



Bassett Creek Watershed Management Commission

Regular Meeting
Thursday, October 19, 2023
8:30 a.m.

Council Conference Room
Golden Valley City Hall @ 7800 Golden Valley Rd.

MEETING AGENDA

1. CALL TO ORDER and ROLL CALL

2. **PUBLIC FORUM ON NON-AGENDA ITEMS** – *Members of the public may address the Commission about any item not contained on the regular agenda. A maximum of 15 minutes is allowed for the Forum. If the full 15 minutes are not needed for the Forum, the Commission will continue with the agenda. The Commission will take no official action on items discussed at the Forum, except for 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 (10 minutes)

- A. Approval of Minutes – September 21, 2023 Commission Meeting
- B. Acceptance of October 2023 Financial Report
- C. Approval of Payment of Invoices
 - i. Keystone Waters, LLC – September 2023 Administration
 - ii. Keystone Waters, LLC – September 2023 Administrative Expenses
 - iii. Barr Engineering – September 2023 Engineering Services
 - iv. Kennedy & Graven – August 2023 Legal Services
 - v. Redpath – September 2023 Accounting Services
 - vi. Triple D Espresso – Meeting Catering
 - vii. Three Rivers Park District – Medicine Lake AIS Management
 - viii. Finance and Commerce – Public Hearing Notification
- D. Approval of Settlement Agreement with Lagoon Dredging Project Contractor

5. BUSINESS

- A. Consider Approving Letter of Support for Bassett Creek Valley Community Works Program (15 min)
- B. Consider Approving Recommendations from Technical Advisory Committee (20 min)
 - i. Process to Consider Next Steps for Lagoon Dredging Project
 - ii. Protocol for Monitoring and Analysis of Potential Blue Green Algae Blooms
 - iii. Targeting Outreach Through Low Salt, No Salt Minnesota Campaign
- C. Receive Updates from Plan Steering Committee (20 min)
 - i. Receive Update on Plan Development Budget
 - ii. Consider Approving Recommendation to Develop Scope of Work for Medicine Lake TMDL Assessment
 - iii. Receive Update on Committee Progress and Calendar of Work
- D. Consider Approving Scope and Budget for Development of Feasibility Study for Plymouth Creek Restoration Project Dunkirk Lane to Plym Ice Center (20 min)
- E. Consider Amending the Cooperative Agreement for the Bryn Mawr Meadows Water Quality Improvement Project (10 min)

- F. Receive Update on Status of 2023 Operating Budget (10 min)
- G. Consider Approving Administrator and Commissioner Attendance at Minnesota Watershed Conference (10 min)

6. COMMUNICATIONS (10 minutes)

- A. Administrator's Report
 - i. Reminder of **Wednesday** November Meeting
 - ii. Report on Post Treatment Survey in Sweeney Lake
 - iii. Update on Outreach in Minneapolis Neighborhoods
- B. Engineer
 - i. Update on Atlas 15
- C. Legal Counsel
- D. Chair
- E. Commissioners
 - i. Report on Watershed Tour
- F. TAC Members
- G. Committees

7. INFORMATION ONLY (Information online only)

- A. BCWMC Administrative Calendar
- B. CIP Project Updates www.bassettcreekwmo.org/projects
- C. Grant Tracking Summary and Spreadsheet
- D. Bassett Creek Watershed Tour Handout
- E. [Ĥaĥa Wakpadaŋ Pronunciation Video](#)
- F. [Article on Ĥaĥa Wakpadaŋ Water Ceremony](#)
- G. WCA Notices Plymouth, New Hope

8. ADJOURNMENT

Upcoming Meetings & Events

- BCWMC Education Committee Meeting: Monday October 16th, 4:00 p.m., Sweeney Lake Rm, Brookview
- Metro Watersheds Quarterly Meeting: Tuesday October 17th, 7:00 p.m., Capitol Region Watershed District, St. Paul
- BCWMC Plan Steering Committee Meeting: Wednesday, November 1st, 8:30 a.m.
- BCWMC Regular Meeting: WEDNESDAY November 15, 8:30 a.m., Golden Valley City Hall
- BCWMC Plan Steering Committee Meeting: Wednesday, December 6th, 8:30 a.m.
- BCWMC Technical Advisory Committee Meeting: Wednesday, December 6th, 10:30 a.m., Wirth Lake Room, Brookview



Bassett Creek Watershed Management Commission

AGENDA MEMO

Date: October 12, 2023

To: BCWMC Commissioners

From: Laura Jester, Administrator

RE: Background Information for 10/19/23 BCWMC Meeting

1. **CALL TO ORDER and ROLL CALL**
2. **PUBLIC FORUM ON NON-AGENDA ITEMS**
3. **APPROVAL OF AGENDA – ACTION ITEM with attachment**

4. **CONSENT AGENDA**
 - A. Approval of Minutes – September 21, 2023 Commission Meeting- **ACTION ITEM with attachment**

 - B. Acceptance of October Financial Report - **ACTION ITEM with attachment**

 - C. Approval of Payment of Invoices - **ACTION ITEM with attachments (online) – I reviewed the following invoices and recommend payment.**
 - i. Keystone Waters, LLC – September 2023 Administration
 - ii. Keystone Waters, LLC – September 2023 Administrative Expenses
 - iii. Barr Engineering – September 2023 Engineering Services
 - iv. Kennedy & Graven – August 2023 Legal Services
 - v. Redpath – September 2023 Accounting Services
 - vi. Triple D Espresso – Meeting Catering
 - vii. Three Rivers Park District – Medicine Lake AIS Management
 - viii. Finance and Commerce – Public Hearing Notification

 - D. Approval of Settlement Agreement with Lagoon Dredging Project Contractor – **ACTION ITEM with attachment -** *During a closed session at their meeting last month the Commission directed the Commission Attorney to negotiate a final settlement with the Main Stem Lagoon Dredging contractor. The attached settlement agreement was prepared by the Commission Attorney and was verbally approved by the contractor (written approval is expected by the time of this meeting). The agreement is within the financial parameters and provisions approved by the Commission. Staff recommends approval of the settlement agreement and closure of the project.*

5. **BUSINESS**
 - A. Consider Approving Letter of Support for Bassett Creek Valley Community Works Program (15 min) – **ACTION ITEM with attachment –** *Hennepin County Chair Fernando recently convened a second meeting of Bassett Creek Valley stakeholders. Commissioner Welch, Alternate Commissioner Polzin, and I attended. At the meeting the group received a presentation on the county’s Community Works Program and discussed how a program established for the Bassett Creek Valley could help develop a large, regional floodplain and stormwater management project through a multi-jurisdictional partnership. Stakeholders were told they could request the formation of a Community Works Program through correspondence to the county. The attached draft letter is correspondence to Chair Fernando stating the Commission’s recommendation on this item.*

- B. Consider Approving Recommendations from Technical Advisory Committee (20 min) – ACTION ITEM with attachment - *The BCWMC Technical Advisory Committee met on October 4th and discussed a variety of topics. Please see the attached memo with their recommendations to the Commission.*
- i. Process to Consider Next Steps for Lagoon Dredging Project
 - ii. Protocol for Monitoring and Analysis of Potential Blue Green Algae Blooms
 - iii. Targeting Outreach Through Low Salt, No Salt Minnesota Campaign
- C. Receive Updates from Plan Steering Committee (20 min) – ACTION & INFORMATION ITEM with attachment – *The BCWMC Plan Steering Committee met on October 4th to continue developing goals, review the calendar of work, receive an update on the plan budget, and consider scoping an assessment of the Medicine Lake Total Maximum Daily Load status. Please see the attached memo with their recommendations and updates.*
- i. Receive Update on Plan Development Budget
 - ii. Consider Approving Recommendation to Develop Scope of Work for Medicine Lake TMDL Assessment
 - iii. Receive Update on Committee Progress and Calendar of Work
- D. Consider Approving Scope and Budget for Development of Feasibility Study for Plymouth Creek Restoration Project Dunkirk Lane to Plym Ice Center (20 min) – ACTION ITEM with attachment – *It was recently determined that the CIP project slated for 2025 (the 3rd project in the Medicine Lake Rd & Winnetka Ave Long Term Flood Mitigation Plan in Golden Valley) is not ready for feasibility study development now nor implementation in 2025. Rather than having a gap in the capital improvement program, I recommend moving the 2026 project to 2025: Plymouth Creek Restoration, Dunkirk Lane to 38th Avenue North behind Plymouth Ice Center (2026 CR-P). I requested that the Commission Engineers work with Plymouth staff to develop a scope and budget for development of a feasibility study for this project. Staff recommend approval of the attached scope and direction to the Commission Engineers to begin the study. Funding for this study would come from CIP funds that would be “backfilled” with 2025 levy funds for this project assuming it is officially ordered in the future.*
- E. Consider Amending the Cooperative Agreement for the Bryn Mawr Meadows Water Quality Improvement Project (10 min) – ACTION ITEM with attachment – *Please see the attached memo with a recommendation from me and Commission Attorney Anderson to amend this project’s agreement with the City of Minneapolis and the Minneapolis Park and Rec Board so that grant funding can be received.*
- F. Receive Update on Status of 2023 Operating Budget (10 min) – INFORMATION ITEM see Item 4B – *We are 2/3 of the way through the fiscal year which is a good time to check the status of the annual operating budget. Aside from the Watershed Plan Budget (discussed in Item 5C above), the budget is fairly on track. We are running slightly over budget on a few items such as legal tasks and audit/insurance, but running slightly under budget in engineering and administration. I plan to reconvene the Budget Committee soon to continue developing plans for use of investment fund income.*
- G. Consider Approving Administrator and Commissioner Attendance at Minnesota Watershed Conference (10 min) – ACTION ITEM with attachment – *The [Minnesota Watersheds Annual Conference and Meeting](#) is scheduled for November 28 – December 1 in Alexandria, MN. I would like to attend the Minnesota Association of Watershed Administrators meeting on Nov 28 and I am scheduled to give a presentation on the Low Salt, No Salt MN campaign on Nov 30. I may attend all or part of a workshop on Nov 29. I am requesting attendance to the full conference with a registration*

cost of \$258 (including a speaker discount) plus 3 nights lodging and mileage for a total estimated cost of \$794, plus my time to attend. This amount would come from the Administrator's budget line. Commissioners and alternates are encouraged to attend as well. Registration rates vary depending on the number of days you attend. Lodging is \$109/night plus tax. The tentative conference schedule is attached. At this meeting you could consider appointing two delegates and one alternate delegate to attend at least the regional caucuses on Nov 30 and the business meeting on Dec 1. (Or, this action could wait until the November meeting.) Commissioners may also be interested in workshops scheduled for Nov 28 and education sessions (concurrent sessions) on Nov 29.

6. COMMUNICATIONS (10 minutes)

- A. Administrator's Report – **see attachment**
 - i. Reminder of **Wednesday** November Meeting
 - ii. Report on Post Treatment Survey in Sweeney Lake
 - iii. Update on Outreach in Minneapolis Neighborhoods
- B. Engineer
 - i. Update on Atlas 15 – **see attachment**
- C. Legal Counsel
- D. Chair
- E. Commissioners
 - i. Report on Watershed Tour – **see handout in Item 7D**
- F. TAC Members
- G. Committees

7. INFORMATION ONLY (Information online only)

- A. BCWMC Administrative Calendar
- B. CIP Project Updates www.bassettcreekwmo.org/projects
- C. Grant Tracking Summary and Spreadsheet
- D. Bassett Creek Watershed Tour Handout
- E. [Ĥaĥa Wakpadaŋ Pronunciation Video](#)
- F. [Article on Ĥaĥa Wakpadaŋ Water Ceremony](#)
- G. WCA Notices Plymouth, New Hope

8. ADJOURNMENT

Upcoming Meetings & Events

- BCWMC Education Committee Meeting: Monday October 16th, 4:00 p.m., Sweeney Lake Rm, Brookview
- Metro Watersheds Quarterly Meeting: Tuesday October 17th, 7:00 p.m., Capitol Region Watershed District, St. Paul
- BCWMC Plan Steering Committee Meeting: Wednesday, November 1st, 8:30 a.m.
- BCWMC Regular Meeting: WEDNESDAY November 15, 8:30 a.m., Golden Valley City Hall
- BCWMC Plan Steering Committee Meeting: Wednesday, December 6th, 8:30 a.m.
- BCWMC Technical Advisory Committee Meeting: Wednesday, December 6th, 10:30 a.m, Wirth Lake Room, Brookview



Bassett Creek Watershed Management Commission

DRAFT Minutes of Regular Meeting & Public Hearing
Thursday, September 21, 2023
8:30 a.m.
Golden Valley City Hall, 7800 Golden Valley Road

1. CALL TO ORDER and ROLL CALL

On Thursday, September 21, 2023 at 8:31 a.m. Chair Cesnik called the Bassett Creek Watershed Management Commission (Commission) to order.

Commissioners, city staff, and others present

City	Commissioner	Alternate Commissioner	Technical Advisory Committee Members (City Staff)
Crystal	Dave Anderson	Joan Hauer	Mark Ray
Golden Valley	Paula Pentel	<i>Vacant</i>	Eric Eckman
Medicine Lake	Clint Carlson	Shaun Kennedy	<i>Absent</i>
Minneapolis	Michael Welch	Jodi Polzin	Liz Stout
Minnetonka	Maryna Chowhan	Stacy Harwell	<i>Absent</i>
New Hope	Jere Gwin-Lenth	Jen Leonardson	Nick Macklem
Plymouth	Catherine Cesnik	<i>Absent</i>	Ben Scharenbroich
Robbinsdale	Wayne Sicora	<i>Absent</i>	Mike Sorensen
St. Louis Park	RJ Twiford	<i>Vacant</i>	
Administrator	Laura Jester, Keystone Waters, LLC		
Engineers	Karen Chandler, Greg Wilson, Stephanie Johnson - Barr Engineering		
Recording Secretary	<i>Vacant Position</i>		
Legal Counsel	Dave Anderson, Kennedy & Graven		
Presenters/ Guests/Public	Jami Markle and Brian Vlach (Three Rivers Park District)		

2. PUBLIC FORUM ON NON-AGENDA ITEMS

None

3. APPROVAL OF AGENDA

Administrator Jester requested the addition of a closed session for attorney-client privileged communications regarding the ongoing claim dispute with Fitzgerald Excavating & Trucking, Inc. related to the Main Stem Lagoon Dredging Project.

MOTION: Commissioner Gwin-Lenth moved to approve the agenda as amended. Commissioner Carlson seconded the motion. Upon a vote the motion carried 7-0 with the cities of Robbinsdale and Minnetonka absent from the vote.

4. CONSENT AGENDA

Administrator Jester noted the August meeting minutes would be updated to include Nick Macklem present at the meeting.

MOTION: Commissioner Pentel moved to approve the consent agenda as amended. Commissioner Gwin-Lenth seconded the motion. Upon a vote the motion carried 7-0 with the cities of Robbinsdale and Minnetonka absent from the vote.

The following items were approved as part of the consent agenda.

- Approval of the August 17, 2023 Meeting Minutes
- Acceptance of September 2023 Financial Report
- Approval of Payment of Invoices
- Approval of Payment for Pre and Post Road Survey in Lagoon Dredge Project Area
- Approval of Updated Commission Roles and Responsibility Document

5. PUBLIC HEARING

A. Receive Comments on Proposed 2024 CIP Projects

Chair Cesnik opened the public hearing at 8:34 a.m. Administrator Jester reminded commissioners of the 2024 projects included in their approved Capital Improvement Program listed below. And she briefly reviewed the Commission's Equipment Purchase Policy related to the cost share purchase of a high efficiency street sweeper for the City of Golden Valley. Commissioner Hauer asked about the expected life of the projects and long-term maintenance. Commission Engineer Chandler noted that each project's life expectancy is included in the feasibility study for the project and is typically the basis on which the "cost per pound of pollutant removal" is based. Administrator Jester noted that projects are typically implemented by the city where they are located which includes design, construction and long-term maintenance.

[Commissioner Chowhan arrives.]

