site, which also included a test trench on the Dover Hills Apartment property and three push probes in the wooded area between DeCola Ponds B and C. The Phase II investigation indicated that the wooded area north of DeCola Pond B is likely filled with debris, and that a leaking underground storage tank (LUST) is located on the Dover Hills Apartment property. In addition, some unexpected low-level contamination was encountered on the Dover Hills property during the construction in 2017. We recommend additional investigation in the Pennsylvania Woods area on the Dover Hills property to delineate the extent of debris/fill and assess whether contamination associated with fill or the LUST site is present in the soils north of DeCola Pond B. This scope includes three additional test trenches within the area to be excavated north of DeCola Pond B (outside the existing wetland boundary), with up to two soils samples per trench analyzed for PAHs, RCRA metals and DRO with silica gel cleanup, and up to two soil samples analyzed for VOCs and GRO, if elevated headspace readings are observed. Peat, if encountered, will be sampled and analyzed for arsenic, based on elevated arsenic concentrations identified in peat samples in the Liberty Crossing project area. The additional test trench investigation report will be

**To:** Bassett Creek Watershed Management Commission  
**From:** Barr Engineering Co.  
**Subject:** Item 6Di – Consider Approval of Proposal to Prepare Feasibility Study for the Medicine Lake Road and Winnetka Avenue Area Long Term Flood Mitigation Plan Implementation Phase I: DeCola Ponds B & C Improvement Project (2019 CIP Project BC-2, BC-3 & BC-8)  
BCWMC September 21, 2017 Meeting Agenda  
**Date:** September 13, 2017  
**Page:** 5

---

letter format and will include trench logs, data tables comparing results to MPCA Soil Reference Values, and sample location figures. Depending on the results of the additional investigation, the BCWMC may consider applying for a Hennepin County ERF grant during the fall of 2018 (as part of a future project effort). In addition, we assume that an amendment to the RAP/CCP, if needed, would be developed during project final design.

- c) Wetland delineations – We will amend the wetland delineation and determination from 2015 to include a delineation around the perimeter of DeCola Pond C and along the north edge of DeCola Pond A. Barr 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 amend the existing 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 A, B, and C.
- d) Wetland bank scoping – We will complete the USACOE/BWSR wetland mitigation proposal draft prospectus scoping document which is the first step in the wetland banking process. This document provides an opportunity for the applicant to obtain agency comments regarding the potential suitability for establishing the site as a wetland bank site. This includes preparation of several figures, knowledge of past history of the site, an aerial imagery review, a description of activities that have drained or altered the wetlands, identification of drainage easements or agreements, a description of activities that would be implemented to improve wetland functions, and potential problems or concerns with implementing the proposed restoration activities. After submittal of this scoping document, an agency site review will likely be conducted and the applicant will receive findings and recommendations to assist the applicant in the decision regarding pursuit of the site as a wetland bank.
- e) Topographic and utility location survey – We will complete a topographic and utility location survey for the project area, including the area within Pennsylvania Woods and around DeCola Ponds B & C, including detailed survey of the outlet structure and overflow at DeCola Pond C. 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 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). Consideration will be given to replace trees along portions of the project area where feasible.
- g) Threatened and endangered species desktop review – The City of Golden Valley’s flood mitigation project on the Liberty Crossing development site included a desktop review of the available databases to determine the potential for adverse impacts to state and federally listed species. In anticipation of a future environmental review, we will expand the desktop review (as part of this feasibility study) to include review of the potential locations of the rusty patched bumblebee and we will update and revise the previous memo to reflect the current project area and footprint.
- h) Cultural resources desktop review - In anticipation of a future environmental 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.
- i) Project easements – The proposed project is located on both public and private property; Dover Hills Apartments, LLC, owns the private land. As part of the City of Golden Valley’s flood mitigation project on the Liberty Crossing development site, city staff engaged the owners of Dover Hills Apartments. The property owners supported the project and the city secured a drainage and utility easement over the Pennsylvania Woods area of the property at that time. No additional easement acquisition is anticipated.

### **3) Evaluation and Concept Plans**

- a) Development of up to 3 concepts for the expansion of flood mitigation volume and water quality treatment around DeCola Ponds B & C and in the Pennsylvania Woods.
- b) Use of the BCWMC Phase 2 XP-SWMM and P8 model to estimate impacts to peak flood elevations and pollutant removals, respectively, as a result of the project concepts.
- c) Estimation of the extent and volume of accumulated sediment in DeCola Ponds A, B, & C, based on review of the bathymetric surveys and sediment probe/core information; and develop concept plans for accumulated sediment removal, including alternate methods for removing and dewatering the material, as appropriate.

**To:** Bassett Creek Watershed Management Commission  
**From:** Barr Engineering Co.  
**Subject:** Item 6Di – Consider Approval of Proposal to Prepare Feasibility Study for the Medicine Lake Road and Winnetka Avenue Area Long Term Flood Mitigation Plan Implementation Phase I: DeCola Ponds B & C Improvement Project (2019 CIP Project BC-2, BC-3 & BC-8)  
BCWMC September 21, 2017 Meeting Agenda  
**Date:** September 13, 2017  
**Page:** 7

---

- 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 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.
- f) 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., are any homes removed from the floodplain, inundation depth at adjacent roadways).
- g) Develop tree removal estimates for each concept, including removals needed to gain 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, etc. Primary group for public discussions will be the nearby residents and property owners, including residents living around the DeCola Ponds and in Rosalyn Court (in New Hope) as well as adjacent property owners including representatives of Dover Hill Apartments and the Liberty Crossing development, and park users. The budget for this task includes time to prepare for and attend two public meetings, one early in the process, prior to development of concept plans, and another later in the process, after completion of concept plans, and up to 2 small group/neighborhood meetings, as needed. We assume that meeting coordination, expenses, and set-up 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, and/or presentation, and record and compile comments.

#### **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.

**To:** Bassett Creek Watershed Management Commission  
**From:** Barr Engineering Co.  
**Subject:** Item 6Di – Consider Approval of Proposal to Prepare Feasibility Study for the Medicine Lake Road and Winnetka Avenue Area Long Term Flood Mitigation Plan Implementation Phase I: DeCola Ponds B & C Improvement Project (2019 CIP Project BC-2, BC-3 & BC-8)  
 BCWMC September 21, 2017 Meeting Agenda  
**Date:** September 13, 2017  
**Page:** 8

---

## Cost Estimate

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

**Table 1. DeCola Ponds B & C Improvement Project Feasibility Study Costs**

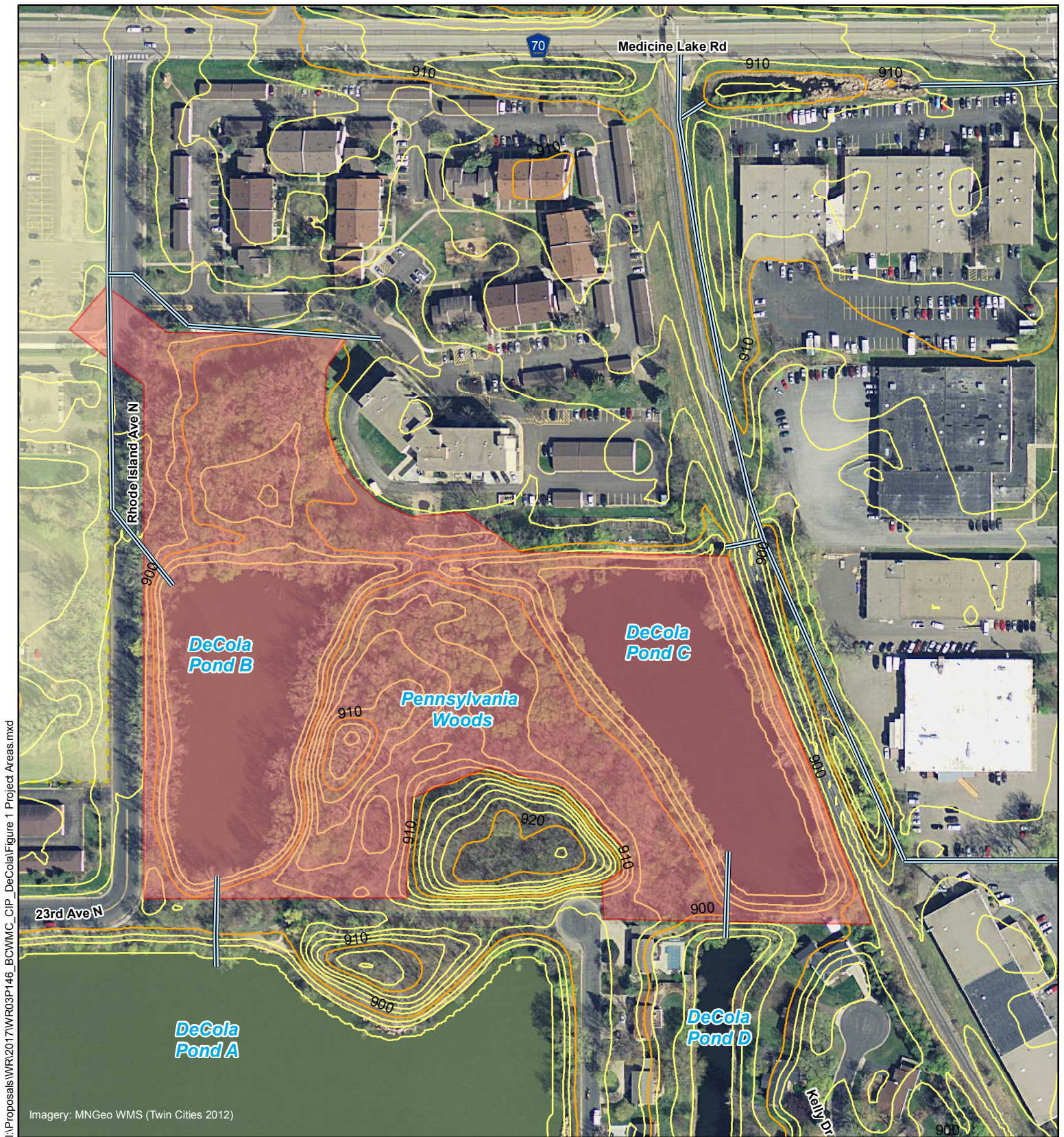
<b>Tasks</b>	<b>Estimated Total</b>
<b>1) Project Meetings</b>	\$5,100
<b>2) Field Investigations</b>	\$45,500
<b>3) Evaluation and Concept Plans</b>	\$15,500
<b>4) Discuss project impacts with public</b>	\$7,300
<b>5) Feasibility Report</b>	\$12,600
<b>Total</b>	<b>\$86,000</b>

## Schedule

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

<b>Tasks and milestones</b>	<b>Estimated Schedule</b>
<b>Kick-off meeting with BCWMC and City of Golden Valley, New Hope and Crystal staff</b>	September/October 2017
<b>Wetland delineations</b>	September 2017
<b>Wetland bank scoping &amp; combined agency field review/TEP review</b>	October 2017
<b>Topographic, utility, and tree survey</b>	September/October 2017
<b>Public meeting #1</b>	October/November 2017
<b>Desktop Review – threatened and endangered species, cultural resources</b>	October 2017
<b>Meeting with BCWMC, City, USACE, MN DNR and MPCA</b>	November 2017
<b>Small group/neighborhood meetings (up to 2)</b>	November 2017 – January 2018
<b>Develop concept alternatives and cost estimates</b>	January/February 2018
<b>Public meeting #2</b>	March 2018
<b>Submit draft feasibility report for City and BCWMC staff review</b>	April 6, 2018
<b>City and BCWMC staff complete review</b>	April 20, 2018
<b>Submit draft feasibility report for BCWMC review at Commission meeting</b>	May 9, 2018
<b>BCWMC completes review at Commission meeting</b>	May 17, 2018
<b>Submit final feasibility report for BCWMC review at Commission meeting</b>	Summer 2018
<b>Final Feasibility Report – BCWMC approval at Commission meeting</b>	Summer 2018





I:\Proposals\WR\2017\WR03P146\_BCWMC\_CIP\_DeCola\Figure 1 Project Areas.mxd

Imagery: MNGeo WMS (Twin Cities 2012)

- Liberty Crossing Development & Flood Mitigation Project (2016/2017)
- BCWMC CIP: DeCola Ponds B & C Improvement Project



Feet  
0 200 400



Figure 1

**PROPOSED PROJECT AREA**  
 BCWMC CIP: DeCola Ponds B & C Improvement Project  
 Golden Valley, MN









## Memorandum

**To:** Bassett Creek Watershed Management Commission  
**From:** Barr Engineering Co.  
**Subject:** Item 6Dii – Consider Approval of Proposal to Prepare Feasibility Study for Westwood Lake Water Quality Improvement Project (2019 CIP Project WST-2)  
BCWMC September 21, 2017 Meeting Agenda  
**Date:** September 13, 2017

### **6Dii. Consider Approval of Proposal to Prepare Feasibility Study for Westwood Lake Water Quality Improvement Project (2019 CIP Project WST-2)**

#### **Recommendations:**

1. Consider approving the scope of work and \$40,500 budget presented in this memorandum and direct the Engineer to complete the feasibility study for the Westwood Lake Water Quality Improvement Project (2019 CIP Project WST-2) to be constructed in 2019.
2. Direct the 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 Engineer to prepare a feasibility study that complies with the requirements of the USACE and BCWMC criteria.

#### **Background**

The proposed Westwood Lake Water Quality Improvement Project is in the BCWMC's current CIP (Table 5-3, as amended in July 2017), listed as project WST-2 with a total estimated cost of \$300,000. At its March 16, 2017 meeting, the Commission approved the 5-year (working) CIP, which included project WST-2, scheduled for construction in 2019.

The Westwood Lake Water Quality Improvement Project is part of a much larger project at the Westwood Hills Nature Center (WHNC), a 160-acre park located in St. Louis Park. WHNC is in the planning phase of a complete reconstruction of its facilities in 2019. A master plan for the reconstruction project was completed in May 2016 for the City of St. Louis Park. The proposed improvements in the master plan include trail circulation and wayfinding, additional parking, expanded outdoor classroom area and water garden, expanded natural play and outdoor education area, improved canoe and kayak launch, interpretive features, and new interpretive center building. As part of this project, the City of St. Louis Park is proposing to construct additional water quality improvements to treat stormwater runoff that would otherwise flow untreated to Westwood Lake. The improvements may include pervious pavers or other best management practices at the parking lot or trails, improvements to the existing stormwater pond, or

**To:** Bassett Creek Watershed Management Commission  
**From:** Barr Engineering Co.  
**Subject:** Item 6Dii – Consider Approval of Proposal to Prepare Feasibility Study for Westwood Lake Water Quality Improvement Project (2019 CIP Project WST-2)  
BCWMC September 21, 2017 Meeting Agenda  
**Date:** September 13, 2017  
**Page:** 2

---

vegetation management. The BCWMC's WST-2 CIP project would go towards the portions of the water quality improvements that go "above and beyond" the BCWMC requirements for the WHNC project.

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 water quality improvement project, review the permitting 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, 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 water quality 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.

We understand that the City of St. Louis Park will perform the necessary wetland delineations, soil borings, a topographic survey, tree survey, and a Phase 1 environmental site assessment, as part of the larger WHNC project. The city will also perform an EAW for the WHNC project, if needed. We will perform the Section 106 cultural resources review as part of the feasibility study. We assume the city's WHNC field investigations will be completed by the end of October so the results can be used for the 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
  - Summarize 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

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 St. Louis Park 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.