There were no members of the public present for the hearing. Commissioner Welch asked how this public hearing was noticed and indicated that 8:30 a.m. on a weekday morning is not a convenient time for many residents. He wondered if public hearings should be moved to an evening meeting. Administrator Jester noted the hearing notice was on the online calendar and published in the Commission's official publications including Finance and Commerce and the Sun Post and Sun Sailor. Commissioner Pentel noted that even an evening meeting isn't likely to draw attendees and wondered if an online comment form is possible. There were other suggestions for notifying residents near specific project sites including postcards and through city communications.

- i. [Bassett Cr Main Stem Restoration Project - Regent Ave to Golden Valley Rd](#) (2024-CRM)
- ii. [Ponderosa Woods Stream Restoration Project](#) (ML-22)
- iii. [Sochacki Park Water Quality Improvement Project](#) (BC-14)
- iv. Cost Share Purchase of High Efficiency Street Sweeper (BC-12)

Chair Cesnik closed the public hearing at 8:45 a.m.

6. BUSINESS

A. Review Feasibility Study for Sochacki Park Water Quality Project

Administrator Jester provided a high level overview of the project, noting the draft feasibility study was presented at last month's meeting and that staff is seeking approval of the feasibility study and direction to develop agreements with partners.

Commission Engineer Greg Wilson presented changes from the original draft feasibility study including reviewing how the project meets the BCWMC gatekeeper criteria and water quality goals for the creek in the 2015 watershed plan; how some of the recommended best management practices (BMPs) have been refined to address comments from

commissioners and comments from city staff; that tree removal quantities were added; and some possible funding sources were added. Commission Engineer Chandler noted that the ponds in Sochacki Park are part of the BCWMC Trunk System.

Engineer Wilson reviewed the goals of the project including improving water quality in Bassett Creek and ponds/wetlands in Sochacki Park, enhancing the aquatic vegetation community, and removing contaminated soils and debris from upland areas where ponds are proposed to be created or expanded. He noted that sediment sampling results indicate high PAHs, some lead and cadmium but no PCBs.

Engineer Wilson reviewed the structural BMPs including creation of two new stormwater ponds, dredging and expansion of an existing pond, and a filtration BMP in South Halifax Park. Additional, non-structural BMPs include a water level drawdown of the ponds, an alum treatment in the ponds, and enhanced street sweeping.

[Commissioner Sicora arrives.]

There was a question about additional sediment/soil testing as construction moves forward. Engineer Wilson explained that a Phase II Environmental Assessment would be part of the design process and would include additional soil investigations.

Engineer Wilson further reviewed the structural BMPs:

The new pond (NR-1) on the east side of the existing park trail was revised to remove wetland impacts.

The new pond (SR-3), proposed to be created between a restored prairie and South Rice Pond, was revised to remove wetland and prairie impacts.

The BMP proposed for South Halifax Park (GR-6), where an environmental covenant exists, is proposed to capture street runoff and move it through a permeable treatment barrier with crushed limestone that will remove total phosphorus before water flows into Grimes Pond.

The existing pond (SR-4) would be expanded by 2 to 3 times and adjacent erosion would be addressed. He noted that 24 acres of residential area in Robbinsdale drain through that currently undersized pond. When asked, Engineer Wilson noted this pond expansion would not be within the railroad right of way.

Engineer Wilson reviewed a table comparing the different BMPs along with the cost benefit and proposed sequencing of the BMPs. He reported that a 53% reduction in total phosphorus (or approximately 68 lbs/year) is expected from the total project. He reported a total estimated cost of \$1,903,000 and reviewed potential funding sources including \$600,000 from the BCWMC CIP, if officially ordered.

When asked, Engineer Wilson reviewed the known history of the area including farmland, filled wetlands, debris dumping in the 1960's and 70's, and establishment of the current Sochacki Park in 2015. When asked about potential for bacteria reduction, Engineer Wilson that the proposed BMPs are known to reduce bacteria through capture and treatment of stormwater and through photodegradation but that bacteria load reductions were not calculated. It was noted that additional clarity on bacteria reduction should have been included in the report.

MOTION: Commissioner Pentel moved to approve the Sochacki Park Water Quality Project feasibility study. Commissioner Gwin-Lenth seconded the motion.

Discussion: Commissioner Welch reported that he would not support this project noting that the project wasn't properly initiated and the Commission did not receive information on the subwatershed analysis by Three Rivers Park District that precipitated this project. He noted the ponds in the park are not priority waterbodies but indicated that there is potential for a good project that addresses Commission goals. He noted the feasibility study was rushed and there is no commitment from partners for funding. Administrator Jester noted that until an actual agreement for implementation is executed, the Commission has not yet committed funds. Jami Markle with TRPD noted that TRPD funded the feasibility study and has funding in its CIP for project design. Commissioner Carlson indicated his trust that the partners could come together to support the common goals. Commissioner Pentel noted that this project represents a successful partnership although she agrees it was fast-tracked. She noted it's a different way to implement a project and that she supports the project.

VOTE: Upon a vote the motion passed 8 – 1 with Minneapolis voting nay and all other cities voting in favor.

B. Consider Approval of Resolution 23-06 Ordering 2024 Improvements

- i. Ordering 2024 Improvements
- ii. Making Findings Pursuant to Minnesota Statutes Section 103B.251
- iii. Certifying Costs to Hennepin County
- iv. Approving Agreement with City of Plymouth for Construction of Ponderosa Woods Stream Restoration Project (ML-22)

Administrator Jester provided an overview of the resolution which accomplishes multiple tasks in one action. She reported the resolution officially orders the 2024 CIP projects and certifies the costs of the projects to Hennepin County for the collection of levy funds in 2024. She noted it also approves an agreement with the City of Plymouth for design, construction, and long-term maintenance of the Ponderosa Woods Stream Restoration Project. She noted that agreements with Golden Valley for the cost share of the street sweeper and the Bassett Creek Main Stem Restoration Project - Regent Ave to Golden Valley Rd are currently being reviewed by the city. The agreement for implementation on the Sochacki Park Water Quality Improvement Project is in development. All three of these agreements would be present for Commission consideration at a future meeting.

Commissioner Hauer asked about the life span of the Sochacki Park project. Engineer Wilson reported the BMPs are designed to last 20 years. Commission Attorney Anderson noted the long term maintenance expectations would be addressed in the cooperative agreement and that the Commission is not responsible for projects' long term maintenance. TAC member Sorensen noted that cities must document BMP maintenance as part of the MS4 permit from the State to the city. He noted that all infrastructure is inspected and put on a maintenance schedule.

MOTION: Commissioner Gwin-Lenth moved to approve Resolution 23-06. Commissioner Pentel seconded the motion.

Discussion: Commissioner Welch noted that for consistency he would not vote to approve this resolution. He noted his desire for the Commission to implement and maintain their own projects. He noted this is a significant but critical change to the Commission's operation. He also noted that the public hearing materials did not have information related to the project to cost share the purchase of a street sweeper and as such, there is no basis for ordering the project.

VOTE: Upon a vote the motion passed 8 – 1 with Minneapolis voting nay and all other cities voting in favor.

[Chair Cesnik called a 5-minute break.]

C. Consider Approval of Updated 90% Plans for Four Seasons Area Water Quality Improvement Project

Commission Engineer Chandler reminded commissioners that 90% plans for this CIP project were originally approved in December and that a cooperative agreement with the City of Plymouth for implementation of this project was approved at the August Commission meeting. She noted this CIP project is being built before the Four Seasons Mall site is redeveloped and that the 90% plans presented here are slightly revised from the earlier version with some changes to the footprint and a slight reduction in the estimated pollutant removal from about 118 lbs. of total phosphorus to 113 lbs. Engineer Chandler noted that previous action by the Commission allows for the amount of impervious surface existing before the mall was demolished to be used in pollutant removal calculations. She requested explicit approval for a similar provision related to floodplain: that the floodplain impact analysis be based on pre-demolition floodplain conditions.

MOTION: Commissioner Gwin-Lenth moved to approve the revised 90% plans and analysis of floodplain impacts to be based on conditions before the mall was demolished.

Discussion: There was discussion about the tributary area draining to this project (from the west and the north), about the importance of chloride reductions, how the city will require chloride management on the developed site, and how the Commission could address chlorides in the 2025 watershed plan.

[Alternate Commissioner Harwell arrives.]

Commissioner Welch requested that project review memos include more information on wetland impacts. He asked why the forebay was removed from the plans. TAC member Scharenbroich reported that the Army Corps of Engineers has presented varying permitting direction and currently requires that the forebay be removed from the plans. He noted the city is still working with the Corps on this item as the city believes the forebay is an important protection measure for the rest of the restored wetland.

There was also discussion on the floodplain and the floodway and the life span of the project. TAC member Scharenbroich reported that the south pond would be regularly maintained and that the wetland restoration component should not need maintenance.

VOTE: Upon a vote the motion passed unanimously.

D. Consider Proposal to Update and Reprint Watershed Map

Administrator Jester reported that the Bassett Creek Watershed map (printed, folded green map) has been a popular staple of the Commission’s outreach and education program since it was first developed and printed in 2015. She noted there are very few copies of the map remaining and it’s time to update some of the educational content on the “back of the map.” She recommended approval of the attached agreement with a mapping contractor which was drafted by the Commission Attorney for design and printing of an updated map. She noted the BCWMC Education Committee will be instrumental in creation of the updated content.

There was some discussion on the number of hours in the contract and the printing cost. Many commissioners agreed the contract seemed like a fair estimate of time and printing cost. Administrator Jester noted she thought the map update process could take several months depending on how many times the Education Committee needed to meet. She noted the full Commission would review and approve the Education Committee’s recommendations on map updates before printing.

MOTION: Commissioner Carlson moved to approve the contract with INCASE, LLC for an amount not to exceed \$7,700. Commissioner Chowhan seconded the motion. Upon a vote the motion carried 8 – 1 with Minneapolis voting nay and all other cities voting in favor.

[Commissioner Chowhan departs the meeting.]

E. Receive Update from Plan Steering Committee

Plan Steering Committee Chair Kennedy thanked commissioners for a productive workshop at the August meeting and reported that the committee began developing complete issue statements and measurable goals for the impaired waters and chloride issues at their September 7th meeting. He noted that work would continue at the next meeting on October 4th.

7. COMMUNICATIONS

A. Administrator’s Report

- i. Update on Watershed Tour – Administrator Jester asked for a show of hands for those who planned to attend the watershed tour. About 12 people raised their hands.
- ii. Report on AIS Rapid Response in Sweeney Lake – Administrator Jester described the actions taken by BCWMC staff, Sweeney Lake Association members, Golden Valley staff, and the DNR to quickly address Eurasian watermilfoil discovered in Sweeney Lake. She reported the lone, small bed of EWM was treated only 5 days after discovery, thanks in part, to the lake association contracting directly with an herbicide applicator and paying for the treatment. She reported a post treatment survey will be conducted in October and paid for by Hennepin County. Commissioners asked Administrator Jester to consider submitting a press release about this story.

- B. Engineer – Commissioner Welch asked the Commission Engineer Chandler about the National Oceanic and Atmospheric Administration’s preparation of “Atlas 15.” He noted it is supposed to be finalized in 2025 and that it will include both historical data and predictions for the future. Engineer Chandler indicated she knew about that and that multiple Barr staff are tracking progress.

- C. Legal Counsel – No report
- D. Chair – No report
- E. Commissioners
 - i. Commissioners reported that there would not be a Minnetonka commissioner present at the October meeting. Commissioner Pentel reported that she will also be absent for the October meeting.
 - ii. Commissioner Carlson thanked Commissioner Welch for his critical thinking, expertise, and comments during the meeting.
- F. TAC Members – TAC Chair Ray reported that at their September meeting, the committee discussed some “lessons learned” on the Lagoon dredge project and will discuss further at the next meeting. Alternate Commissioner Kennedy was appointed the TAC liaison for the October TAC meeting.
- G. Committees – No report.

8. INFORMATION ONLY

- A. BCWMC Administrative Calendar
- B. CIP Project Updates www.bassettcreekwmo.org/projects
- C. Grant Tracking Summary and Spreadsheet
- D. [Haha Wakpadan Oral History Podcast](#)
- E. Haha Wakpadan Upcoming Events
- F. WCA Notices Plymouth
- G. Medicine Lake Water Levels 1972-2023 Graphic
- H. [2022 Met Council Lake Quality Report](#)

9. CLOSED SESSION PURSUANT TO MINN. STAT. 13D.05, SUBD. 3(b) TO ENGAGE IN ATTORNEY-CLIENT PRIVILEGED COMMUNICATIONS REGARDING ONGOING CLAIM DISPUTE WITH FITGERALD EXCAVATING & TRUCKING, INC. (MAIN STEM LAGOON DREDGING PROJECT CONTRACTOR)

MOTION: Chair Cesnik made a motion to enter a closed session. Commissioner Welch seconded the motion. Upon a vote the motion carried 9-0.

The closed session was attended by:

City	Commissioner	Alternate Commissioner
Crystal	Dave Anderson	Joan Hauer
Golden Valley	Paula Pentel	
Medicine Lake	Clint Carlson	Shaun Kennedy
Minneapolis	Michael Welch	Jodi Polzin
Minnetonka		Stacy Harwell
New Hope	Jere Gwin-Lenth	Jen Leonardson
Plymouth	Catherine Cesnik	
Robbinsdale	Wayne Sicora	
St. Louis Park	RJ Twiford	
Administrator: Laura Jester		
Engineers: Karen Chandler, Jim Herbert		
Legal Counsel: Dave Anderson, Michelle Weinberg		

MOTION: Chair Cesnik moved to end the closed session and return to the regular meeting. Commissioner Gwin-Lenth seconded the motion. Upon a vote the motion carried 9-0.

10. ADJOURNMENT - The meeting adjourned at 11:23 a.m.

Bassett Creek Watershed Management Commission						
Statement of Financial Position						
				Capital Improvement Projects	General Fund	TOTAL
ASSETS						
Current Assets						
Checking/Savings						
101 · Wells Fargo Checking				-789,378.80	856,918.73	67,539.93
102 · 4MP Fund Investment				3,501,986.62	184,893.92	3,686,880.54
103 · 4M Fund Investment				3,533,650.36	-61,977.31	3,471,673.05
Total Checking/Savings				6,246,258.18	979,835.34	7,226,093.52
Accounts Receivable						
111 · Accounts Receivable				0.00	600.67	600.67
112 · Due from Other Governments				52,806.40	-0.26	52,806.14
113 · Delinquent Taxes Receivable				11,396.55	0.00	11,396.55
Total Accounts Receivable				64,202.95	600.41	64,803.36
Other Current Assets						
114 · Prepays				0.00	2,978.75	2,978.75
116 · Undeposited Funds				0.00	1,500.00	1,500.00
Total Other Current Assets				0.00	4,478.75	4,478.75
Total Current Assets				6,310,461.13	984,914.50	7,295,375.63
TOTAL ASSETS				6,310,461.13	984,914.50	7,295,375.63
LIABILITIES & EQUITY						
Liabilities						
Current Liabilities						
Accounts Payable						
211 · Accounts Payable				23,749.53	112,471.45	136,220.98
Total Accounts Payable				23,749.53	112,471.45	136,220.98
Other Current Liabilities						
212 · Unearned Revenue				438,823.00	0.00	438,823.00
251 · Unavailable Rev - property tax				11,396.55	0.00	11,396.55
Total Other Current Liabilities				450,219.55	0.00	450,219.55
Total Current Liabilities				473,969.08	112,471.45	586,440.53
Total Liabilities				473,969.08	112,471.45	586,440.53
Equity						
311 · Nonspendable prepays				0.00	2,978.75	2,978.75
312 · Restricted for improvements				4,562,582.00	0.00	4,562,582.00
315 · Unassigned Funds				0.00	375,424.57	375,424.57
32000 · Retained Earnings				1,198,999.33	108,188.52	1,307,187.85
Net Income				40,910.46	419,851.47	460,761.93
Total Equity				5,802,491.79	906,443.31	6,708,935.10
TOTAL LIABILITIES & EQUITY				6,276,460.87	1,018,914.76	7,295,375.63
UNBALANCED CLASSES				34,000.26	-34,000.26	0.00