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

## **1) Project Meetings**

- a) Project kick-off meeting with BCWMC staff, commissioners, and City of St. Louis Park staff (including WHNC staff) and preparation of meeting notes.
- b) Meeting with BCWMC staff, City staff, USACE, MnDNR and MPCA to discuss concept alternatives and review permit requirements for project, and prepare meeting minutes to confirm regulatory agencies' discussion results.

## **2) Field Investigations**

- a) Soil Borings – For this work scope, we assume that others are coordinating the collection of soil borings in the parking lot and BMP area. We recommend collecting borings that extend to groundwater. If groundwater is not encountered, we recommend borings are 12 to 15 feet in depth. We need to know soil types groundwater elevations and blow counts to complete the feasibility study.
- b) Environmental investigations – For this work scope, we assume that an Environmental Assessment Worksheet (EAW) or a Phase 1 environmental investigation, if necessary, will be completed by others. We recommend that a Phase 1 environmental investigation take place prior to completion of the feasibility study as the Phase 1 results will affect project design and construction costs. An EAW may not be possible to complete until after the feasibility study is complete, as typically you need project drawings that are further along in design.
- c) Wetland delineations – We understand wetland delineations are being completed by others. Barr needs to know the wetland type classifications and descriptions, along with boundary locations in AutoCAD, to complete the feasibility study.
- d) Topographic and utility location survey – We understand a topographic and utility location survey for the project area is being completed by others. We need this information in an AutoCAD format to complete the feasibility study.

- e) Tree location, diameter, species, and condition survey – We understand a tree survey is being completed by others. We need this information in an AutoCAD format to help with estimating project design and costs. A tree survey will also help determine if the trees within the project area could provide habitat for the northern long eared bat, which is an endangered species.
- f) Threatened and endangered species desktop review – In anticipation of a future environmental review, we will perform a desktop review of the available databases to determine the potential for adverse impacts to state and federally-listed species and will summarize the information in the feasibility report.
- g) Cultural resources desktop review - In anticipation of a future environmental 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.

### **3) Evaluation and Concept Plans**

- a) Development of up to 3 concepts for water quality treatment around the Westwood Hills Nature Center proposed parking lot and building.
- b) Use of the BCWMC P8 model to estimate impacts to pollutant removals 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 USACE, MnDNR and MPCA 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.

### **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, etc. Primary group for public discussions will be the nearby residents and property owners, and the Westwood Hills Nature Center patrons. The budget for this task includes time to prepare for and attend one public meeting, and it is assumed that meeting coordination, expenses, and set-up will be largely completed by the BCWMC Administrator with assistance from the City.
- b) Assist with public involvement process as necessary – prepare handouts, boards or presentation.

### **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.

**To:** Bassett Creek Watershed Management Commission  
**From:** Barr Engineering Co.  
**Subject:** Item 6Dii – Consider Approval of Proposal to Prepare Feasibility Study for Westwood Lake Water Quality Improvement Project (2019 CIP Project WST-2)  
 BCWMC September 21, 2017 Meeting Agenda  
**Date:** September 13, 2017  
**Page:** 5

---

- 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. Westwood Hills Nature Center Water Quality Improvement Project Feasibility Study Costs**

<b>Tasks</b>	<b>Estimated Cost</b>
<b>1) Project Meetings</b>	\$5,100
<b>2) Field Investigations</b>	\$3,500
<b>3) Evaluation and Concept Plans</b>	\$15,700
<b>4) Discuss project impacts with public</b>	\$4,400
<b>5) Feasibility Report</b>	\$11,800
<b>Total</b>	<b>\$40,500</b>





## Schedule

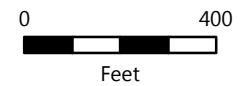
We will complete the tasks and milestones outlined in the scope of work on the following schedule.

<b>Tasks and milestones</b>	<b>Estimated Schedule</b>
<b>Kick-off meeting with BCWMC and City of St. Louis Park staff</b>	September 2017
<b>Wetland delineations &amp; TEP review</b>	September/October 2017
<b>Topographic, utility, and tree survey</b>	September/October 2017
<b>Desktop Reviews – Threatened and Endangered Species, Cultural Resources</b>	October 2017
<b>Meeting with BCWMC, City, USACE, MN DNR, and MPCA</b>	November 2017
<b>Develop concept alternatives and cost estimates</b>	December 2017/January 2018
<b>Public meeting</b>	February 2018
<b>Submit draft feasibility report for City and BCWMC staff review</b>	March 9, 2018
<b>City and BCWMC staff complete review</b>	March 23, 2018
<b>Submit draft feasibility report for BCWMC review at Commission meeting</b>	April 11, 2018
<b>BCWMC completes review at Commission meeting</b>	April 19, 2018
<b>Submit final feasibility report for BCWMC review at Commission meeting</b>	May 9, 2018
<b>Final Feasibility Report – BCWMC approval at Commission meeting</b>	May 17, 2018





-  Feasibility Study Area
-  Hennepin County Parcels
-  10-Foot Contour
-  2-Foot Contour



Westwood Lake  
Water Quality  
Improvement Project

FIGURE 1







## Memorandum

**To:** Bassett Creek Watershed Management Commission  
**From:** Barr Engineering Co.  
**Subject:** Item 6Diii – Consider Approval of Proposal to Prepare Feasibility Study for the Bryn Mawr Meadows Water Quality Improvement Project (2019 CIP Project BC-5)  
BCWMC September 21, 2017 Meeting Agenda  
**Date:** September 13, 2017

### **6Diii. Consider Approval of Proposal to Prepare Feasibility Study for the Bryn Mawr Meadows Water Quality Improvement Project (2019 CIP Project BC-5)**

#### **Recommendations:**

1. Consider approving the scope of work and \$107,500 budget presented in this memorandum and direct the Engineer to complete the feasibility study for the Bryn Mawr Meadows Water Quality Improvement Project (2019 CIP Project BC-5), scheduled for construction in 2019.
2. Direct the 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 Engineer to prepare a feasibility study that complies with the requirements of the USACE and BCWMC criteria.

#### **Background**

The proposed Bryn Mawr Meadows Water Quality Improvement Project is in the BCWMC's current CIP (Table 5-3, as amended in July 2017). It is listed as project BC-5 with a cost of \$500,000. At its March 16, 2017 meeting, the Commission approved the 5-year (working) CIP, which included project BC-5, scheduled for construction in 2019.

This project was described as option 7 in the June 2000 Bassett Creek Main Stem Watershed Management Plan. The project is to construct stormwater best management practices (BMP) in the Bryn Mawr park area within the City of Minneapolis. The BMP is proposed to treat runoff from 209 acres of land to remove an estimated 22 pounds of phosphorus per year, on average.

The project was originally recommended for 2016 at an estimated cost of \$160,000. However, after a site visit, watershed information review, and discussions, the City of Minneapolis decided to defer the project for a later time because of the Minneapolis Park & Recreation Board's upcoming master plan process for the park; the master plan was to include locations where stormwater runoff could be addressed. It was also determined that the BMP would likely cost more than the \$160,000 originally estimated.

**To:** Bassett Creek Watershed Management Commission  
**From:** Barr Engineering Co.  
**Subject:** Item 6Diii – Consider Approval of Proposal to Prepare Feasibility Study for the Bryn Mawr Meadows Water Quality Improvement Project (2019 CIP Project BC-5)  
BCWMC September 21, 2017 Meeting Agenda  
**Date:** September 13, 2017  
**Page:** 2

---

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 water quality improvement project, estimate the amount of annual phosphorus that would be removed by the BMP, review the permitting 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, 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. This project was included in the RMP, so the RMP protocols apply to this project. 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.

The water quality improvement project area includes the Bryn Mawr Meadows Park, residential areas to the west, with connection to Bassett Creek to the north through the City of Minneapolis vehicle impound lot. The impound lot is the site of the former Irving Avenue Dump, a closed Minnesota state superfund site, where dump debris and contaminated soil remains. Based on review of the Hennepin County Environmental Data Access Tool, environmental contamination associated with the Bryn Mawr Park property has not been identified, but the site was filled in during the early 1900’s and the content and source of the fill is unknown. The proposed project area also contains very poor geotechnical conditions based on the local geology in the area and information obtained from investigations completed at nearby properties. Some existing storm sewer lines have been constructed on pilings.

## **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
  - Summarize each alternative for the Commission to judge its merits
  - Cost estimate for annualized cost per pound of pollutant removal



**To:** Bassett Creek Watershed Management Commission  
**From:** Barr Engineering Co.  
**Subject:** Item 6Diii – Consider Approval of Proposal to Prepare Feasibility Study for the Bryn Mawr Meadows Water Quality Improvement Project (2019 CIP Project BC-5)  
BCWMC September 21, 2017 Meeting Agenda  
**Date:** September 13, 2017  
**Page:** 3

---

- Evaluation of new and/or innovative approaches
- Identification of permitting requirements

As noted earlier, the feasibility study must address most of the RMP protocols. 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, MPRB and City of Minneapolis 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.

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

## **1) Project Meetings**

- a) Project kick-off meeting with BCWMC staff, commissioners, MPRB staff and City of Minneapolis staff, and prepare meeting notes.
- b) Meeting with BCWMC staff, MPRB staff, Minneapolis staff, USACE, MnDNR, and MPCA to discuss concept alternatives and review permit requirements for project, and prepare meeting minutes to confirm regulatory agencies' discussion results.

## **2) Field Investigations**

- a) Gather available existing data from city of Minneapolis and MPRB, including sewer plats. See Figure 1 for location of storm sewer within the park, and Figure 2 for the pipeshed that drains to the 66-inch reinforced concrete pipe sewer which outlets into Bassett Creek.
- b) Environmental investigation –Given the history of filling at the property, Barr will perform an environmental test trench investigation in Bryn Mawr Park to assess whether debris is present in the fill soils and to collect soil samples for laboratory analysis for potential environmental contaminants. Up to 8 test trenches are assumed to be completed with soil samples analyzed for parameters commonly identified in urban fill (polycyclic aromatic hydrocarbons, RCRA metals and diesel range organics). Soil samples will also be collected from the fill layer in proposed geotechnical boring locations (see below). We will use the results of the proposed environmental investigations in the park, along with existing environmental information from past investigations for the City of Minneapolis Impound Lot, to assess environmental risks and potential cleanup costs.
- c) Geotechnical investigation - The intent of the geotechnical investigation is to provide a baseline understanding of the geotechnical conditions in the proposed project area. Prior to construction and design, a more detailed geotechnical investigation and engineering evaluation report will be

**To:** Bassett Creek Watershed Management Commission  
**From:** Barr Engineering Co.  
**Subject:** Item 6Diii – Consider Approval of Proposal to Prepare Feasibility Study for the Bryn Mawr Meadows Water Quality Improvement Project (2019 CIP Project BC-5)  
BCWMC September 21, 2017 Meeting Agenda  
**Date:** September 13, 2017  
**Page:** 4

---

necessary once specific design plans are finalized. Based on existing information and a review of the regional geology, the project area is anticipated to consist of lacustrine clay deposits overlying terrace deposits and glacial till soils. Deep foundation systems will likely be required for most, if not all, structures across the project area.

The preliminary geotechnical investigation will include the following scope of work:

- i) Advance four soil borings to a maximum depth of 100 feet, depending on conditions encountered. The soil borings will be advanced using hollow-stem auger or mud rotary drilling techniques with samples obtained continuously to a depth of 15 feet and at 5-foot intervals thereafter in accordance with procedures outlined in ASTM D1586, Standard Test Method for Standard Penetration Test (SPT) and Split-Barrel Sampling of Soils.
  - ii) Document geotechnical characteristics of soil including depth to sediment/fill contacts (if any), SPT results (N-values), moisture content, and depth to water as applicable.
  - iii) Perform a limited program of laboratory testing on recovered soil samples, which may include Atterberg limits, moisture content, grain size distribution tests, and strength testing.
  - iv) Perform additional environmental field screening as described above.
  - v) Abandon soil borings in accordance with state requirements.
  - vi) Prepare a Preliminary Geotechnical Investigation Report, which outlines the results of the subsurface investigation, provides a preliminary assessment of the site geotechnical conditions and potential deep foundation systems, and highlights the general constructability of the site.
- d) Wetland delineations – Barr performed a wetland delineation in the portion of the project area along Bassett Creek in 2016, as part of the 2017 Main Stem Channel Restoration Project feasibility study. According to the wetland delineation report, no wetlands were found along the creek in this area. Given how high groundwater is at the park, it is possible wetlands are present within the Bryn Mawr Meadows park boundary. If wetlands are found within the project area during the site evaluation, Barr will perform a 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 create 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

**To:** Bassett Creek Watershed Management Commission  
**From:** Barr Engineering Co.  
**Subject:** Item 6Diii – Consider Approval of Proposal to Prepare Feasibility Study for the Bryn Mawr Meadows Water Quality Improvement Project (2019 CIP Project BC-5)  
BCWMC September 21, 2017 Meeting Agenda  
**Date:** September 13, 2017  
**Page:** 5

---

Government Unit (LGU). Our cost estimate also includes a wetland functions and values assessment (i.e., a Minnesota Rapid Assessment Method, or MNRAM, analysis). Results of the MNRAM analysis will be included in the wetland delineation report if wetlands are found.

If no wetlands are found within the Bryn Mawr Meadows project area then a MNRAM would not be needed, and there would be less data to analyze and present in the report. In this situation, we would prepare a wetland determination report that describes field conditions within the park boundary instead of wetland descriptions.

- e) Topographic and utility location survey – We will complete a topographic and utility location survey for the project area. We will locate underground utilities 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 Minneapolis or Hennepin County benchmarks. Surface features such as paving, parking lots, etc., will not be surveyed. Basic locations of these elements will be shown via an aerial photograph. The park will be undergoing a master plan in the future, and it is likely locations of these features will change when the master plan is implemented. The survey will concentrate on buried utilities, and confirming the accuracy of the LIDAR data available for the site. The portion of Bassett Creek near the project area was surveyed in 2017 for the Main Stem Stream Restoration project. That survey data will be used to complete the feasibility study.

The City will video the existing 66" reinforced concrete pipe (RCP) storm sewer which outlets into Bassett Creek from Bryn Mawr Meadows. The video is not part of the feasibility scope, however information obtained from the video will be used to complete the feasibility study.

- f) Tree location, diameter, species, and condition survey – MPRB will identify and locate all significant trees in the study area. MPRB will provide the location, diameter, species, and condition (e.g. dead/live, shaggy/peeling/deeply furrowed bark) of the trees to Barr in AutoCAD or GIS compatible format. 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).
- g) Threatened and endangered species desktop review – In anticipation of a future environmental review, Barr will perform a desktop review of the available databases to determine the potential for adverse impacts to state and federally-listed species and will summarize findings in the feasibility report.
- h) Cultural resources desktop review - In anticipation of a future environmental 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 vicinity of the project and will summarize any available information in the feasibility report.

### **3) Evaluation and Concept Plans**

- a) Development of up to 3 concepts for water quality treatment within Bryn Mawr Meadows Park.
- b) Use of the BCWMC P8 model to estimate impacts to pollutant removals 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 USACE, MnDNR and MPCA 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.

### **4) Public Engagement**

- a) Public engagement will be coordinated through the North Service Area Community Advisory Committee which is established by the MPRB to facilitate park planning within the city. The BCWMC Administrator, city staff and/or MPRB staff will attend appropriate work groups and open houses scheduled throughout the park planning process. The budget for this task includes time to prepare for and attend one public meeting. Additional meetings will be addressed by MPRB, city staff, and the BCWMC Administrator. We assume that meeting coordination, expenses, and set-up 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 and/or presentation, and record and compile comments for one meeting.