Bassett Creek Watershed Management Commission					
Statement of Revenues, Expenditures and Changes in Fund Balances - General Fund					
		Annual Budget	Sep 21 - Oct 19, 23	Feb 1 - Oct 19, 23	
				Budget Balance	
Ordinary Income/Expense					
Income					
	411 · Assessments to Cities	617,430.00	0.00	617,430.00	0.00
	412 · Project Review Fees	80,000.00	5,670.50	68,670.50	11,329.50
	413 · WOMP Reimbursement	5,000.00	0.00	4,500.00	500.00
	414 · State of MN Grants		0.00	12,257.72	-12,257.72
	415 · Investment earnings		31,575.78	212,916.07	-212,916.07
	416 · TRPD Reimbursement	5,000.00	0.00	0.00	5,000.00
	417 · Transfer from LT & CIP	68,000.00	0.00	0.00	68,000.00
	Total Income	775,430.00	37,246.28	915,774.29	-140,344.29
Expense					
1000 · Engineering					
	1010 · Technical Services	145,000.00	8,274.00	104,954.18	40,045.82
	1020 · Development/Project Reviews	80,000.00	3,766.50	55,006.10	24,993.90
	1030 · Non-fee and Preliminary Review	30,000.00	1,849.00	12,851.00	17,149.00
	1040 · Commission and TAC Meetings	15,000.00	1,260.00	11,267.40	3,732.60
	1050 · Surveys and Studies	15,000.00	0.00	0.00	15,000.00
	1060 · Water Quality / Monitoring	105,000.00	8,002.46	57,526.64	47,473.36
	1070 · Water Quantity	9,000.00	557.75	5,920.96	3,079.04
	1080 · Annual Flood Control Inspection	15,000.00	1,825.00	8,315.00	6,685.00
	1090 · Municipal Plan Review	2,000.00	0.00	1,860.00	140.00
	1100 · Watershed Monitoring Program	27,000.00	0.00	18,013.35	8,986.65
	1110 · Annual XP-SWMM Model Update	3,000.00	110.00	319.00	2,681.00
	1120 · TMDL Implementation Reporting	0.00	0.00	0.00	0.00
	1130 · APM/AIS Work	40,000.00	39,716.34	42,277.34	-2,277.34
	1140 · Erosion Control Inspections	0.00	0.00	0.00	0.00
	1000 · Engineering - Other		0.00	0.00	0.00
	Total 1000 · Engineering	486,000.00	65,361.05	318,310.97	167,689.03
2000 · Plan Development					
	2010 · Next Gen Plan Development	53,250.00	7,398.75	56,533.11	-3,283.11
	2000 · Plan Development - Other		0.00	0.00	0.00
	Total 2000 · Plan Development	53,250.00	7,398.75	56,533.11	-3,283.11
3000 · Administration					
	3010 · Administrator	78,750.00	5,493.75	48,637.50	30,112.50
	3020 · MAWD Dues	7,500.00	0.00	0.00	7,500.00
	3030 · Legal	17,000.00	891.33	15,505.69	1,494.31
	3040 · Financial Management	14,540.00	1,075.00	9,440.00	5,100.00
	3050 · Audit, Insurance & Bond	18,700.00	0.00	20,705.00	-2,005.00
	3060 · Meeeting Catering	2,400.00	161.23	1,451.07	948.93
	3070 · Administrative Services	7,240.00	199.81	2,263.01	4,976.99
	3000 · Administration - Other		0.00	0.00	0.00
	Total 3000 · Administration	146,130.00	7,821.12	98,002.27	48,127.73
4000 · Education					
	4010 · Publications / Annual Report	1,000.00	0.00	1,338.00	-338.00
	4020 · Website	1,600.00	0.00	687.16	912.84
	4030 · Watershed Education Partnershi	18,350.00	0.00	9,500.00	8,850.00
	4040 · Education and Public Outreach	28,000.00	647.50	10,287.79	17,712.21
	4050 · Public Communications	1,100.00	133.28	1,263.52	-163.52
	4000 · Education - Other		0.00	0.00	0.00
	Total 4000 · Education	50,050.00	780.78	23,076.47	26,973.53
5000 · Maintenance					
	5010 · Channel Maintenance Fund	25,000.00	0.00	0.00	25,000.00
	5020 · Flood Control Project Long-Term	35,000.00	0.00	0.00	35,000.00
	5000 · Maintenance - Other		0.00	0.00	0.00
	Total 5000 · Maintenance	60,000.00	0.00	0.00	60,000.00
	Total Expense	795,430.00	81,361.70	495,922.82	299,507.18
	Net Ordinary Income	-20,000.00	-44,115.42	419,851.47	-439,851.47
	Net Income	-20,000.00	-44,115.42	419,851.47	-439,851.47

Bassett Creek Watershed Management Commission					
Statement of Revenues, Expenditures and Changes in Fund Balances - Construction in Progress					
	Project Budget	Sep 21 - Oct 19, 23	Year to Date	Inception to Date Expense	Remaining Budget
Ordinary Income/Expense					
Income					
418 · Property Taxes		0.00	1,128,610.08		
BC2,3,8 · DeCola Ponds B&C Improve		0.00	0.00		
BC23810 · Decola Ponds/Wildwood Park		0.00	0.00		
BC5 · Bryn Mawr Meadows		0.00	2,934.00		
BC7 · Main Stem Dredging Project		0.00	0.00		
BCP2 · Bassett Creek Park & Winnetka		0.00	0.00		
CL3 · Crane Lake Improvement Project		0.00	0.00		
CRM · Main Stem Cedar Lk Rd-Dupont		0.00	0.00		
ML12 · Medley Park Stormwater Treatment		0.00	0.00		
ML21 · Jevne Park Stormwater Mgmt		0.00	0.00		
NL2 · Four Seasons Mall Area		0.00	0.00		
SL1,3 · Schaper Pond Enhancement		0.00	0.00		
SL8 · Sweeny Lake Water Quality		0.00	32,242.96		
TW2 · Twin Lake Alum Treatment		0.00	0.00		
Total Income		0.00	1,163,787.04		
Expense					
1000 · Engineering					
2017CRM · CIP-Main Stem Cedar Lk Rd-Dupont	0.00	0.00	0.00	768,478.47	-768,478.47
2024CRM · CIP-BS Main Stem Restore	1,941,000.00	0.00	45,613.64	85,495.39	1,855,504.61
BC-12 · CIP-CostShare Pur High Eff St S	150,000.00	0.00	0.00	0.00	150,000.00
BC-14 · CIP-Sochacki Pk Wter Quality Im	600,000.00	0.00	0.00	0.00	600,000.00
BC-238 · CIP-DeCola Ponds B&C	1,600,000.00	0.00	0.00	1,507,985.31	92,014.69
BC-2381 · CIP-DeCola Ponds/Wildwood Pk	1,300,000.00	0.00	0.00	62,789.39	1,237,210.61
BC-5 · CIP-Bryn Mawr Meadows	1,835,000.00	2,770.50	26,083.08	310,019.41	1,524,980.59
BC-7 · CIP-Main Stem Lagoon Dredging	2,759,000.00	10,450.96	988,511.42	1,575,969.84	1,183,030.16
BCP-2 · CIP- Basset Cr Pk & Winnetka	1,123,351.00	0.00	0.00	1,075,698.32	47,652.68
ML-12 · CIP-Medley Park Stormwater	1,500,000.00	0.00	0.00	95,218.61	1,404,781.39
ML-20 · CIP-Mount Olive Stream Restore	178,100.00	0.00	0.00	43,157.42	134,942.58
ML-21 · CIP-Jevne Park Stormwater Mgmt	500,000.00	0.00	0.00	56,390.75	443,609.25
ML-22 · CIP-Ponderosa Wood Strm Restora	352,000.00	0.00	9,696.43	43,789.81	308,210.19
NL-2 · CIP-Four Seasons Mall	990,000.00	4,667.00	7,767.00	204,215.06	785,784.94
PL-7 · CIP-Parkers Lake Stream Restore	485,000.00	2,107.00	32,784.28	108,548.62	376,451.38
SL-1,3 · CIP-Schaper Pond	612,000.00	3,754.07	12,420.73	482,149.08	129,850.92
SL-8 · CIP-Sweeney Lake WQ Improvement	568,080.00	0.00	0.00	568,064.13	15.87
TW-2 · CIP-Twin Lake Alum Treatment	163,000.00	0.00	0.00	91,037.82	71,962.18
Total Expense	16,656,531.00	23,749.53	1,122,876.58	7,079,007.43	9,577,523.57
Net Ordinary Income	-16,656,531.00	-23,749.53	40,910.46	-7,079,007.43	
Net Income	-16,656,531.00	-23,749.53	40,910.46		

Bassett Creek Watershed Management Commission Construction Fund Schedule									
				Sep 22, 23 Oct 19, 23	Year to-Date	Inception to Date			Remaining Budget
Income									
	Fid1 · Flood Control Long Term Maint			0.00	0.00	154,421.90			
	Fid2 · Flood Control Long Term Exp	699,980.00		0.00	0.00	462,976.41			
Total		699,980.00		0.00	0.00	-308,554.51			308,554.51
	Flood1 · Emergency FCP Income			0.00		0.00			
	Flood2 · Emergency FCP Expense	500,000.00		0.00	0.00	0.00			
Total		500,000.00		0.00	0.00	0.00			500,000.00
	Gen · Next gen Plan Development Income			0.00	0.00	38,000.00			
	Gen1 · Next gen Plan Development Exp	0.00		0.00	0.00	11,000.00			
Total		0.00		0.00	0.00	27,000.00			27,000.00
	Qual · Channel Maintenance Fund			0.00	0.00	545,000.00			
	Qual1 · Channel Maintenance Expense	0.00		0.00	0.00	275,738.70			
Total		0.00		0.00	0.00	269,261.30			269,261.30
	TMDL1 · TMDL Studies Income			0.00					
	TMDL2 · TMDL Studies Expense	135,000.00		0.00		107,850.15			
Total		135,000.00		0.00	0.00	-107,850.15			0.00

SETTLEMENT AGREEMENT

This Settlement Agreement and Mutual Release (hereinafter the “Agreement”) is entered into as of October __, 2023 between **Fitzgerald Excavating and Trucking, Inc.** (“Fitzgerald”) and **Bassett Creek Watershed Management Commission** (“Commission”) (each entity may also be referred to as a “Party” and collectively, the “Parties”).

WHEREAS, Fitzgerald is a Minnesota business corporation with its principal place of business located at 21432 350th Street, Goodhue, MN 55027;

WHEREAS, the Commission is joint powers watershed management organization established under the laws of the State of Minnesota;

WHEREAS, the Commission, as owner, and Fitzgerald, as contractor, entered into a construction contract, dated November 10, 2022, for the Main Stem Lagoon Dredging Project (“Project”) by executing the 2013 EJCDC Form C-001, as modified (“Contract”);

WHEREAS, as part of the Project, Fitzgerald was responsible for the excavation and dredging with off-site disposal to landfill of sediment, muck, and vegetation from the Main Stem lagoons (“Dredging Work”);

WHEREAS, shortly after performing the Dredging Work, the Project engineer conducted surveys of the lagoons and identified certain discrepancies between the Project plans and specifications and the Dredging Work;

WHEREAS, as a result of the surveys and identified discrepancies, the Project engineer concluded that the Commission had overpaid Fitzgerald for the Dredging Work;

WHEREAS, Fitzgerald denied that there were any discrepancies in the Dredging Work, asserted that it had properly completed the Dredging Work in accordance with the Contract, and denied that the Commission had overpaid for any Dredging Work;

WHEREAS, the Commission has retained \$65,768.00 in Project retainage pending final completion, in accordance with the Contract;

WHEREAS, Fitzgerald has completed additional Project work with a Contract value of \$68,710.00, for which payment has not been made;

WHEREAS, Fitzgerald and the Commission desire to resolve the dispute over the alleged overpayment amicably and without assignment of fault to any party.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, Fitzgerald and the Commission agree as follows.

1. **Settlement Payment.**
 - A. Fitzgerald agrees to waive receipt of the outstanding retainage in the amount of \$65,768.00.
 - B. Fitzgerald further agrees to waive receipt of payment for the unpaid completed work in the amount of \$68,710.00.
 - C. Within 30 days of execution of this Agreement by both Parties, Fitzgerald shall deliver to the Commission a check in the amount of \$60,000.00.
2. **Final Completion.** The execution of this Agreement and payment of the consideration described in Paragraph 1 shall constitute final payment under Section 15.06 of the General Conditions of the Contract.
3. **Release of Claims.** In consideration of sums, services, work or other actions and consideration described Paragraph 1, the sufficiency of which is hereby acknowledged, Fitzgerald and the Commission hereby unconditionally mutually release and forever discharge each other, and each other's respective insurers, re-insurers, third party administrators, engineers, attorneys, successors, sureties, guarantors, parents, subsidiaries, affiliates, distributors, suppliers, agents, subcontractors, employees, insureds, subrogees, subrogors and their officers, directors and assigns from any and all claims, actions, causes of action, demands, damages, rights or remedies that were made, or could have been made, of whatever kind or nature, known or unknown, including claims for attorney's fees, that are in any way connected with the errors or omissions in development, design, construction, provision of products or materials, equipment utilized for the Project, including claims for contribution, indemnity and attorney's fees.
4. **Reservation of Contract Rights.** Notwithstanding any terms of this Agreement to the apparent contrary, any Contract rights and obligations that survive final payment with respect to any Contract work other than the Dredging Work remain in full force and effect.
5. **No Admission of Liability or Wrongdoing.** By entering into this Agreement, neither Party nor any of its respective agents, owners, employees, servants, officers, directors, principals, shareholders, elected officials, successors, assigns, engineers, and legal counsel, makes any admission of any culpability, fault, liability, or wrongdoing of any kind. The Parties recognize that this Agreement is a compromise of disputed claims and that the consideration accepted and paid hereunder is not intended nor shall it be construed as an admission of liability by or on behalf of any of the Parties.
6. **Authority to Execute.** The Parties hereby declare and represent that in executing this Agreement, each Party and/or its responsible officer has: (1) had the opportunity to consult with legal counsel of its choice, to receive independent legal advice from its attorney(s) with respect to its rights and liabilities, all matters settled and resolved

herein, and the advisability of executing this Agreement and being bound by its terms and conditions; and (2) carefully read this Agreement and understands its contents. Each signatory to this Agreement represents and warrants that they are duly empowered with the authority to execute and deliver this Agreement on behalf of their respective Party, thereby legally binding that Party on whose behalf they are signing and has obtained any consent or authorization required to bind their Party to this Agreement.

7. **Governing Law.** The parties hereto agree that this Agreement shall be interpreted, construed, governed and enforced under and pursuant to the laws of the State of Minnesota.
8. **Severability.** The terms and provisions of this Agreement shall be deemed separable, so that if any term or provision is deemed to be invalid or unenforceable, such term or provision shall be deemed deleted or modified so as to maintain the remainder of the Agreement as valid and enforceable to the full extent permitted by applicable law, unless such term negates the essential basis of the bargain.
9. **Counterparts.** This Agreement may be signed in counterparts, each of which will be considered an original.
10. **Electronic Signature.** This Agreement may be signed by electronic signature or via facsimile and electronic or facsimile signatures are intended to be binding.

[Signature page to follow.]

IN WITNESS WHEREOF, the parties hereto have executed the Settlement Agreement on the dates set forth below.

Fitzgerald Excavation and Trucking, Inc.

By: _____

Dated: _____, 2023

Its: _____

Bassett Creek Watershed Management Commission

By: _____

Dated: _____, 2023

Its: Chair

By: _____

Dated: _____, 2023

Its: Secretary



Bassett Creek Watershed Management Commission

October 19, 2023

DRAFT

Irene Fernando, Chair
Hennepin County Board of Commissioners
Government Center A2400
300 South 6th Street
Minneapolis, MN 55487

Dear Chair Fernando,

The Bassett Creek Watershed Management Commission (BCWMC) appreciates the opportunity to be involved with envisioning, studying, and implementing significant improvements to water management in the Bassett Creek Valley. The BCWMC commends you and your staff for recently convening a large group of stakeholders on this topic. We believe that collaborative, science-driven regional planning in the Bassett Creek Valley offers a significant opportunity to improve community health and vitality, build resiliency to climate change and flooding, provide green space and connections to the creek, and improve redevelopment potential.