### **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.

**To:** Bassett Creek Watershed Management Commission  
**From:** Barr Engineering Co.  
**Subject:** Item 6Diii – Consider Approval of Proposal to Prepare Feasibility Study for the Bryn Mawr Meadows Water Quality Improvement Project (2019 CIP Project BC-5)  
 BCWMC September 21, 2017 Meeting Agenda  
**Date:** September 13, 2017  
**Page:** 7

---

## Cost Estimate

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

**Table 1. Bryn Mawr Meadows Water Quality Improvement Project Feasibility Study Costs**

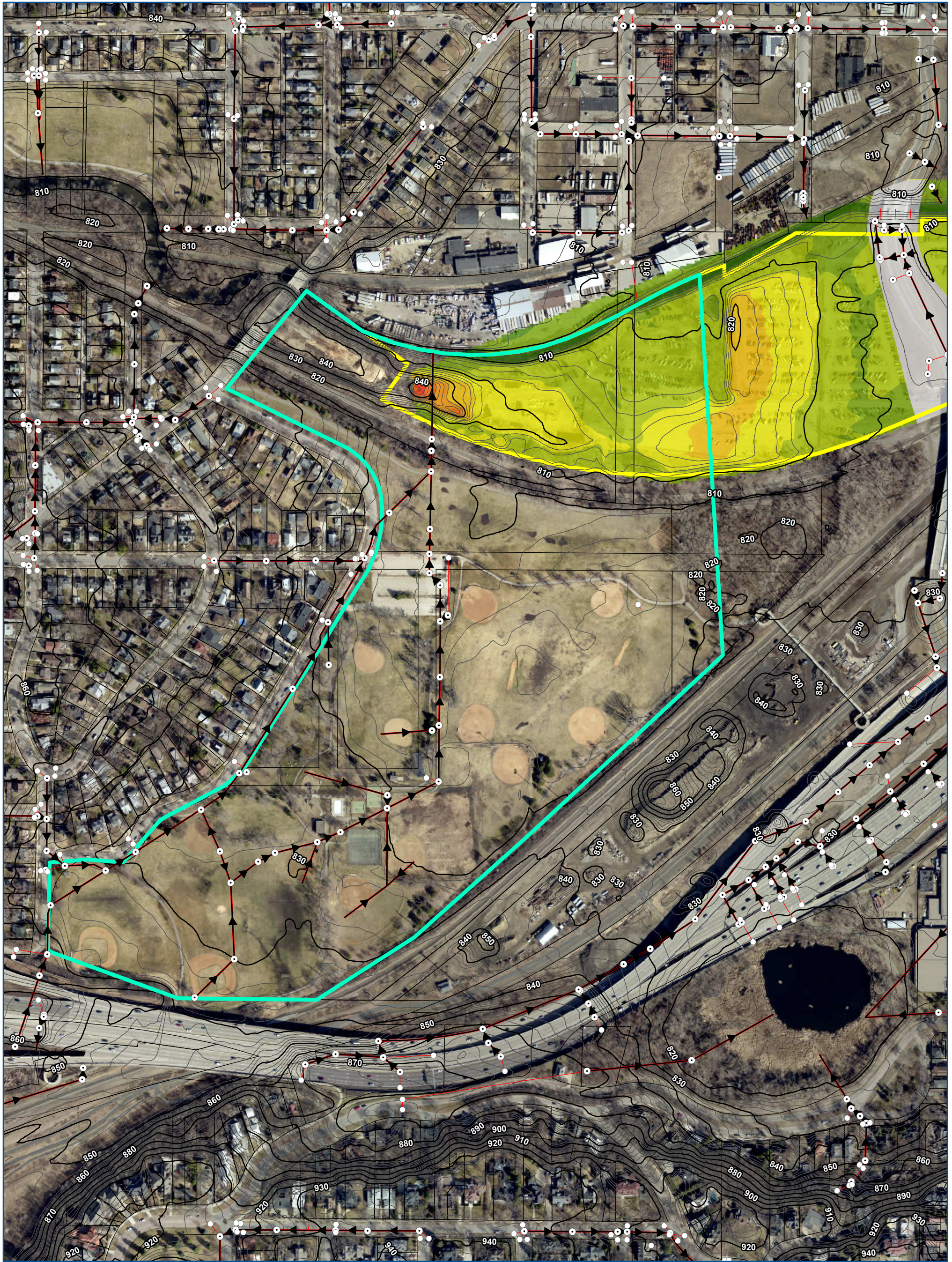
<b>Tasks</b>	<b>Estimated Total</b>
<b>1) Project Meetings</b>	\$5,000
<b>2) Field Investigations</b>	\$69,800
<b>3) Evaluation and Concept Plans</b>	\$16,700
<b>4) Public Engagement</b>	\$3,500
<b>5) Feasibility Report</b>	\$12,500
<b>Total</b>	<b>\$107,500</b>

## Schedule

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

<b>Tasks and milestones</b>	<b>Estimated Schedule</b>
<b>Kick-off meeting with BCWMC, MPRB, and City of Minneapolis staff</b>	September/October 2017
<b>Wetland delineations &amp; TEP review</b>	September/October 2017
<b>Topographic, utility, and tree survey</b>	September/October 2017
<b>Desktop Review – threatened and endangered species, cultural resources</b>	October 2017
<b>Meeting with BCWMC, City, MPRB, USACE, MN DNR and MPCA</b>	November 2017
<b>Develop concept alternatives and cost estimates</b>	December 2017/January 2018
<b>Public meeting #1</b>	February 2018
<b>Submit draft feasibility report for City, MPRB, and BCWMC staff review</b>	March 9, 2018
<b>City, MPRB, and BCWMC staff complete review</b>	March 23, 2018
<b>Submit draft feasibility report for BCWMC review at Commission meeting</b>	April 11, 2018
<b>BCWMC completes review at Commission meeting</b>	April 19, 2018
<b>Submit final feasibility report for BCWMC review at Commission meeting</b>	May 9, 2018
<b>Final Feasibility Report – BCWMC approval at Commission meeting</b>	May 17, 2018





LiDAR Ground Surface Elevation Contours (Spring/Fall 2011)

10 ft Contour

2 ft Contour

City of Minneapolis Public Works Property

Hennepin County Parcels (2016)

Feasibility Study Area

Catch Basin

Manhole

Storm Pipe

Impound Lot Thickness of Fill

0 - 5 ft

5 - 10 ft

10 - 15 ft

15 - 20 ft

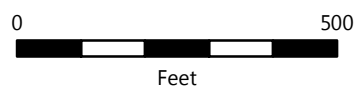
20 - 25 ft

25 - 30 ft

30 - 35 ft

35 - 40 ft

40 - 45 ft



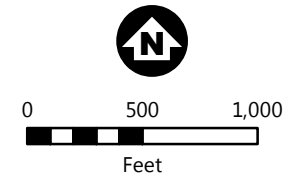
BRYN MAWR MEADOWS  
Water Quality  
Improvement Project

FIGURE 1





- ▲ 66-inch Reinforced Concrete Pipe Outfall to Bassett Creek
- ▭ Approximate Outfall Pipeshed
- Storm Sewers
  - Storm Force Main
  - Storm Main
  - Storm Pipe In Pipe
  - Storm Tunnel
- LiDAR Ground Surface Elevation Contours (Spring/Fall 2011)
- ~ 10 ft Contour
- ▭ City of Minneapolis Public Works Property
- ▭ Hennepin County Parcels (2016)
- ▭ Feasibility Study Area



**STORM SEWER TRIBUTARY AREA**  
Bryn Mawr Meadows  
Water Quality  
Improvement Project  
**FIGURE 2**











Item 6E.  
BCWMC 9-21-17

## Bassett Creek Watershed Management Commission

### MEMO

To: Bassett Creek Watershed Commissioners  
 From: Laura Jester, Administrator  
 Date: July 11, 2017

**NOTE:** Recommendations 1- 5 were approved at the July Commission meeting. At this meeting we'll consider recommendations 6 -16, as time allows.

**RE: APM/AIS Committee Recommendations**

[Please note: All committee meeting agendas, notes, presentations, and materials can be found at: <http://www.bassettcreekwmo.org/document/meeting-materials-minu.>]

#### **Background and Initial Committee Work**

The BCWMC Aquatic Plant Management/Aquatic Invasive Species Committee met on eight occasions from June 2016 to June 2017 to discuss and consider the Commission's role in these issues. The committee included commissioners and alternate commissioners; Commission Engineers Chandler and Rattei; TAC members from Plymouth and Golden Valley; representatives of Sweeney Lake, Parkers Lake, and Medicine Lake; and representatives from Three Rivers Park District (TRPD), Minneapolis Park and Rec Board, Hennepin County, Metropolitan Council, and the Department of Natural Resources (DNR).

In order to guide their discussions, the committee identified types of projects where the Commission should have a role in APM/AIS. Reflecting the goals of the BCWMC Watershed Management Plan, the committee decided on the following levels of involvement:

PRIMARY OBJECTIVE of PROJECT	Commission should be involved	Commission should be involved only as a partner	No Commission role; although may be outcome of project
Activities that improve water quality	X		
Activities that improve habitat and the overall ecology of the waterbody	X		
Activities that protect the function or capacity of Flood Control Project	X		
Activities that improve recreation		X	
Activities that improve or protect human health and safety		X	
Activities that improve aesthetics			X

The committee noted that “recreation” is a broad term that means different things to different people and that improving water quality, in turn, improves recreation. The committee noted that effects on recreation would be taken into consideration for any Commission project or program and the Commission could partner with others on recreation-based projects. Although there wasn’t complete consensus, most committee members agreed that projects which have the primary objective of improved recreation should not be led by the Commission. Alt. Commissioner Holter believe the Commission should have “improved recreation” included as a primary focus of the Commission’s work and role in these issues.

In order to help determine where Commission involvement should be concentrated, the committee reviewed a map and description of the different classifications of waterbodies in the watershed, the locations and descriptions of different AIS already in the watershed and in nearby watersheds, and a list of impaired waterbodies in the watershed. (See Table 1)

The committee also received a presentation from the DNR on the latest studies, observations, and monitoring results regarding control of curly-leaf pondweed (CLP), and a presentation from TRPD on a whole-lake treatment on Medicine Lake that was part of a collaborative pilot project conducted in 2004 – 2006.

Table 1. BCWMC Waterbodies

<b>Waterbody</b>	<b>BCWMC Classification<sup>1</sup></b>	<b>AIS Present</b>	<b>Impairment/TMDL completion date and reference</b>	<b>Local Partners</b>
Medicine Lake	Priority 1 deep lake	CLP, Eurasian watermilfoil, carp	Nutrients 2011: <a href="https://www.pca.state.mn.us/water/tmdl/medicine-lake-excessive-nutrients-tmdl-project">https://www.pca.state.mn.us/water/tmdl/medicine-lake-excessive-nutrients-tmdl-project</a>	TRPD, AMLAC
Parkers Lake	Priority 1 deep lake	CLP, Eurasian watermilfoil	Chloride 2016 <sup>2</sup>	
Sweeney Lake	Priority 1 deep lake	CLP, yellow iris, carp	Nutrients 2011 <a href="https://www.pca.state.mn.us/water/tmdl/sweeney-lake-total-phosphorus-tmdl-project">https://www.pca.state.mn.us/water/tmdl/sweeney-lake-total-phosphorus-tmdl-project</a> Chloride 2016 <sup>2</sup>	Homeowners Assoc.
Twin Lake	Priority 1 deep lake	CLP, carp	None	
Wirth Lake	Priority 1 deep lake	CLP, Eurasian watermilfoil	Nutrients 2010 (since delisted) <a href="https://www.pca.state.mn.us/water/tmdl/wirth-lake-excess-nutrients-tmdl-project">https://www.pca.state.mn.us/water/tmdl/wirth-lake-excess-nutrients-tmdl-project</a> Chloride 2016 <sup>2</sup>	MPRB
Northwood Lake	Priority 1 shallow lake	CLP	Nutrients – no TMDL	Friends of Northwood
Westwood Lake	Priority 1 shallow lake	CLP		Westwood Nature Center
Cavanaugh (Sunset) Pond	Priority 2 shallow lake			
Crane Lake	Priority 2 shallow lake	CLP		
Lost Lake	Priority 2 shallow lake	CLP		
Main Stem Bassett Creek	Priority stream	CLP	Chloride 2016 <sup>2</sup> + Bacteria 2014 <sup>3</sup>	Friends of Bassett Creek
North Branch Bassett Creek	Priority stream		Bacteria 2014 <sup>3</sup>	
Plymouth Cr.	Priority stream		Chloride 2016 <sup>2</sup> + Bacteria 2014 <sup>3</sup>	
Sweeney Br. Bassett Cr.	Priority stream			

CLP = Curly-leaf Pondweed

<sup>1</sup> Priority 1 Lakes– “MDNR Public Waters” Lakes, greater than 10 acres, with public access or adjacent to public land

Priority 2 Lakes – “MDNR Public Waters” Lakes, greater than 10 acres, without public access or adjacent to public land

Priority 1 Streams – “MDNR Public Waters” Watercourses

<sup>2</sup>Twin Cities Metro Area Chloride TMDL: <https://www.pca.state.mn.us/sites/default/files/wq-iw11-06e.pdf>

<sup>3</sup> Upper Mississippi Bacteria TMDL: <https://www.pca.state.mn.us/water/tmdl/upper-mississippi-river-bacteria-tmdl-project>

**Committee Recommendations**

Over the course of four meetings, the committee reviewed and discussed activities related to AIS early detection, rapid response, studies, prevention, and management. The committee determined which APM/AIS activities the Commission should lead and which activities could include the Commission as a partner only. To help develop recommendations, the committee often prioritized the activities, considering the activity’s impact vs. the level of effort needed for the activity.

The committee recommends the following activities by the Commission:

<b>1. EARLY DETECTION TRAINING</b>	
<b>Recommendation:</b> The committee recommends that the Commission cooperate with other organizations on training groups or individuals on early detection of AIS in all waterbodies. Possible Commission activities include advertising training sessions, helping to recruit participants, assisting with venue coordination, reimbursing registration costs for Commissioners and active CAMP volunteers, and providing some modest funding. Because training programs and curriculum already exist, the Commission should not develop its own program.	
Current Activity by Others:	DNR, Hennepin County, TRPD and U of M offer training programs
Priority:	<b>HIGH</b> due to low effort for high impact

<b>2. EARLY DETECTION MONITORING</b>	
<b>Recommendation:</b> The committee recommends that the Commission purchase \$600 worth of zebra mussel sampler plates (approx. 50 plates) with 2017 APM/AIS funds for use by CAMP volunteers and lake residents on Priority 1 lakes and CAMP lakes. Further, the Commission should cooperate with other organizations and/or actively recruit and train volunteers to detect zebra mussels on all Priority 1 lakes, aiming for at least one volunteer in each lake quadrant. Finally, the Commission should consider recruiting one “AIS captain” per lake to field calls and questions from volunteers and to collect samples, as needed, to reduce time spent by Commission administrator.	
Current Activity by Others:	<ul style="list-style-type: none"> <li>• Routine Commission monitoring will detect invasive plants, snails, spiny waterflea, and rusty crayfish in lakes and streams</li> <li>• TRPD performs early detection monitoring on Medicine Lake for zebra mussels (but could use help in expanding program)</li> <li>• MPRB performs early detection monitoring on Wirth Lake</li> </ul>
Priority:	<b>HIGH</b> due to low effort for high impact

<b>3. RAPID RESPONSE PLAN DEVELOPMENT</b>	
<b>Recommendation:</b> The committee recommends that the Commission begin developing a rapid response action plan for key species (including zebra mussels and starry stonewort) in Priority 1 lakes using 2017 APM/AIS budget (up to \$15,000). The Commission should request a proposal from the Commission Engineer to develop lake-specific rapid response plans that consider infestation thresholds for action, consider experience and recommendations of the DNR and other organizations, assign responsible parties, and list possible funding partners for plan implementation. The Commission could request that this committee review the draft plan and implementation recommendations.	
Current Activity by Others:	MPRB has a Zebra Mussel Action Plan for Wirth Lake
Priority:	<b>HIGH</b> due to need to identify responsible parties and funding mechanisms for quickest, most effective response to new infestations.