The BCWMC recommends that Hennepin County exercise its authority under Minn. Stat. 383B.79 to create a Community Works Program in partnership with the City of Minneapolis, Minneapolis Park and Recreation Board, BCWMC, and others, centered on floodplain and stormwater management in the Bassett Creek Valley. This “Bassett Creek Valley” Community Works Program should convene a broad coalition of stakeholders to fully explore recommendations from the [“Bassett Creek Valley Stormwater and Floodplain Management Study”](#) (2019, Wenck; now known as Stantec) and collaborate towards future implementation.

The BCWMC is willing and able to be an active member of policy and technical committees that would be created for the Community Works Program, and we are excited to help the County get started on this important work.

Please contact BCWMC Administrator, Laura Jester, if you have questions or comments. We look forward to working with you!

Sincerely,

Catherine Cesnik
Chair

CC: Commissioner Lunde
Commissioner Greene
Commissioner Conley
Commissioner Goettel

Commissioner Seat
Commissioner Anderson
Administrator Huff



Bassett Creek Watershed Management Commission

MEMO

To: BCWMC Commissioners and Alternate Commissioners
From: Laura Jester, Administrator
Date: October 9, 2023

RE: Technical Advisory Committee Recommendations

The BCWMC Technical Advisory Committee (TAC) met on October 4, 2023 to discuss several topics.

Attendees at the TAC meeting included:

City/Partner	Technical Advisory Committee Members and Others
Crystal	Mark Ray
Golden Valley	Eric Eckman
Medicine Lake	Susan Wiese
Minneapolis	<i>Absent</i>
Minnetonka	Sarah Schweiger
New Hope	Nick Macklem
Plymouth	Ben Scharenbroich
Robbinsdale	Richard McCoy
St. Louis Park	Erick Francis
Others	Rachael Crabb, Minneapolis Park and Rec Board; Administrator Laura Jester; Commission Engineer Karen Chandler; Alternate Commissioner Polzin

1. Considerations for Future Dredging Projects

At their meeting September 6th, the TAC reviewed the Lagoon Dredging Project including bidding specifications, measurements used for payment, means and methods of the contractor, and lessons learned overall. The goal of the review was to develop best practices for bidding and implementing pond dredging projects – not only by the BCWMC, but by other entities as well. A refined list of items to consider for future dredging projects was briefly reviewed at the October 4th meeting and was tabled in order to allow TAC Chair Ray to gather input from other entities on the topic. The TAC will provide a full list of recommendations at a future Commission meeting.

2. Recommendations for Next Steps on Lagoon Dredging Project

The TAC considered whether to recommend that the Commission complete the Lagoon Dredging Project by dredging to the originally designed 6-foot depth, whether to leave the project as-is, or even consider dredging a different lagoon (such as Lagoon G or Lagoons A, B, or C) in conjunction with additional dredging. Staff reported that when the current project is completed, there will be approximately \$1.56M remaining in the project budget. They reviewed Table 1 for cost benefit analyses from the feasibility study compared to the completed project and a potential future project.

Table 1. Cost benefits from the feasibility study compared to the completed project and a potential future project.

Project costs, benefits	Feasibility Study Alternative:		Completed Project	Future Project
	6-foot depth	4-foot depth	Approx. 3.7-foot depth	Complete to 6-foot depth
Dredged volume	39,600 cubic yards	27,800 cubic yards	25,650 cubic yards	13,950 cubic yards
Project cost*	\$3,145,000	\$2,247,000	\$1,428,000	\$1,200,000
Total phosphorus load reduction	600 lb/year	390 lb/year	360 lb/year	Incremental: 240 lb/year
Cost/benefit	\$270/lb TP/year	\$300/lb TP/year	\$210/lb TP/year	\$260 lb/TP/year

Notes:

- “Project cost” includes engineering, design, permitting, legal. No other expenses are expected for a future project.
- The estimated cost for a future project does not include dredging Lagoons A, B, C, or G (noted as options above).
- The estimated cost for a future project is conservative but may be low if contractors bid the project using special equipment like a hydraulic dredge. However, even if the project cost was \$1.5M, the cost benefit is still low: \$320/lb/TP/year

The TAC discussed the merits and drawbacks of the various project options noted above. Ultimately, it was determined that the TAC wished to weigh a potential future lagoon project against other potential CIP projects and to use the CIP scoring matrix for a full comparison of all potential projects as is normally done with potential CIP projects. An important note is that it is too late to bid and contract for dredging the lagoons this winter, so there is time to decide on the best course of action for a potential project in the winter of 2024/2025 or later.

Recommendation: The TAC recommends that the Commission consider a potential future project to complete the Lagoon Dredging Project and/or dredge Lagoon G (or Lagoons A, B, and C) in conjunction with normal review and ranking process of other potential CIP projects during development of the 5-year CIP early in 2024.

3. Options for Use of New WMWA Education Coordination

Administrator Jester explained that through a new Hennepin County position (filled by Grace Barcelow), the West Metro Water Alliance has a half time education coordinator to significantly augment WMWA's capacity for education and outreach programming. She noted that each of WMWA's four partner watersheds, including BCWMC, can receive time from the coordinator to concentrate on a project or workshop of the watershed's choosing. She reported that some watersheds are using Grace's time to coordinate a special project (like raingarden installation) with a multi-family housing complex. Others are using Grace's time to coordinate a workshop (like a shoreline restoration workshop). She noted that another possibility that likely fits BCWMC's current needs, is to provide outreach to targeted properties using the Low Salt, No Salt MN campaign materials and tools. She noted this work could be concentrated in the watershed of a specific waterbody and would work best with faith-based communities, homeowners associations, schools, residential treatment facilities, etc.

TAC members agreed that Metro Blooms is already doing excellent work with large projects in underserved communities, often in partnership with BCWMC and with some BCWMC funding or pass-through grant funds. Additionally, shoreline restoration workshops could be hosted by member cities or BCWMC through the existing Blue Thumb Program. Thus, the TAC agreed that engaging particular properties through the Low Salt, No Salt MN program is a good idea and fills a current gap in BCWMC education and outreach activities. Administrator Jester noted that in addition to using Grace to facilitate outreach, there are funds available to provide equipment upgrades or other physical tools or materials associated with reducing chlorides in the targeted area.

Recommendation: The TAC recommends that the Hennepin County educator's time allocated to the BCWMC be used for outreach to targeted properties in the Parkers Lake subwatershed using the Low Salt, No Salt Minnesota campaign materials. Plymouth staff would be requested to help find potential properties for outreach.

4. Protocol for Monitoring and Analysis of Suspected Blue Green Algae Blooms

At the TAC meeting in September, staff reported that the BCWMC was alerted to multiple potential blue green (BG) algae blooms in lakes and ponds over the summer (the drought was a significant factor). Staff noted that because some BG algae blooms could pose health threats to humans and pets, there is often a request from a resident for the BCWMC to sample and confirm/deny the bloom. Further, staff reported that with no policy or protocol in place, responses to potential blooms have not been consistent over the years. It is unsustainable (financially and staffing-wise for either BCWMC or cities) to sample every suspected BG algae bloom. TAC members noted that BG algae blooms are ephemeral, spotty, and unpredictable. Even more noteworthy is that lab analyses to determine actual toxin levels of potential harmful algae blooms takes days or weeks.

At the October meeting, the TAC reviewed a potential protocol for sampling and analyzing potential blooms that is used by the Nine Mile Creek Watershed District. Staff recommended adoption of the same or similar protocol. Staff noted that the protocol allows member cities to that BCWMC monitoring staff make a special trip to a lake or pond to sample and then analyze potential BG algae blooms at that city's expense (through a reimbursement to the BCWMC; current estimated cost for one sampling trip and analysis = \$750.)

Rachael Crabb with the Minneapolis Park and Rec Board (MPRB) noted that MPRB staff are trained to use a visual monitoring tool for identifying suspected BG algae blooms that rates the potential for a harmful algal bloom. Administrator Jester will send the training materials to member cities for their use, if desired.

Recommendation: The TAC recommends the protocol for sampling potential blue-green algal blooms along with identification, enumeration, and communication actions found on the following pages.

BCWMC's Protocol for Blue-Green Algal Bloom and Potential Harmful Algal Bloom Monitoring & Analysis

The BCWMC's testing protocol for a potential blue-green (BG) or Harmful Algal Bloom (HAB) will be implemented through the BCWMC's normal routine lake monitoring program and follows recommendations of the World Health Organization (WHO). When BCWMC monitoring staff observes algal scum on a lake they are currently monitoring, staff will take a water sample of the potential bloom (even if the bloom is occurring at a location on the lake where samples aren't typically gathered) and will expediate algal identification and enumeration. If the analysis determines blue-green cell counts exceed WHO thresholds (Table 1) for low, moderate or high probability of health risk to recreational users, staff will notify the proper entities (e.g., city, lake association, MPCA and MDH) of the potential health risk. Member cities may opt to post signs at the lake's access point. BCWMC will not sample a lake they are not currently monitoring unless requested by a member city and at that city's expense. If the lake is not part of the BCWMC normal monitoring (regardless if it is a year to be tested or not), then the decision to test is up to the member city and at the member city's sole expense. Below is a flowchart detailing the BCWMC's protocol.

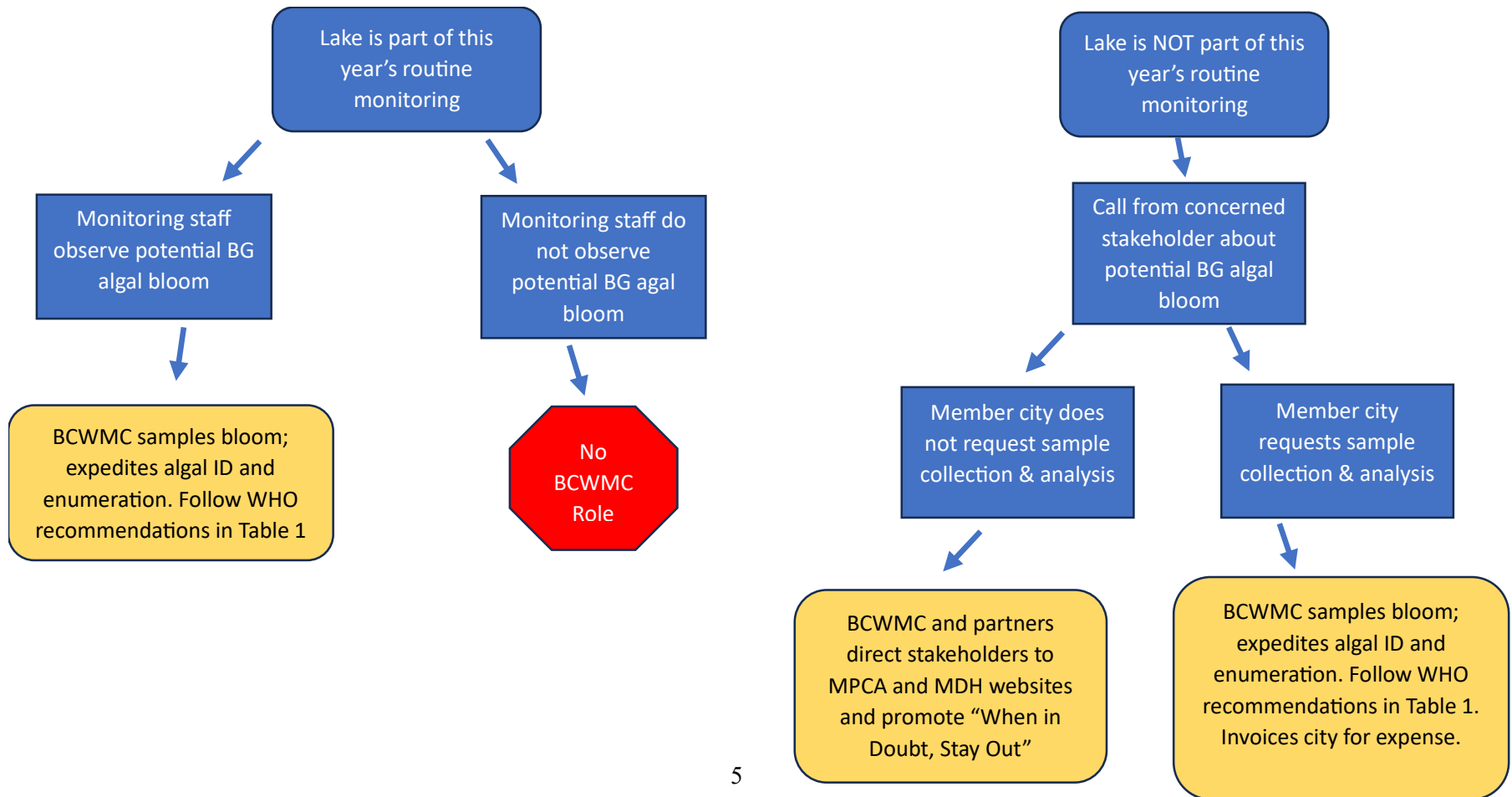


Table 1. World Health Organization Guideline Thresholds

Guidance Level	Health Risk Level	Health Risks	BCWMC Actions
< 20,000 blue-green algal cells per milliliter	Little, If any probability	<ul style="list-style-type: none"> Little if any 	None
> 20,000 blue-green algal cells per milliliter but < 100,000 blue-green algal cells per milliliter	Low probability	<ul style="list-style-type: none"> Short-term health outcomes (e.g., skin irritations, gastrointestinal effects) 	<p>Inform the City, the MPCA, MDH and other stakeholder partners of findings of a low probability of a health risk to lake/pond users and pets.</p> <p>Direct lake/pond users to MPCA website and “When in Doubt, Stay Out” message.</p> <p>https://www.pca.state.mn.us/air-water-land-climate/blue-green-algae-and-harmful-algal-blooms</p>
> 100,000 blue-green algal cells per milliliter but < 1,000,000 blue-green algal cells per milliliter	Moderate probability	<ul style="list-style-type: none"> Short-term health outcomes (e.g., skin irritations, gastrointestinal effects) Potential for long-term effects from some cyanobacterial species 	<p>Inform the City, the MPCA, MDH and other stakeholder partners of findings of a moderate probability of a health risk to lake/pond users and pets.</p> <p>Recommend that the property owner or city post advisory signs on the property.</p> <p>Direct lake/pond users to MPCA website and “When in Doubt, Stay Out” message.</p> <p>https://www.pca.state.mn.us/air-water-land-climate/blue-green-algae-and-harmful-algal-blooms</p>
> 10,000,000 blue-green algal cells per milliliter	High probability	<ul style="list-style-type: none"> Short-term health outcomes (e.g., skin irritations, gastrointestinal effects) Potential for long-term effects from some cyanobacterial species Potential for acute poisoning 	<p>Inform the City, the MPCA, MDH and other stakeholder partners of findings of a high probability of a health risk to lake/pond users and pets.</p> <p>Recommend that the property owner or city post advisory signs on the property.</p> <p>Direct lake/pond users to MPCA website and “When in Doubt, Stay Out” message.</p> <p>https://www.pca.state.mn.us/air-water-land-climate/blue-green-algae-and-harmful-algal-blooms</p>

Who should you contact if you suspect a potential blue-green algal bloom?

- Contact the Minnesota Pollution Control Agency (MPCA) or the Minnesota Department of Health (MDH)
- MPCA lake monitoring staff track reports of potential harmful algae blooms. You can email pictures of the suspected bloom to algae.mPCA@state.mn.us. For more information on harmful algae blooms, call 651-757-2822 or 800-657-3864 or visit the [MPCA’s Blue-Green Algae and Harmful Algal Bloom web page](#).
- Report human health effects to the Minnesota Department of Health (MDH) [Foodborne and Waterborne Illness Hotline](#) at 1-877-366-3455. For health questions, citizens can contact MDH’s Waterborne Diseases Unit at 651-201-5414 or visit the [MDH’s Harmful Algal Bloom web page](#).
- In addition, if you think you or your pets are experiencing adverse health effects due to contact with, or ingestion of, lake water/algae, seek medical attention immediately.