<b>4. RAPID RESPONSE TO NEW INFESTATIONS</b>	
<b>Recommendation:</b> The committee recommends the Commission follow guidance resulting from the rapid response plan.	
Current Activity by Others:	MDNR works with local entities to implement rapid responses
Priority:	No priority level set by committee

<b>5. INVENTORIES AND STUDIES</b>	
“Inventories and studies” could include a very thorough and detailed inventory of all AIS, an assessment of the proximity of AIS to BCWMC waterbodies, an analysis of various pathways of AIS into the BCWMC, and an assessment of vulnerability of each waterbody to various AIS.	
<b>Recommendation:</b> At this time, the committee recommends that additional water quality parameters be added to routine monitoring starting in 2018 in order to assess the vulnerability of waterbodies to harboring AIS; and that water monitoring reports include a brief assessment of vulnerability. In 2018 this additional work, estimated at \$2,800, could come from APM/AIS budget.	
Current Activity by Others:	Henn County analyzed the risk of AIS originating from pet stores & nurseries
Priority:	<b>HIGH:</b> Inventory and general vulnerability analysis with routine monitoring through addition of some water quality parameters  <b>LOW:</b> Developing full blown studies and assessments for every lake

**6. AIS PREVENTION: BOAT LAUNCH AND ACCESS MANAGEMENT**

Activities could include inspections of boats entering/leaving lake for AIS; installation and management of washing stations and/or compost bins at launches; regulation of launch closures/open hours.

**Recommendation:** The committee believes that boat launch owners (including private owners, cities, TRPD, and MPRB) should be responsible for monitoring and managing launches. However, the committee recommends the Commission begin an AIS Prevention Grant Program beginning with the 2019 BCWMC Budget to assist boat launch owners with inspections, equipment purchase, educational signage, staff training, etc.

Current Activity by Others:	<p>TRPD performs inspections during peak hours at their boat launch on Medicine Lake.</p> <p>MPRB closed the boat launch on Wirth Lake to help prevent AIS movement</p>
Priority:	No priority level set by committee.

**7. AIS PREVENTION: AIS EDUCATION**

**Recommendation:** The committee recommends that the Commission add materials and activities regarding AIS to its education and outreach program including 1) providing printed educational materials during events (using existing materials rather than developing new materials); 2) distributing newsletter articles to cities about AIS; 3) adding AIS information to news items on BCWMC website home page; and 4) considering ideas or requests from cities/lake groups for tailored educational materials through Education Committee’s annual work and budget planning.

Current Activity by Others:	TRPD, MPRB, Hennepin County, DNR, and lake groups each provide some level of AIS education through various avenues
Priority:	No priority level set by committee.

**8. AIS PREVENTION: POLICY DEVELOPMENT/ADVOCACY**

Advocating for and/or assisting with policy changes or ordinance development at the local or state level.

**Recommendation:** The committee doesn't recommend Commission involvement at this time. The committee did direct the Administrator to determine if the Commission could be a member of the Minnesota Lakes and Rivers Advocates due their lobbying efforts on AIS at the legislature. Upon review, the Administrator/Legal Counsel determined the Commission cannot be an actual member of the organization. However, the committee suggested that the organization's newsletter could be distributed or posted with BCWMC materials.

Current Activity by Others:	Some lake groups are member of Minnesota Lakes and River Advocates. Park districts and cities may have AIS issues within their policy agendas.
-----------------------------	--

Priority:	No priority level set by committee.
-----------	-------------------------------------

**9. MANAGEMENT: MONITORING CURRENT INFESTATIONS**

**Recommendation:** The committee notes that the BCWMC's current routine monitoring program includes monitoring AIS infestations except for fish. The committee recommends that the Commission gather and review existing information on fish surveys during routine lake monitoring to determine if a survey is needed and/or if there are ways to partner with others on surveys. The committee further recommends that the Commission request a presentation from the DNR and others performing fish surveys (such as TRPD and the City of Plymouth) on fish populations in BCWMC waterbodies.

Current Activity by Others:	BCWMC's current monitoring program includes surveys of current AIS infestations except fish. TRPD surveys fish on Medicine Lake  City of Plymouth surveys fish on all lakes
-----------------------------	--

Priority:	No priority level set by committee.
-----------	-------------------------------------

<b>10. MANAGEMENT: HERBICIDE SPOT TREATMENTS WITH APPROVED PLAN</b>	
Includes spot treating aquatic invasive plants with herbicide (as opposed to treating a whole lake)	
<b>Recommendation:</b> The committee recommends that the Commission perform herbicide spot treatments of aquatic invasive plants where the following conditions are met: 1) treatment of the plant is considered a management tool for improving water or habitat quality according to an approved management plan such as a TMDL; and 2) another entity or organization is sharing the cost of the treatment. (This is consistent with the committee’s recommendation and Commission approval of curly-leaf pondweed control on Medicine Lake in January 2017.)	
Current Activity by Others:	TRPD and MPRB use spot treatments at access points, fishing piers, and beaches. (City of Plymouth previously treated curly-leaf pondweed in Medicine Lake.)
Priority:	No priority level set by committee.

<b>11. MANAGEMENT: HERBICIDE SPOT TREATMENTS WITHOUT APPROVED PLAN</b>	
Includes spot treating aquatic invasive plants with herbicide (as opposed to treating a whole lake)	
<b>Recommendation:</b> The committee recommends that the Commission consider requests for spot treatments on lakes without an approved plan on a case by case basis.	
Current Activity by Others:	TRPD and MPRB use spot treatments at access points, fishing piers, and beaches.
Priority:	No priority level set by committee.



### 12. MANAGEMENT: WHOLE LAKE HERBICIDE TREATMENTS

**Recommendation:** The committee recommends that the Commission consider requests for whole lake herbicide treatments and that the Commission Engineer continue to engage with the DNR regarding this as well as other new treatment methods and technologies.

Current Activity by Others:	TRPD treated curly-leaf pondweed in <a href="#">Medicine Lake through a whole lake herbicide treatment</a> (2004-2006) as part of a pilot program in coordination with the DNR.
-----------------------------	---

Priority:	No priority level set by committee.
-----------	-------------------------------------

### 13. MANAGEMENT: CARP HARVESTING/FISH BARRIERS

Common carp can have a significant negative impact on water quality and aquatic vegetation, particularly in shallow lakes.

**Recommendation:** The committee recommends that the Commission consider the need for managing carp populations in Priority 1 lakes if fish surveys and other data indicate that carp are a significant problem.

Current Activity by Others:	TRPD and neighboring watershed organizations have performed or will be performing carp management activities including harvesting and barrier installation.
-----------------------------	---

Priority:	No priority level set by committee.
-----------	-------------------------------------

### 14. MANAGEMENT: WATER LEVEL MANAGEMENT

In some lake systems, water levels can be lowered in order to consolidate sediments, encourage native plant growth, and significantly reduce invasive plants such as curly-leaf pondweed.

**Recommendation:** The committee recommends that the Commission consider water level management on a case by case basis if recommended in an approved management plan.

Current Activity by Others:	Neighboring watershed organizations have performed water level management activities.
-----------------------------	---

Priority:	No priority level set by committee.
-----------	-------------------------------------

**15. MANAGEMENT: BIOLOGICAL TREATMENT**

Insects are sometimes used to control invasive species, including beetles introduced to control purple loosestrife infestations.