Bassett Creek Watershed Management Commission

MEMO

To: BCWMC Commissioners and Alternate Commissioners
From: Laura Jester, Administrator
Date: October 12, 2023

RE: Updates and Recommendations from Plan Steering Committee

At their meeting on October 4th, the BCWMC Plan Steering Committee (PSC) continued to develop goals to address high priority issues and discussed a variety of topics. They have the following updates and recommendations. As a reminder, all PSC meeting materials can be found on the 2025 Watershed Plan webpage: <https://www.bassettcreekwmo.org/document/2025-plan-update>.

i. Receive Update on Plan Development Budget

Commission Engineers and I recently reviewed the budget status for the development of the 2025 Watershed Plan. At their meeting on October 4th, the PSC received this budget update and asked that it be shared with the whole Commission.

At their meetings in March and September 2022, the Commission approved a Plan development budget for phases 1, 2, and 4 of \$124,380 and a subsequent budget for phase 2 of \$38,375 for a total Plan development budget of \$162,755.

With work completed to date and an estimate of work yet to be completed, staff expects the Plan budget to end up being approximately 20% higher than originally budgeted by the time the Plan is completed in 2025. There are multiple reasons for this likely increase. To date, we had a more complex public kickoff meeting with an open house format that required more preparation time than budgeted; more PSC meetings than expected to prepare for the issues identification workshop and additional material preparation and internal meetings prior to the workshop; and more PSC meeting time spent on process, format, vision statement development, and other topics.

This of this is all good work with good discussions and meaningful progress being made. I do not recommend an official budget amendment at this time but wanted to alert the Commission of the issue. More detail and a possible budget amendment could be developed during 2025 Operating Budget development early next year.

ii. Consider Approving Recommendation to Develop Scope of Work for Medicine Lake TMDL Assessment

One of the highest priority goals proposed by the PSC is to improve water quality in Medicine Lake so that it meets State eutrophication (nutrient) standards. Medicine Lake was added to the State’s impaired waters list for high nutrients in 2004 and a Total Maximum Daily Load Study (TMDL) was completed in 2009. A TMDL study is a “clean up plan” for the lake that identifies sources of nutrient pollution and determines how much pollution should be reduced from each source such that water quality would improve to meet standards.

Since 2009, the BCWMC, member cities (mainly Plymouth) and other MS4 permit holders (like MnDOT) have been implementing best management practices and capital improvement projects aimed at reducing nutrient pollution in the lake. BCWMC capital projects in the Medicine Lake subwatershed are listed on the Medicine Lake webpage: www.bassettcreekwmo.org/lakes-streams/medicine-lake. Unfortunately, the lake’s nutrient levels are still above the State standard.

In order to target future practices and programs with the goal of meeting the water quality standard, an assessment of the status of the TMDL’s implementation and full analysis of current lake water quality is needed. Originally, BCWMC staff and the PSC considered including this assessment as an implementation action within the 2025 Watershed Plan. However, performing an assessment now allows the resulting recommended actions to be included in the Plan’s implementation program right away.

Recommendation: The PSC (and the BCWMC Technical Advisory Committee) recommends that the Commission Engineer be directed to bring a scope of work and budget for this assessment to the November Commission meeting for consideration.

iii. Receive Update on Committee Progress and Calendar of Work

As noted above, the PSC continues to refine issues statements and develop measurable goals to address the issues. Specifically, they have been working on the high priority issues of impaired waters and high chlorides. In addition to developing goals, they are also listing possible actions, projects, and policies (tools) that could be used to meet the goals. The PSC recently approved a more user-friendly format for presentation of the issues, goals, and actions and have asked staff to add cost estimates and notes where new policies or actions are being considered.

At their meeting earlier this month, the PSC also reviewed a calendar of work slated for the committee, Commission, and Planning TAC over the next 15 months (see attached).

Phase 3 Plan Development Calendar

1. Updating Physical Environment Inventory

Happening in the background by Barr staff concurrently with other steps below

2. Defining issues and measurable goals

21 issues were identified by PSC and confirmed by Commission.

For EACH issue:

- a) Develop succinct issue statement and narrative explaining why and where the issue occurs in the watershed. **What's the problem?**
- b) Develop measurable goals to address each issue. **What is the quantifiable change** in resource, watershed, or organizational condition you expect after you implement the 10-year plan? (Some issues may not have easily quantifiable goals; metrics will vary among issues.)

Examples:

- 1) Achieve State eutrophication standards in Medicine Lake

- 2) Reduce average chloride concentrations in Bassett Creek by 10% at the Watershed Outlet Monitoring Program (WOMP) station.

3. Revising policies and performance standards

For each goal, determine the strategies, actions, or tasks that will be implemented to achieve each goal. **How will you achieve the goal? What are the implementation actions associated with this goal?** These actions will consist of various tools like policies, requirements, programs, and projects performed by the BCWMC or its member cities.

Examples:

- 1) Assess Medicine Lake TMDL implementation status and existing conditions.
- 2) Perform subwatershed analysis for Northwood Lake.
- 3) Require winter maintenance plans for all applicable projects/locations.

4. Creating a targeted implementation program

Determine **when** actions will be taken, **where** they will be taken, **by whom** will they be taken, and the **estimated cost** of each action. The implementation program can be developed concurrently with activities in #3 above. This is an iterative process to make sure we can implement appropriately during the life of the plan.

5. Compiling the complete draft plan

Pull everything together into one complete document.

Potential Calendar of PSC Planning Activities:

Month and Year	Plan Steering Committee Work	Commission and Plan TAC* meetings
September 2023	<p>Develop issue statements and measurable goals:</p> <ul style="list-style-type: none"> • Impaired Waters • Chloride Loading <p>(Represents 2 of 10 issues in Waterbody and Watershed Quality category)</p>	
October 2023	<p>Consider mission statement, vision statement, and/or guiding principles (NOTE: This activity is not included in plan development scope and budget)</p> <p>Consider adding “desired future condition” to some or all issues (overarching, very long range goals).</p> <p>Example: Water quality in priority waterbodies meets applicable State water quality standards.</p> <p>Discuss plan format and terminology for issues, goals, and actions:</p> <ul style="list-style-type: none"> • Desired future condition • 10-year Goal • Strategy • Action • Task • Policy • Requirement <p>Review the 2025 Plan update planning process calendar/timeline/budget</p> <p>Finalize goals and review possible implementation actions for:</p> <ul style="list-style-type: none"> • Impaired waters • Chloride Loading 	
November 2023	<p>Develop issue statements, measurable goals and possible implementation actions for:</p> <ul style="list-style-type: none"> • Streambank and gully erosion • Lakeshore erosion • Aquatic Invasive Species • Wetland Health and Restoration • Groundwater Surface Water Interaction 	

	<ul style="list-style-type: none"> • Degradation of Riparian Areas • Degradation/Loss of Upland Areas • Groundwater Quality 	
December 2023	<p>Finalize any outstanding issues/goals/action from November.</p> <p>Determine process and format for presenting at January Commission meeting.</p> <p>Review draft Land and Water Resources Inventory (Appendix A).</p> <p>Discuss mechanism for developing land and/or water acknowledgement statements.</p>	Convene Plan TAC to review issues and goals thus far and discuss potential implementation actions
January 2024	<p>Develop issue statements, measurable goals and possible implementation actions for Climate Resiliency category:</p> <ul style="list-style-type: none"> • Impact of climate change on hydrology, water levels, and flood risk • Bassett Creek Valley Stormwater Management • Groundwater Quantity 	Present issue statements and measurable goals for Waterbody and Watershed Quality at Jan 18 th Commission meeting
February 2024	<p>Develop issue statements, measurable goals and possible implementation actions for Education and Outreach category and some issues in Organizational Effectiveness category:</p> <ul style="list-style-type: none"> • Provide outreach to and develop relationships with diverse communities • Protect recreation opportunities • Organizational assessment of capacity and staffing • BCWMC funding mechanisms • Progress assessment • Projects and programs implemented through a DEI lens • Public ditch management • Carbon footprint of BCWMC projects 	
March 2024	<p>Finalize any remaining statements, measurable goals and possible implementation actions</p> <p>Determine process and format for presenting at April Commission meeting.</p>	Convene Plan TAC to complete discussion/input on issues, measurable goals, potential implementation

April 2024	<p>Begin discussing plan implementation: How will the actions be implemented including:</p> <ul style="list-style-type: none"> • Who implements CIP projects? • Are changes needed to BCWMC staff capacity? • What policies are needed to achieve desired outcomes? 	<p>Present issue statements and measurable goals for Climate Resiliency, Education, and Organizational Effectiveness at April 18th Commission meeting</p>
May 2024	<p>Discuss possible revisions to BCWMC development requirements. Possible topics include:</p> <ul style="list-style-type: none"> • Requirements related to winter maintenance and chloride minimization design practices • Changes to linear project standards • Changes to permitted activities in floodplains 	
June 2024	<p>Review updated CIP prioritization metrics to reflect this plan's priority issues.</p> <p>Review potential CIP projects 2025 – 2035.</p>	
July 2024	<p>Consider policies for addressing various goals. What changes, additions, deletions from 2015 policies are needed?</p>	
August 2024	<p>Discuss implementation of plan including CIP implementation and staff capacity.</p>	<p>Convene Plan TAC to discuss implementation items (projects, programs, and policies)</p>
September 2024	<p>Catch up month for unfinished work from last few months.</p> <p>Determine process and format for presenting at October Commission meeting.</p>	<p>Convene Plan TAC to complete discussion/input on implementation items (projects, programs, and policies)</p>
October 2024	<p>Review complete implementation program.</p>	<p>Present draft implementation program at October 15th Commission meeting</p>
November 2024	<p>Finalize policies and implementation program</p> <p>Review various plan sections</p>	

*Plan TAC = Regular city TAC members plus state and local agencies and other partners



Memorandum

To: Bassett Creek Watershed Management Commission
From: Barr Engineering Company
Subject: Item 5D – Order Feasibility Study for Plymouth Creek Restoration, Dunkirk Lane to 38th Avenue North behind Plymouth Ice Center (2026 CR-P)
BCWMC October 19, 2023, Meeting
Date: October 12, 2023

Item 5D. Order Feasibility Study for Plymouth Creek Restoration, Dunkirk Lane to 38th Avenue North behind Plymouth Ice Center (2026 CR-P)

Recommendations:

1. Consider approving the scope of work and \$122,000 budget presented in this memorandum and direct the Engineer to complete the feasibility study for the restoration of Plymouth Creek from Dunkirk Lane to 38th Avenue North behind Plymouth Ice Center (2026 CR-P).
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 stream feasibility study that complies with the requirements of the USACE, MnDNR, and BCWMC criteria.

Background

The proposed Plymouth Creek restoration project is in the Bassett Creek Watershed Management Commission's (BCWMC) current CIP slated for 2026 (2026 CR-P) with an estimated budget of \$2,000,000. Staff recommends that this project be moved ahead in the CIP schedule to 2025 because the project currently slated for 2025 implementation (the 3rd project in the Medicine Lake Rd & Winnetka Ave Long Term Flood Mitigation Plan in Golden Valley) is not currently ready for feasibility study development and is not ready for implementation in 2025.

This Plymouth Creek restoration project is located entirely within the City of Plymouth and would address needed stabilization and restoration along approximately 7,000 feet of Plymouth Creek from Dunkirk Lane to just south of 38th Avenue North behind Plymouth Ice Center (Figure 1). This reach is located on a combination of privately owned and publicly owned properties.

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 would examine methods to stabilize and restore areas of erosion within this corridor.

To: Bassett Creek Watershed Management Commission
From: Barr Engineering Company
Subject: Item 5D – Order Feasibility Study for Plymouth Creek Restoration, Dunkirk Lane to 38th Avenue North behind Plymouth Ice Center (2026 CR-P)
BCWMC October 19, 2023, Meeting
Date: October 12, 2023
Page: 2

The CIP project would address the issues identified by the City of Plymouth including, erosion, steep slopes, and sediment accumulation in this approximately 7,000-foot-long reach of the creek. Continued erosion along the stream will result in increased sediment and pollutant loading downstream, including Medicine Lake. Restoration and repair of Plymouth Creek in this area will reduce phosphorus and sediment loading (assist in meeting Medicine Lake TMDL goals), possibly improve riparian and in-stream habitats, and the removal of accumulated sediment will lower the flood potential for homes and stormwater infrastructure. Another project goal is to work with private landowners along the reach to expand buffers adjacent to the stream. The project is consistent with the goals (Section 4.1) and policies (Section 4.2.5) for stream restoration and protection in the 2015 – 2025 BCWMC Watershed Management Plan.

The BCWMC completed a Resource Management Plan (RMP) in 2009 through which the Corps of Engineers (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 reach of Plymouth Creek 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 feasibility study under the criteria adopted by the BCWMC in October 2013. In general, the protocols require compliance with Section 106 of the National Historic Preservation Act, compliance with Section 404 of the Clean Water Act, and Clean Water Act Section 401 Water Quality Certification. Compliance with Section 106 typically requires a cultural resources inventory.

Content and Scope of Feasibility Study

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

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

To: Bassett Creek Watershed Management Commission
From: Barr Engineering Company
Subject: Item 5D – Order Feasibility Study for Plymouth Creek Restoration, Dunkirk Lane to 38th Avenue North behind Plymouth Ice Center (2026 CR-P)
BCWMC October 19, 2023, Meeting
Date: October 12, 2023
Page: 3

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 following items to meet the RMP pre-applications protocols:

- Review of cultural resources
- Identification of wetland impacts

In addition to the RMP protocols and specific criteria adopted by the BCMWC, it is important to gather public input early and often in the process. The BCWMC Engineer will work with the BCWMC Administrator and staff from the City of Plymouth (including water resources, parks and recreation and forestry staff) to identify the most-effective means to gather public input. Prior to completing the draft feasibility report, we will seek input from impacted landowners and users of adjacent public lands by discussing identified problems and the means under consideration to address the issues.

This feasibility study will address the approximately 7,000-foot-long reach (Figure 1) from Dunkirk Lane to just south of 38th Avenue North behind Plymouth Ice Center. This project will include bank stabilization measures and erosion repair methods, sediment removal, and possible re-meandering of Plymouth Creek. Consideration will be given to a variety of best management practices. Per BCWMC policy, the Commission will strive to utilize soft armoring techniques as much as possible and where feasible, including bio-logs, erosion control blanket, live stakes and fascines, slope shaping, and native vegetation buffers. However, soft armoring can result in tree removal, so we will also consider the impacts of tree removal, including the value of existing trees.

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

1) Project Meetings

- a) One (1) project kick-off meeting with BCWMC Administrator, Plymouth staff (including water resources, parks and recreation, and forestry staff), Wayzata School District staff, and BCWMC commissioners representing Plymouth.
- b) One (1) virtual meeting with BCWMC staff, Plymouth staff (including water resources, parks and recreation, and forestry staff), Wayzata School District, and agency staff (i.e., USACE, MnDNR, and MPCA), as needed, to discuss concept alternatives and review permit requirements for the project. This task will also include preparation of meeting minutes to confirm discussion results.
- c) Biweekly updates to the project team throughout the project to provide updates on work completed, upcoming work, and any outstanding data requests throughout the project.

2) Field Investigations

- a) Barr will complete a site walk of the reach with City staff to evaluate the existing conditions of the reach; locate (via GPS) and identify potential project features and design approaches to address

To: Bassett Creek Watershed Management Commission
From: Barr Engineering Company
Subject: Item 5D – Order Feasibility Study for Plymouth Creek Restoration, Dunkirk Lane to 38th Avenue North behind Plymouth Ice Center (2026 CR-P)
BCWMC October 19, 2023, Meeting
Date: October 12, 2023
Page: 4

erosion, sedimentation, and/or obstruction concerns; and consider potential metrics for site prioritization. As part of the site visit, Barr will develop an ARC-GIS online map that can be used to document site conditions, photos, and document erosion throughout the creek reach. Following site visit, Barr will meet with City staff to review and get feedback on the prioritization matrix developed for the Bassett Creek Main Stem Feasibility Study, which was utilized to rank problem areas to focus the restoration concept development. Afterwards, Barr will incorporate one round of revisions to the prioritization matrix to align with City goals. We assume the City will coordinate access (as needed) and send letters to all property owners notifying them in advance of the site visit.

- b) Sediment investigation – As part of the site walk, Barr will use hand tools, such as hand augers, to estimate the approximate depth and volume of sediment accumulation in the following sediment accumulation areas identified by the City: downstream of Yuma Lane, Vicksburg Lane, and 38th Avenue. During the site walk, Barr will review the reach for additional areas of sediment accumulation and evaluate if sediment accumulation investigation is needed in additional locations. Due to the expected small volume of accumulated material, we will not perform sediment testing as part of this study. For cost estimating purposes, we will assume the sediment is contaminated and requires landfill disposal. During design, if deemed necessary, sediment could be performed to analyze for potential contaminants such as polycyclic aromatic hydrocarbons, arsenic, and copper.
- c) Desktop Wetland Assessment – Barr will perform a Level 1 desktop assessment for the project reach. A Level 1 review consists of reviewing soils, topography, National Wetland Inventory (NWI), and aerial photos to evaluate the potential presence of a wetland, identify its type, and/or estimate its approximate boundaries. We will complete the assessment for the project reach and within a 50-foot buffer on either side of the reach. Full wetland delineations as per the USACE 1987 Manual and regional supplements may need to be performed during the project design phase (outside the scope of this project). In the possible re-meander location, we will assume the entire re-meander area is a wetland, based on information provided by the City.
- d) Desktop environmental review – Barr will conduct a review of the Minnesota Pollution Control Agency's (MPCA) "What's in my Neighborhood?" database to assess the potential for prior contamination along the project reach. We will include a summary of this data review in the feasibility study. Considering historic land use in the project area is primarily residential and park, we assume we will not need to complete a Phase I environmental site assessment (ESA) for this project; however, should the desktop assessment suggest there is concern for contamination along the creek, a Phase I ESA could be completed as part of final design.

To: Bassett Creek Watershed Management Commission
From: Barr Engineering Company
Subject: Item 5D – Order Feasibility Study for Plymouth Creek Restoration, Dunkirk Lane to 38th Avenue North behind Plymouth Ice Center (2026 CR-P)
BCWMC October 19, 2023, Meeting
Date: October 12, 2023
Page: 5

- e) Desktop topographic and utility location review – Barr will utilize the 2011 Minnesota Department of Natural Resources (MnDNR) LiDAR data for topographic information, in addition to any data collected during the site visit. We assume that Plymouth staff will provide available utility data (sanitary sewer, water main, and storm sewer) in GIS format. Sanitary sewer is adjacent to most of the creek reach and crosses the creek in multiple locations; we will need to consider the potential impacts of the sanitary sewer on restoration options. Full topographic and utility survey will need to occur during the project design phase (outside the scope of this project).
- f) Drone video and photos – Based on communications with City staff, City staff will use an unmanned aircraft system (UAS) to collect video and photos of the project reach following leaf off to provide current detailed imagery of the reach that can also be used to help define project components, visualize the concepts, and estimate quantities. Due to tree cover, we do not recommend use of the UAS to collect topographic information.
- g) Tree location, diameter, species, and condition survey – Barr will survey by GPS methods all trees with a diameter of 6 inches or greater, recording the location, diameter, species, and condition (e.g., dead/live, shaggy/peeling/deeply furrowed bark) of the trees within a 50-ft buffer on either side of the stream centerline (total width of 100 ft). In addition to aiding in the development of estimated project costs for the various scenarios (if tree removal is required), the tree survey will help us evaluate if the trees within the project area could provide habitat for the northern long eared bat (endangered). We assume no tagging of trees will be required.
- h) Desktop threatened and endangered species review – Barr will perform a desktop review of the available databases to assess the potential for adverse impacts to state and federally listed species.
- i) Desktop cultural resources review - In anticipation of future permitting for project development, 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 summarize any available information in the feasibility report. This work does not include a Phase I cultural resources review; if one is needed, it would be performed during final design.
- j) Project easements – The proposed project is located on a combination of private and public properties. According to the City, no additional easements (permanent and/or temporary) will be required for construction.. We assume the City of Plymouth can provide a GIS layer showing existing easement locations within the project area. We will review the existing easements with City staff and confirm whether any easements are required for the project. If required, easement survey and acquisition will be completed during final design.

To: Bassett Creek Watershed Management Commission
From: Barr Engineering Company
Subject: Item 5D – Order Feasibility Study for Plymouth Creek Restoration, Dunkirk Lane to 38th Avenue North behind Plymouth Ice Center (2026 CR-P)
BCWMC October 19, 2023, Meeting
Date: October 12, 2023
Page: 6

3) Evaluation and Concept Plans

- a) Develop concepts for the project, considering input from stakeholders. This includes developing three concepts for stream restoration, channel stabilization, and erosion repair. In addition, the concepts will include design features such as sediment removal, re-establishing stream meanders, exploring ways to improve in-stream habitat, and improving the public's physical or visual access to the creek where it runs through public property, such as Plymouth Creek Elementary School and trail areas. To develop the three concepts, the reach will be reviewed in terms of erosion and site conditions to determine all locations that could be potentially used as a stream restoration area. The three concepts will be based on ranking potential stream restoration areas from low to high with the prioritization matrix developed as part of the project, similar to the methodology used for the 2023 Bassett Creek Main Stem Feasibility study.
 - i) Analyze the alternatives for addressing identified issues within each reach.
 - ii) Develop draft concept plans for each alternative.
 - iii) Refine concept plans based on input from City staff and BCWMC.
- b) Use the most current BCWMC XP-SWMM model results to review flow and flood information for the reach.
- c) Identify permitting requirements for the concepts, based on available field and desktop data, and the results of the agency meeting (see task 1b).
- d) Develop cost estimates for each concept, including a "30-year cost," analysis of life expectancy, and annualized cost per pound of pollutant removal for water quality treatment portions of the project.
- e) Develop tree removal estimates for each concept, including removals needed to gain access to implement the concept as well as any estimated tree replacement.

4) Public Engagement

- a) Coordinate with the BCWMC Administrator and City staff to determine the best means to gather public input, such as mailings, newspaper articles, open houses, etc. Primary group for public discussions will be the nearby residents, property owners and adjacent property owners, other stakeholders including Plymouth Creek Elementary School staff. The budget for this task includes time to prepare for and attend one (1) in-person public meeting early in the process, after the development of concept plans. This task also includes assisting with the public involvement process as necessary – preparing handouts, boards, and/or presentations, and recording and compiling comments. We assume that meeting coordination, expenses, and set-up will be largely completed by the BCWMC Administrator, with assistance from the City.

To: Bassett Creek Watershed Management Commission
From: Barr Engineering Company
Subject: Item 5D – Order Feasibility Study for Plymouth Creek Restoration, Dunkirk Lane to 38th Avenue North behind Plymouth Ice Center (2026 CR-P)
 BCWMC October 19, 2023, Meeting
Date: October 12, 2023
Page: 7

5) Feasibility Report

- a) Prepare draft report for review by City staff and BCWMC Administrator; revise report based upon review comments. We assume one set of comments will be provided by the City and BCWMC.
- b) Present draft feasibility study findings at BCWMC meeting.
- c) Prepare final report (revising draft report based on comments provided by the BCWMC) for approval at BCWMC meeting and use at future project hearing.
- d) Present final feasibility study findings at BCWMC meeting.

Cost Estimate

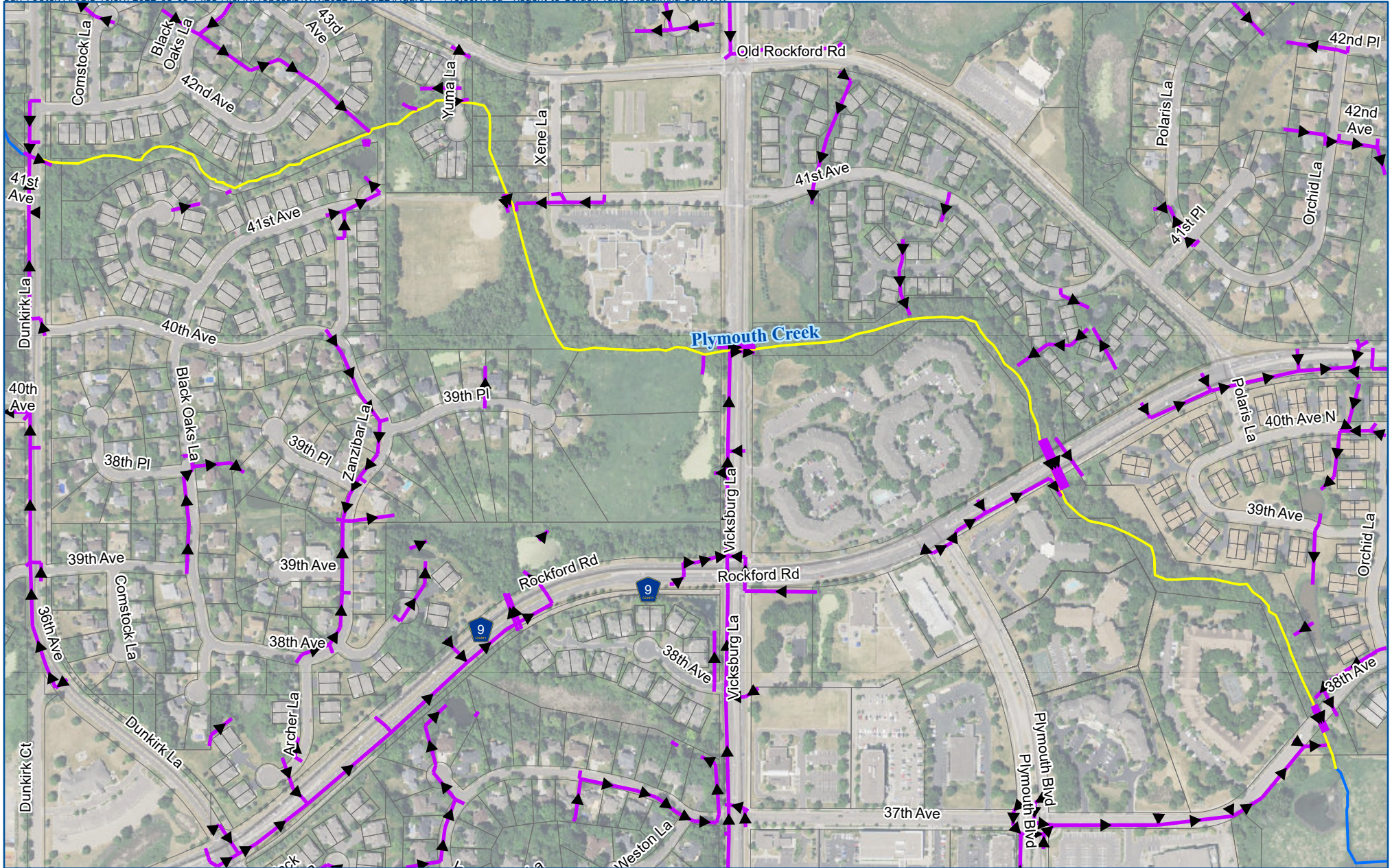
Our cost estimate for the scope of work outlined above is summarized in the table below.





Tasks	Estimated Total
1) Project Meetings	\$ 10,500
2) Field Investigations	\$ 37,700
3) Evaluation and Concept Plans	\$ 23,800
4) Public Engagement	\$ 8,500
5) Feasibility Report	\$ 30,600
Total	\$111,100

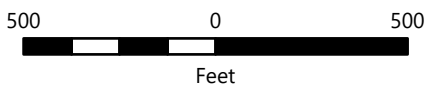
Schedule

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

Tasks and milestones	Estimated Schedule
Kick-off meeting with BCWMC and City of Plymouth	Late October 2023
Site visit	November 2023
Desktop topographic and utility review	November 2023
Desktop wetland review	November 2023
UAS photos/videos of alignment	November 2023
Desktop environmental review ("What's in My Neighborhood?")	November 2023
Desktop review – threatened and endangered species, cultural resources	November 2023
Meeting with BCWMC, city, and agency staff	December 2023
Develop concept alternatives and cost estimates	December 2023 – February 2024
Public meeting	March 2024
Submit draft feasibility report for city and BCWMC staff review	April 12, 2024
City and BCWMC staff complete review	April 26, 2024
Submit draft feasibility report for BCWMC review at Commission meeting	May 9, 2024
BCWMC completes review at Commission meeting	May 16, 2024
Submit final feasibility report for BCWMC review at Commission meeting	June 13, 2024
Final feasibility report – BCWMC approval at Commission meeting	June 20, 2024



-  Project Area
-  Creeks
-  Storm Pipe
-  Parcels



PLYMOUTH CREEK
DUNKIRK LANE TO 38TH
AVENUE BEHIND PLYMOUTH
ICE CENTER
PROJECT AREA
FIGURE 1



Bassett Creek Watershed Management Commission

MEMO

To: BCWMC Commissioners and Alternate Commissioners
From: Laura Jester, Administrator
Date: October 12, 2023

RE: Consider Amending the Cooperative Agreement for the Bryn Mawr Meadows Water Quality Improvement Project

In April 2020, the Commission entered a grant agreement with the MN Board of Water and Soil Resources for a \$400,000 Clean Water Fund grant for the Bryn Mawr Meadows Water Quality Improvement Project with an original expiration date of December 31, 2022. Last year, the grant expiration date was extended to December 31, 2023. No more grant extensions are available. All grant requirements must be satisfied by the end of this year. Although \$100,000 in grant funding and \$84,000 in matching funds have been spent to date, construction expenses of \$400,000 should be paid by the end of the year (to cover eligible grant expenses + required matching funds) or the Commission will forfeit the remaining grant funds of \$300,000.

Construction of the project is complete and vegetation establishment at the site is underway. Through a [cooperative agreement](#) approved in March 2022 with the City of Minneapolis and the Minneapolis Park and Recreation Board (MPRB), the MPRB constructed the project and Minneapolis performed some storm sewer and street reconstruction work. These entities can be reimbursed by the BCWMC with CIP and grant funds for the construction costs with appropriate documentation as per the agreement.

No reimbursement requests have yet been submitted by MPRB nor the city. As per the cooperative agreement, no BCWMC funds will be reimbursed before a maintenance agreement between the MPRB and the City is fully executed. While work is underway to develop an operation and maintenance plan and subsequent maintenance agreement, an agreement will not be executed by the end of this year.

However, as stated above, construction funds totaling \$400,000 must be spent by the end of the year in order to collect the remaining grant funds before the grant expires.

The Commission Attorney and I recommend a simple amendment to the cooperative agreement with the MPRB and City allowing reimbursement of \$400,000 prior to full execution of a maintenance agreement. The remaining project funds (likely totaling around \$1M) would not be eligible for reimbursement to the MPRB or the City until the maintenance agreement is fully executed. We will bring potential amendment language to the meeting.



Tuesday, Nov 28	Tentative Time Schedule
MAWA Meeting	10-3
Lunch for MAWA	12-1
Partner Updates	3-4
MW BOD	4-6
Wednesday, Nov 29	
Conferences (Staff, Drainage, Managers)	8-4
Lunch	12-1
Trade Show – Opening Night	4-9
Night at the Movies	5-8
Thursday, Nov 30	
	8-5
	Break from 12-3 for lunch and Trade Show networking
Regional Caucuses	7-9
Concurrent Sessions	8-4
Lunch + Awards	12-1:30
Trade Show	8-3
Banquet + Awards	5-7
Friday, Dec 1	
Breakfast	7-9
Business Meeting (resolutions)	9-11
MW BOD Meeting	11-12



Item 6A.
BCWMC
10-19-23

Bassett Creek Watershed Management Commission MEMO

Date: October 11, 2023
From: Laura Jester, Administrator
To: BCWMC Commissioners
RE: **Administrator's Report**

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

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

2019 Medicine Lake Road and Winnetka Avenue Area Long Term Flood Mitigation Plan Implementation Phase I: DeCola Ponds B & C Improvement Project (BC-2, BC-3 & BC-8) Golden Valley (No change since Nov 2021): A feasibility study for this project was completed in May 2018 after months of study, development of concepts and input from residents at two public open houses. At the May 2018 meeting, the Commission approved Concept 3 and set a maximum 2019 levy. Also in May 2018, the Minnesota Legislature passed the bonding bill and the MDNR has since committed \$2.3M for the project. The Hennepin County Board approved a maximum 2019 levy request at their meeting in July 2018. A BCWMC public hearing on this project was held on August 16, 2018 with no comments being received. Also at that meeting the Commission officially ordered the project and entered an agreement with the City of Golden Valley to design and construct the project. In September 2018, the City of Golden Valley approved the agreement with the BCWMC. The [Sun Post](#) ran an article on this project October 2018. Another public open house and presentation of 50% designs was held February 6, 2019. An EAW report was completed and available for public review and comment December 17 – January 16, 2019. At their meeting in February 2019, the Commission approved the 50% design plans. Another public open house was held April 10th and a public hearing on the water level drawdown was held April 16th. 90% Design Plans were approved at the April Commission meeting. It was determined a Phase 1 investigation of the site is not required. The City awarded a contract to Dahn Construction for the first phase of the project, which involves earthwork, utilities, and trail paving and extends through June 2020. Dewatering began late summer 2019. Tree removal was completed in early winter; excavation was ongoing through the winter. As of early June 2020, earth work and infrastructure work by Dahn Construction is nearly complete and trail paving is complete. Vegetative restoration by AES is underway including soil prep and seeding. Plants, shrubs, and trees will begin soon along with placement to goose protection fencing to help ensure successful restoration. The construction phase of this project was completed in June with minor punch list items completed in September. The restoration and planting phase is complete except for minor punch list items and monitoring and establishment of vegetation over three growing seasons. A final grant report for BWSR's Watershed Based Implementation Funding was submitted at the end of January. City staff recently completed a site walk through to document dead or dying trees and shrubs in need of replacement (under warranty). This project (along with Golden Valley's Liberty Crossing Project) recently received the award for "Project of the Year" from the Minnesota Association of Floodplain Managers as part of the overall Project website: <http://www.bassettcreekwmo.org/index.php?CID=433> .