**Recommendation:** The committee recommends that the Commission consider biological control on a case by case basis as a possible future control method and to stay informed on new biological control agents.

Current Activity by Others:	Many entities have released purple loosestrife beetles in the past with great success. The DNR continues to “collect and move” beetles in limited cases.
-----------------------------	--

Priority:	No priority level set by committee.
-----------	-------------------------------------

**16. CONVENING LAKE GROUPS TO UNDERSTAND OPTIONS FOR ORGANIZATION**

During the discussion of many of the prevention and management options, it was noted that formal [lake improvement districts](#) may be the best type of organization to implement many of the prevention and management tools noted above and that BCWMC lake groups might need more information about the pros and cons of forming a lake improvement district.

**Recommendation:** The committee recommends that the Commission convene a meeting of lake groups and other interested groups/individuals in the BCWMC and request a presentation from the DNR and other experts to learn about lake improvement districts vs. lake associations and other less formal lake groups.



## Bassett Creek Watershed Management Commission

### MEMO

Date: September 13, 2017  
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.>)

**2017 Plymouth Creek Restoration Project, Annapolis Lane to 2,500 feet Upstream (2017CR-P):** All project documents including the feasibility study and 90% design plans are available online at <http://www.bassettcreekwmo.org/index.php?CID=284>. The BCWMC executed agreements with the BWSR for a \$400,000 Clean Water Fund grant and with Hennepin County for a \$50,000 Opportunity Grant and a subgrant agreement with the City was executed. Project design was recently completed by the city's contractor, Wenck Associates, with 60% and 90% design plans being approved by the Commission at the April and August 2017 meetings, respectively. The Plymouth City Council gave approval to bid the project. Bid documents will be submitted soon, with a bid opening scheduled for early October. The City is applying for permits from the U.S. Army Corps of Engineers and the Department of Natural Resources. The project is slated for construction this winter.

**2017 Main Stem Bassett Creek Streambank Erosion Repair Project (2017CR-M):** 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 designs were approved at the August Commission meeting. Minneapolis staff and I will present design plans to the Harrison Neighborhood Association's Glenwood Revitalization Team committee on September 13<sup>th</sup>. A public open house on the project will be held on [September 19<sup>th</sup>](#). 90% designs will be presented at the October Commission meeting.

**2013 Four Season Area Water Quality Project/Agora Development (NL-2):** At their meeting in December 2016, the Commission took action to contribute up to \$830,000 of Four Seasons CIP funds for stormwater management at the Agora development on the old Four Seasons Mall location. At their February 2017 meeting the Commission approved an agreement with Rock Hill Management 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.

**2014 Schaper Pond Diversion Project, Golden Valley (SL-3): (No update since August 2017)** Last August (2016), the Commission Engineer reported that the structure had been vandalized and repair was needed. The City executed a change order with Sunram Construction (the contractor for the project) to add weights to some of the baffle anchors; which was accomplished this spring. Unfortunately, city staff recently noticed that another

anchor had pulled out. This was an anchor that had not been given the extra weights this spring. Based on discussions with the Commission Engineer, the City is recommending adding weights to all remaining anchors and reinstalling the anchor that has pulled out. The city is waiting to hear from the Sunram Construction about a time line to complete the work. Depending on the response, the City may decide to complete the work with its own staff. The contractor has some final vegetation establishment to complete before the contract can be closed. Erosion control will be removed once the final stabilization is completed. This summer, the Commission Engineer is monitoring the effectiveness of the pond.

**2014 Twin Lake In-lake Alum Treatment, Golden Valley (TW-2): (No update since January.)** 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 this summer will help determine if a second dose of alum is needed to retain water quality.

**2015 Main Stem Restoration Project 10th Avenue to Duluth Street, Golden Valley (2015CR): (No update since June.)** The restoration project is being constructed in two phases, each under separate contract. Phase one included stream bank shaping, placement of field stone rock and 12-inch bio-logs, and repair of storm sewer outlets. The first phase of the project began in November 2015 and was finished in June 2016. Turf establishment and minor restoration repairs in Phase 1 were accepted in late October 2016. Repairs to some areas where flooding impacted rocks or biologs were completed and accepted in mid-December 2016. Phase 1 of the construction project has entered the warranty period.

Phase 2 of the project includes the establishment of native vegetation along the stream, including grasses, wildflowers, shrubs, live stakes and fascines, and cordgrass plugs. The second phase of the contract, Native Buffer Vegetation installation is underway. The project has been seeded and stabilized and maintenance mowing and spot treatments have been completed. Applied Ecological Services (AES) installed live stakes and fascines this spring and completed the tree and shrub planting along the restoration project. AES will continue to monitor and maintain the native vegetation through 2018. It is anticipated that the total contract amount for both Phase one and Phase two will be within the Watershed's overall project budget.

**2016 Northwood Lake Improvement Project, New Hope (NL-1): (No update since August.)** Northwood Lake Improvement Project is nearing completion with all major work complete. The storm water tank was fully operational in June and will be irrigating the fields for the summer. The educational sign is being designed and will be installed soon. The 2<sup>nd</sup> rain garden was planted with the fescue grass in June.

I recently submitted grant audit materials to MPCA which were approved. A grand opening of the park was held on May 15<sup>th</sup>. Friends of Northwood Lake disseminated water quality educational materials, including BCWMC materials. A semi-annual grant report was submitted to the MPCA last month.

Photos and construction progress are available at: <http://www.ci.new-hope.mn.us/departments/publicworks/2016infrastructure.shtml>

**2016 Honeywell Pond Expansion Project, Golden Valley (BC-4): (No update since June.)** In spring 2016, the Honeywell Pond Project was bid as part of the City of Golden Valley and Hennepin County's Douglas Drive (CSAH 102) Reconstruction Project. The reconstruction project began in June 2016. Excavation of the pond basin is complete and the disturbed soils around the pond were temporarily stabilized. The force main work was recently

completed. WSB and Park Construction are finalizing the shop drawings for the lift station. The connection to Sandburg Athletic Complex was bid as part of the Douglas Drive Landscaping Project. Hoffman & McNamara are in the process of finalizing the irrigation system and will make the connection at Honeywell Pond. Final stabilization of the Pond will be completed this fall.

**2018 Bassett Creek Park Pond & Winnetka Pond Dredging, Crystal (BCP-2): (See Items 5A and 6A)** The final feasibility study for this project was approved at the May 2017 meeting and is now available on the project page online at <http://www.bassettcreekwmo.org/index.php?cid=403>. Hennepin County Commissioners recently approved the 2018 maximum levy request for this project. At this meeting the Commission will hold a public hearing on the project and consider a resolution to order the project and enter an agreement for design and construction with the City of Crystal.

## Other Work

### Administrative, Financial, CIP Projects:

- Reviewed and revised Watershed Plan and posted amended sections online to incorporate recent plan amendment, floodplain elevation changes, and linear project requirement changes
- Distributed public hearing notice to official publications
- Coordinated with City of Minneapolis and Harrison Neighborhood Association (HNA) to schedule public open house, distribute postcards to residents, and provide project update to HNA committee for Main Stem Erosion Repair Project
- Wrote TAC recommendation memo, distributed for review, and coordinated with legal counsel regarding review fee structure
- Participated in the meeting for BWSR's Local Government Roundtable Workgroup
- Reviewed and provided comments on proposals for feasibility studies on 2019 CIP projects
- Toured DeCola Ponds area with Commission Engineer and Golden Valley staff (2019 CIP project area)

### Education:

- Attended WMWA monthly meeting and gathered articles for WMWA newsletter
- Coordinated with education consultant and Golden Valley staff re: creek signs at road crossings
- Assisted with recruitment for Winter Maintenance Training event and Master Water Stewards
- Met with Metro Blooms and MPRB staff for update on Harrison Neighborhood Project and discussion of possible future restoration project in Bassett Creek Park
- Coordinated volunteers and display materials for Golden Valley Arts and Music Festival
- Designed and ordered "salt cups" for event giveaways