2020 Bryn Mawr Meadows Water Quality Improvement Project (BC-5) (See Item 5E), Minneapolis: A feasibility study by the Commission Engineer was developed in 2018 and approved in January 2019. The study included wetland delineations, soil borings, public open houses held in conjunction with MPRB's Bryn Mawr Meadows Park improvement project, and input from MPRB's staff and design consultants. Project construction year was revised from 2020 and 2022 to better coincide with the MPRB's planning and implementation of significant improvements and redevelopment Bryn Mawr Meadows Park where the project will be located. A public hearing for this project was held September 19, 2019. The project was officially ordered at that meeting. In January 2020 this project was awarded a \$400,000 Clean Water Fund grant from BWSR; a grant work plan was completed and the grant with BWSR was fully executed in early May 2020. The project and the grant award was the subject of an article in the Southwest Journal in February: <https://www.southwestjournal.com/voices/green-digest/2020/02/state-awards-grant-to-bryn-mawr-runoff-project/>. In September 2020, Minneapolis and MPRB staff met to review the implementation agreement and maintenance roles.

BCWMC developed options for contracting and implementation which were presented at the November meeting. At that meeting staff was directed to develop a memorandum of understanding or agreement among BCWMC, MPRB, and city of Minneapolis to recognize and assign roles and responsibilities for implementation more formally. The draft agreement was developed over several months and multiple conversations among the parties. At the May 2021 meeting the Commission approved to waive potential conflict of the Commission legal counsel and reviewed a proposal for project design by the Commission Engineer. The updated design proposal and the design agreement among all three parties were approved at the June 2021 meeting. Four public open houses were held in the park in 2021 to gather input on park concepts. Project partners met regularly throughout design to discuss schedules, planning and design components, and next steps. Concept designs were approved by the MRPB Board in late 2021. Staff met with MnDOT regarding clean out of Penn Pond and continue discussions. 50% design plans were approved by the Commission at the January 2022 meeting; 90% design plans were approved at the March 2022 meeting along with an agreement with MPRB and Minneapolis for construction. The agreement was approved by all three bodies. Commission Engineers finalized designs and assisted with bidding documents. Bids were returned in early August. At the meeting in August, the Commission approved moving forward with project construction (through MPRB), and approved a construction budget (higher than previously budgeted) and an amended engineering services budget. MPRB awarded the construction contract. In late November the contractor began the initial earthwork and started on portions of the stormwater pond excavations. By late December the 1st phase of construction was complete with the ponds formed and constructed. The contractor began driving piles in late January and began installing underground piping in early February. At the March meeting, the Commission approved an increase to the engineering services budget and learned the construction budget is currently tracking well under budget. The change order resulting from the City of Minneapolis' request to replace a city sewer pipe resulted in extra design/engineering costs that were approved by the Administrator so work could continue without delays. The MPRB will reimburse the Commission for those extra costs and will, in-turn, be paid by the city. In early May construction was focused in the Morgan / Laurel intersection. The right-of-way storm sewer work is now complete; this includes the rerouting of some of the existing storm infrastructure and installation of the stormwater diversion structures. Construction of the ponds is complete and stormwater from the neighborhood to the west is not being routed through new storm sewers to the ponds. Vegetation is currently being established around the ponds. At this meeting the Commission will discuss providing partial reimbursement to partners prior to execution of a maintenance agreement in order to close out the Clean Water fund grant. Project website: <http://www.bassettcreekwmo.org/projects/all-projects/bryn-mawr-meadows-water-quality-improvement-project>

2020 Jevne Park Stormwater Improvement Project (ML-21) Medicine Lake (No change since July): At their meeting in July 2018, the Commission approved a proposal from the Commission Engineer to prepare a feasibility study for this project. The study got underway last fall and the city's project team met on multiple occasions with the Administrator and Commission Engineer. The Administrator and Engineer also presented the draft feasibility study to the Medicine Lake City Council on February 4, 2019 and a public open house was held on February 28th. The feasibility study was approved at the April Commission meeting with intent to move forward with option 1. The city's project team is continuing to assess the project and understand its implications on city finances, infrastructure, and future management. The city received proposals from 3 engineering firms for project design and construction. At their meeting on August 5th, the Medicine Lake City Council voted to continue moving forward with the project and negotiating the terms of the agreement with BCWMC. Staff was directed to continue negotiations on the agreement and plan to order the project pending a public hearing at this meeting. Staff continues to correspond with the city's project team and city consultants regarding language in the agreement. The BCWMC held a public hearing on this project on September 19, 2019 and received comments from residents both in favor and opposed to the project. The project was officially ordered on September 19, 2019. On October 4, 2019, the Medicine Lake City Council took action not to move forward with the project. At their meeting in October 2019, the Commission moved to table discussion on the project. The project remains on the 2020 CIP list. In a letter dated January 3, 2022, the city of Medicine Lake requested that the Commission direct its engineer to analyze alternatives to the Jevne Park Project that could result in the same or similar pollutant removals and/or stormwater storage capacity. At the March meeting, the Commission directed the Commission Engineer to prepare a scope and budget for the alternatives analysis which were presented and discussed at the April 2022 meeting. No action was taken at that meeting to move forward with alternatives analysis. In May and June 2023, Commission staff discussed the possibility of incorporating stormwater management features into a redevelopment of Jevne Park currently being considered by the City of Medicine Lake. After review of the preliminary park design plans, the Commission Engineer and I recommended implementation of the original CIP Project to the City. Project webpage: <http://www.bassettcreekwmo.org/index.php?cid=467>.

2014 Schaper Pond Diversion Project and Carp Management, Golden Valley (SL-3) (No change since July): Repairs to the baffle structure were made in 2017 after anchor weights pulled away from the bottom of the pond and some vandalism occurred in 2016. The city continues to monitor the baffle and check the anchors, as needed. Vegetation around the pond was planted in 2016 and a final inspection of the vegetation was completed last fall. Once final vegetation has been completed, erosion control will be pulled and the contract will be closed. The Commission Engineer began the Schaper Pond Effectiveness Monitoring Project last summer and presented results and recommendations at the May 2018 meeting. Additional effectiveness monitoring is being performed this summer. At the July meeting the Commission Engineer reported that over 200 carp were discovered in the pond during a recent carp survey. At the September meeting the Commission approved the Engineer's recommendation to perform a more in-depth survey of carp including transmitters to learn where and when carp are moving through the system. At the October 2020 meeting, the Commission received a report on the carp surveys and recommendations for carp removal and management. Carp removals were performed through the Sweeney Lake Water Quality Improvement Project. Results were presented at the February 2021 meeting along with a list of options for long term carp control. Commission took action approving evaluation of the long-term options to be paid from this Schaper Pond Project. Commission and Golden Valley staff met in March 2021 to further discuss pros and cons of various options. At the September 2021 meeting, the Commission approved utilizing an adaptive management approach to carp management in the pond (\$8,000) and directed staff to discuss use of stocking panfish to predate carp eggs. Commission Engineers will survey the carp in 2022. At the April meeting, the Commission approved panfish stocking in Schaper Pond along with a scope and budget for carp removals to be implemented later in 2022 if needed. Commission staff informed lake association and city about summer activities and plans for a fall alum treatment. Approximately 1,000 bluegills were released into Schaper Pond in late May. Carp population assessments by electroshocking in Sweeney Lake and Schaper Pond were completed last summer. A report on the carp assessment was presented in January. Monitoring in Schaper Pond in 2023 and a reassessment of carp populations in 2024 were approved in early 2023. Carp box netting in 2024 is also approved, as needed. Water monitoring in the pond is underway summer 2023, although the lack of precipitation is making for a challenging year to gather data! Project webpage: <http://www.bassettcreekwmo.org/index.php?cID=277>.

2014 Twin Lake In-lake Alum Treatment, Golden Valley (TW-2): (No change since June 2018) At their March 2015 meeting, the Commission approved the project specifications and directed the city to finalize specifications and solicit bids for the project. The contract was awarded to HAB Aquatic Solutions. The alum treatment spanned two days: May 18- 19, 2015 with 15,070 gallons being applied. Water temperatures and water pH stayed within the desired ranges for the treatment. Early transparency data from before and after the treatment indicates a change in Secchi depth from 1.2 meters before the treatment to 4.8 meters on May 20th. There were no complaints or comments from residents during or since the treatment.

Water monitoring continues to determine if and when a second alum treatment is necessary. Lake monitoring results from 2017 were presented at the June 2018 meeting. Commissioners agreed with staff recommendations to keep the CIP funding remaining for this project as a 2nd treatment may be needed in the future. Project webpage: <http://www.bassettcreekwmo.org/index.php?cID=278>.

2013 Four Seasons Area Water Quality Project (NL-2) : At their meeting in December 2016, the Commission took action to contribute up to \$830,000 of Four Seasons CIP funds for stormwater management at the Agora development on the old Four Seasons Mall location. At their February 2017 meeting the Commission approved an agreement with Rock Hill Management (RHM) and an agreement with the City of Plymouth allowing the developer access to a city-owned parcel to construct a wetland restoration project and to ensure ongoing maintenance of the CIP project components. At the August 2017 meeting, the Commission approved the 90% design plans for the CIP portion of the project. At the April 2018 meeting, Commissioner Prom notified the Commission that RHM recently disbanded its efforts to purchase the property for redevelopment. In 2019, a new potential buyer/developer (Dominium) began preparing plans for redevelopment at the site. City staff, the Commission Engineer and I have met on numerous occasions with the developer and their consulting engineers to discuss stormwater management and opportunities with "above and beyond" pollutant reductions. Concurrently, the Commission attorney has been working to draft an agreement to transfer BCWMC CIP funds for the above and beyond treatment. At their meeting in December, Dominium shared preliminary project plans and the Commission discussed the redevelopment and potential "above and beyond" stormwater management techniques. At the April 2020 meeting, the Commission conditionally approved the 90% project plans. The agreements with Dominium and the city of Plymouth to construct the project were approved May 2020 and project designers coordinated with Commission Engineers to finalize plans per conditions. In June 2021, the City of Plymouth purchased

the property from Walmart. The TAC discussed a potential plan for timing of construction of the stormwater management BMPs by the city in advance of full redevelopment. At the August 2021 meeting, the Commission approved development of an agreement per TAC recommendations. The city recently demolished the mall building and removed much of the parking lot. At the December meeting the Commission approved the 90% design plans and a concept for the city to build the CIP project ahead of development and allow the future developer to take credit for the total phosphorus removal over and above 100 pounds. At the July meeting, the Commission approved an agreement with the city to design, construct, and maintain the CIP project components and allow a future developer to use pollutant removal capacity above 100 pounds of total phosphorus. A fully executed agreement is now filed. The updated 90% project plans were approved at the September meeting. Project webpage: <http://www.bassettcreekwmo.org/index.php?cid=282>.

2021 Parkers Lake Drainage Improvement Project (PL-7) (No change since July 2022): The feasibility study for this project was approved in May 2020 with Alternative 3 being approved for the drainage improvement work. After a public hearing was held with no public in attendance, the Commission ordered the project on September 17, 2020 and entered an agreement with the city of Plymouth to design and construct the project. The city hired WSB for project design which is currently underway. 60% design plans were approved at the June meeting. 90% plans were approved at the August meeting. Construction is complete and vegetation is currently being established. www.bassettcreekwmo.org/projects/all-projects/parkers-lake-drainage-improvement-project

2021 Parkers Lake Chloride Reduction Project (PL-7): The feasibility study for this project was approved in May 2020 with Alternative 3 being approved for the drainage improvement work. After a public hearing was held with no public in attendance, the Commission ordered the project on September 17, 2020 and entered an agreement with the city of Plymouth to implement the project in coordination with commission staff. City staff and I have had an initial conversation about this project. The city plans to collect additional chloride data this winter in order to better pinpoint the source of high chlorides loads within the subwatershed. Partners involved in the Hennepin County Chloride Initiative (HCCI) are interested in collaborating on this project. A proposal from Plymouth and BCWMC for the "Parkers Lake Chloride Project Facilitation Plan" was approved for \$20,750 in funding by the HCCI at their meeting in March. The project will 1) Compile available land use data and chloride concentrations, 2) Develop consensus on the chloride sources to Parkers Lake and potential projects to address these sources, and 3) Develop a recommendation for a future pilot project to reduce chloride concentrations in Parkers Lake, which may be able to be replicated in other areas of Hennepin County, and 4) help target education and training needs by landuse. A series of technical stakeholder meetings were held last fall and winter to develop recommendations on BMPs. A technical findings report was presented at the July 2022 meeting. At the September 2022 meeting, the Commission approved a scope and budget for a study of the feasibility of in-lake chloride reduction activities. That study is now underway by the Commission Engineer. Additionally, the city is sampling the stormwater pond at their maintenance facility. The project report is expected at the November 2023 Commission meeting. Project website: www.bassettcreekwmo.org/projects/all-projects/parkers-lake-drainage-improvement-project

2021 Mt. Olivet Stream Restoration Project (ML-20) (No change since July 2022): The feasibility study for this project was approved in May 2020 with Alternative 3 being approved for the drainage improvement work. After a public hearing was held with no public in attendance, the Commission ordered the project on September 17, 2020 and entered an agreement with the city of Plymouth to design and construct the project. The city hired WSB for project design which is currently underway. 60% design plans were approved in June. 90% plans were approved at the August. Construction is complete and vegetation is currently being established. www.bassettcreekwmo.org/projects/all-projects/mt-olivet-stream-restoration-project

2021 Main Stem Lagoon Dredging Project (BC-7) (See Item 4D): The feasibility study for this project was approved in May 2020 with Alternative 2-all (dredge all three lagoons to 6-foot depth) being approved. After a public hearing was held with no public in attendance, the Commission ordered the project on September 17, 2020. Rather than entering an agreement with a separate entity to design and construct this project, the Commission will implement the project in close coordination with the MPRB. At their meeting in November, the Commission approved a timeline for implementation and the Commission Engineer was directed to prepare a scope of work for project design and engineering. The engineering scope and budget were approved at the May 2021 meeting. Design and permitting got underway in summer 2021. Dredging of all three lagoons is planned for winter 2022/2023. A grant agreement for the \$250,000 Watershed Based Implementation Funding grant was approved at the January 2021 meeting. The project work

plan was approved by BWSR. In the spring 2021 the Commission approved a grant agreement for a Hennepin County Opportunity Grant for this project. An Environmental Assessment Worksheet was approved by the Commission at their October 2021 meeting and was submitted for a 30-day comment period by the City of Golden Valley as the RGU. A meeting of project stakeholders was held December 7th and 50% designs were approved at the December 2021 meeting. Comments were received on the EAW from multiple review agencies and one private citizen. Agency comments were relatively minor and expected. Comments from the citizen were more complex and detailed. Responses to comments were developed the RGU (city of Golden Valley) made an official declaration that no Environmental Impact Statement is needed. Staff reviewed a request from a resident to add “safety” benches to the ponds, reviewed reference materials and discussed in detail with MPRB. Determined safety benches aren’t appropriate or needed for this project and responded to the resident. 90% plans were approved at the June meeting. A project flyer and FAQs page were developed in conjunction with MPRB staff. They are posted on the webpage and were distributed to MPRB and Loppet staff at the Chalet and Trailhead. At the October meeting the Commission awarded the construction contract to the lowest responsive, responsible bidder: Fitzgerald Excavating and Trucking and contract documentation was completed thereafter. A pre-construction meeting was held November 28th. Dredging began in January and was completed in March 2023. Two pay requests from the contractor have been approved although dredged quantities reported do not match post-construction surveys performed by the Commission. At the May meeting, the Commission approved submittal of a notice of claim to the contractor. Since then, the contractor completed site restoration and the Commission Engineer submitted an official opinion on the claim, and the contractor submitted a response to the claim. Discussion on claim dispute will took place during a closed session at the August meeting with further discussion during a closed session at the September meeting. As directed by the Commission, a settlement agreement was drafted by Commission Attorneys and accepted by the contracted. The agreement is presented on this month’s consent agenda. Project website: www.bassettcreekwmo.org/projects/all-projects/bassett-creek-main-stem-lagoon-dredging-project

2022 Medley Park Stormwater Treatment Facility (ML-12) (No change since July): The feasibility study for this project is complete after the Commission Engineer’s scope of work was approved last August. City staff, Commission Engineers and I collaborated on developing materials for public engagement over the fall/early winter. A project kick-off meeting was held in September, an internal public engagement planning meeting was held in October, and a Technical Stakeholder meeting with state agencies was held in November. A [story map of the project](#) was created and a survey to gather input from residents closed in December. Commission Engineers reviewed concepts and cost estimates have been reviewed by city staff and me. Another public engagement session was held in April to showcase and receive feedback on concept designs. The feasibility report was approved at the June meeting with a decision to implement Concept #3. At the July meeting the Commission directed staff to submit a Clean Water Fund grant application, if warranted. A grant application was developed and submitted. Funding decisions are expected in early December. A public hearing on this project was held in September with no members of the public attending. In September, a resolution was approved to officially order the project, submit levy amounts to the county, and enter an agreement with the city to design and construct the project. The city hired Barr Engineering to develop the project designs which are now underway. The BCWMC received a \$300,000 Clean Water Fund grant from BWSR in December 2021 and the grant agreement approved in March 2022. 50% design plans were approved in February 2022 and 90% plans were approved at the May 2022 meeting. Final plans and bid documents were developed by the city’s consultation (Barr Engineering). Construction began in November and winter construction was finished in late January 2023. Activities this spring included completing grading (topsoil adjustments); paving (concrete, bituminous); light pole and fixture install; benches install; site clean up and prep for restoration contractor. In late May, Peterson Companies completed their construction tasks and the project transitioned to Traverse de Sioux for site restoration and planting. A small area of unexpected disturbance from construction was added to the overall area to be restored with native plants through a minor change order. Site restoration, planting, and seeding was completed in late June. www.bassettcreekwmo.org/projects/all-projects/medley-park-stormwater-treatment-facility

2022 SEA School-Wildwood Park Flood Reduction Project (BC-2, 3, 8, 10): The feasibility study for this project is complete after the Commission Engineer’s scope of work was approved last August. A project kick-off meeting with city staff was held in late November. Meetings with city staff, Robbinsdale Area School representatives, and technical stakeholders were held in December, along with a public input planning meeting. A virtual open house video and comment form were offered to the public including live chat sessions on April 8th. The feasibility study report was approved in June with a decision to implement Concept #3. A public hearing on this project was held in September with no members of the public attending. In September, a resolution was approved to officially order the project, submit levy amounts to the county, and enter an

agreement with the city to design and construct the project. The city hired Barr Engineering to develop the project designs which are now underway. A virtual public open house was held February 3rd. 50% Design Plans were approved at the January meeting. A public open house was held September 29th. 90% were approved at the October Commission meeting. Six construction bids were received in late February with several of them under engineer's estimates. The city contracted with Rachel Contracting and construction got underway earlier this spring. By late June excavation was completed and the playground area was prepped and ready for concrete work to begin on July 5. Bids were open for the SEA School/Wildwood Park restoration project on June 20. Three bids were received and two came in right around our estimate. The city is recommending the low bidder (Landbridge Ecological). At the end of July utility crews lowered the watermain and installed the storm sewer diversions into the park from along Duluth Street. The hydrodynamic separator was also set (with a crane). Crews also worked on the iron-enhanced sand filter and the outlet installation, stone work on the steepened slopes, trail prep, bituminous paving, and concrete work (curb and gutter, pads, and ADA ramps). The preconstruction meeting for the restoration work was held with work to begin late August or early September. The city awarded the contract for the DeCola Pond D outlet work to Bituminous Roadways Inc. in August. In early September, the construction contractor is doing final site clean-up and finishing the iron enhanced sand filter. The site is stabilized and restoration work is underway with tree plantings, native plantings. For the DeCola Pond D outlet replacement, Bituminous Roadways started the trench/pipe work this week and this is expected to take approximately 2-3 weeks to replace the entire outlet pipe system.

Project webpage: www.bassettcreekwmo.org/projects/all-projects/sea-school-wildwood-park-flood-reduction-project.

Bassett Creek Restoration Project: Regent Ave. to Golden Valley Rd. (2024 CR-M), Golden Valley

A feasibility study for this project got underway in fall 2022. A public open house was held March 1st with 30 residents attending. The draft feasibility report was presented at the April meeting. A final feasibility report was presented at the June meeting where the Commission approved the implementation of Alternative 3: to restore all high, medium, and low priority sites. A Clean Water Fund grant application for \$350,000 was recently developed and submitted to BWSR. The Commission held a public hearing on this project at its September meeting and officially ordered the project and set the final levy. An agreement with the City of Golden Valley to implement the project was drafted by the Commission Attorney and is being reviewed by city staff. Project website: <https://www.bassettcreekwmo.org/projects/all-projects/bassett-creek-restoration-project-regent-ave-golden-valley-r>

Ponderosa Woods Stream Restoration Project, Plymouth (ML-22)

A feasibility study for this project got underway in fall 2022. A public open house was held February 13th with 3 residents attending. The draft feasibility report was presented at the May meeting and additional information was presented at the June meeting where the Commission approved implementing Alternative 1.5. The Commission held a public hearing on this project at its September meeting and officially ordered the project, set the final levy, and approved an agreement with the City of Plymouth for project implementation. Project website: <https://www.bassettcreekwmo.org/projects/all-projects/ponderosa-woods-stream-restoration-project>.

Sochacki Park Water Quality Improvement Project (BC-14) This project is proposed to be added to the CIP through a minor plan amendment as approved at the March Commission meeting with CIP funding set at \$600,000. The project involves a suite of projects totaling an estimated \$2.3M aimed improving the water quality in three ponds and Bassett Creek based on a subwatershed analysis by Three Rivers Park District (TRPD). A memorandum of understanding about the implementation process, schedules, and procedural requirements for the project was executed in April among BCWMC, TRPD, and the cities of Golden Valley and Robbinsdale. A feasibility study is underway for the project and is being funded by TRPD. The feasibility study kick off meeting was held June 5th. Information on the project and an update on the feasibility study was presented at the June meeting. A technical stakeholder meeting was held July 10th. A public open house was held July 26th and a Phase I Environmental Site Assessment was recently completed. The draft feasibility study was presented at the August meeting and the final feasibility study was approved at the September meeting. The Commission held a public hearing on this project at its September meeting and officially ordered the project and set the final levy. A cooperative agreement for project implementation is being developed with project partners. Project webpage: <https://www.bassettcreekwmo.org/projects/all-projects/sochacki-park-water-quality-improvement-project>.

Administrator Activities September 12 – October 10, 2023

Subject	Work Progress
CIP	<ul style="list-style-type: none"> • <u>Main Stem Lagoon Dredging Project</u>: Reviewed correspondence regarding settlement agreement; calculated project budget remaining; reviewed Commission Engineer’s analysis of current project impact and potential future project costs and impacts; included with materials for TAC meeting • <u>Main Stem Restoration Project Regent Ave to Golden Valley Rd</u>: Revised draft agreement per city recommendations and discussed with Attorney Anderson; sent revised agreement to city • Filed resolution ordering 2024 projects • Submitted final 2025 levy to county • Discussed moving 2026 CIP project to 2025 with Plymouth and Commission Engineers
Bassett Creek Tunnel and Bassett Creek Valley	<ul style="list-style-type: none"> • Discussed latest tunnel agreement version with Commission Attorney and Engineer • Corresponded with Minneapolis staff re: timeline for their review of tunnel agreement • Attended Sept 27th Bassett Creek Valley stakeholder meeting • Met with Fernando’s Policy Aide to review next steps and support of Community Works program • Drafted letter of support for Commission consideration
Education, Outreach & West Metro Water Alliance (WMWA)	<ul style="list-style-type: none"> • Attended September and October WMWA meetings; drafted meeting notes for September meeting; corresponded re: budgets for WMWA educator • Attended DEIA Workgroup meeting • Read transcript and attended Haha Wakpadan event on oral history project • Planned for watershed tour including coordinating speakers and talking points, gathering RSVPs, securing vehicles for carpool, developing handout; attended tour • Gave up on Low Salt No Salt MN campaign at virtual Dakota County Groundwater Collaborative • Discussed special projects options for WMWA/County Education coordinator with TAC for recommendation to Commission • Corresponded with watershed map contractor re: agreement and timeline • Set meeting for Education Committee, prepared and sent agenda • Provided information on Smart Salting trainings and materials to Birke in MTKA at Alt. Commissioner Harwell request
Administration	<ul style="list-style-type: none"> • Developed agenda; reviewed invoices and submitted expenses spreadsheet to Redpath; developed Administrator’s report; reviewed bank statements, investment statements and financial report; drafted September meeting minutes; reviewed memos, documents and presentations for Commission meeting; printed and disseminated meeting information to commissioners, staff, and TAC; updated online calendar; drafted meeting follow up email; ordered catering for October Commission meeting • Posted updated Roles and Responsibilities document online • Met with Plymouth staff and Deputy Treasurer re: accounting tasks and sent requested documents • Prepared agenda and materials for 10/4 TAC meeting including protocol for blue-green algae sampling; attended meeting and drafted TAC recommendations • Participated as panelist at SAFL Stormwater Seminar Series • Developed and submitted invoice to MDH for pesticide monitoring
MAWD	<ul style="list-style-type: none"> • Assisted with July minutes and October agenda for Metro Watersheds meeting
Sweeney Lake Eurasian Watermilfoil	<ul style="list-style-type: none"> • Corresponded with Sweeney Lake Association (SLA) re: post treatment survey • Talked with concerned resident re: AIS transport into Sweeney Lake • Assisted with coordination of post treatment survey
2025 Watershed Management Plan	<ul style="list-style-type: none"> • Met with Commission Engineers for bi-weekly check in meetings • Drafted meeting minutes for September PSC meeting • Prepared agenda and assisted with preparing materials for October PSC meeting; attended meeting • Prepared plan process calendar for discussion with PSC • Reviewed planning budget and reported status to PSC • Interviewed North MPLS resident to gather insights, knowledge, and ideas

Website: <https://www.weather.gov/owp/hdsc>
 Email: hdsc.questions@noaa.gov
 Locations: Tuscaloosa, AL – Silver Spring, MD – Chanhassen, MN



OWP OFFICE OF WATER PREDICTION

NOAA ATLAS 15: Update to the National Precipitation Frequency Standard



NOAA is recognized by the engineering and floodplain management communities as the authoritative source of precipitation frequency data, and has a long history of generating these data that serve as the foundation for built infrastructure nationwide.

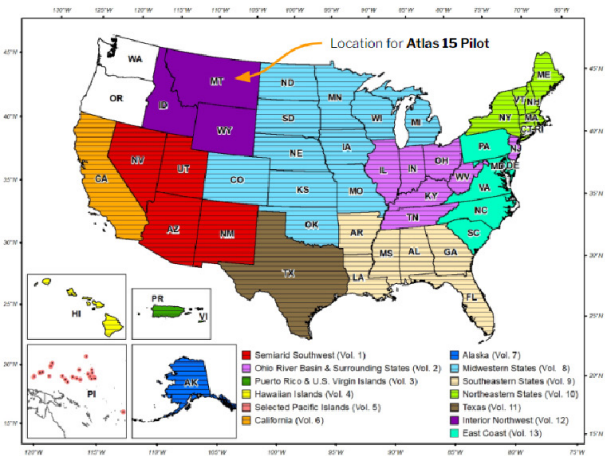
The [National Weather Service \(NWS\) Office of Water Prediction \(OWP\)](#) has produced an authoritative atlas of precipitation frequency estimates, published as volumes of the NOAA Atlas 14 Precipitation-Frequency Atlas of the United States. These estimates are currently posted on the NOAA [Precipitation Frequency Data Server \(PFDS\)](#), with interactive tables and charts. Precipitation frequency estimates are defined as the precipitation depth at a particular location, for a given storm duration, that has a statistically-expected 1-in-YY chance of being exceeded in any given year, where YY is the statistical annual recurrence interval.

The generation of authoritative precipitation frequency information requires a rigorous development process and extensive quality control with significant stakeholder interaction.

NOAA Atlas 14 estimates are used to design, plan, and manage much of the Nation's infrastructure for a wide variety of purposes under federal, state, and local regulations. NOAA Atlas 14 estimates replace estimates previously published by NOAA in the early 1960s and '70s and cover a range of storm durations from 5-minutes through 60-days, for average recurrence intervals of 1-year through 1,000-year. Compared to previous volumes, Atlas 14 estimates benefit from use of better-quality data (e.g. precipitation stations with longer period of record, increased station density, etc.), enhanced quality control methods, consideration of uncertainties, and improved frequency analysis and spatial interpolation methods that account for variation in terrain, proximity to the coastline etc.

First National Precipitation Frequency Analysis Accounting for Climate Change

Historically, NOAA precipitation frequency estimates have been funded by states and other users, on a cost-reimbursable basis, for individual subsets of the U.S. However, with the 2022 [Bipartisan Infrastructure Law \(BIL\)](#), OWP received first-ever direct Federal funding to (1) update the NOAA Atlas 14 precipitation frequency standard while accounting for climate change, and (2) develop precipitation frequency estimates for the entire U.S. and its territories.



Duration	1	2	5	10	25	50	100	1000
60-min	0.021 (0.021-0.020)	0.025 (0.024-0.026)	0.031 (0.030-0.032)	0.038 (0.037-0.039)	0.049 (0.047-0.051)	0.065 (0.063-0.067)	0.087 (0.084-0.090)	0.125 (0.121-0.129)
10-min	0.009 (0.009-0.009)	0.014 (0.014-0.014)	0.017 (0.017-0.017)	0.021 (0.021-0.021)	0.027 (0.027-0.027)	0.036 (0.036-0.036)	0.048 (0.047-0.049)	0.067 (0.065-0.069)
1-hr	0.068 (0.067-0.069)	0.084 (0.083-0.085)	0.107 (0.106-0.108)	0.137 (0.136-0.138)	0.181 (0.179-0.183)	0.238 (0.236-0.240)	0.325 (0.322-0.328)	0.475 (0.471-0.479)
24-hour	1.08 (1.07-1.09)	1.33 (1.32-1.34)	1.69 (1.68-1.70)	2.11 (2.10-2.12)	2.70 (2.68-2.72)	3.47 (3.45-3.49)	4.59 (4.56-4.62)	6.45 (6.41-6.49)
60-min	1.08	1.33	1.69	2.11	2.70	3.47	4.59	6.45
10-min	0.134 (0.133-0.135)	0.245 (0.244-0.246)	0.315 (0.314-0.316)	0.392 (0.391-0.393)	0.508 (0.506-0.510)	0.667 (0.665-0.669)	0.891 (0.888-0.894)	1.215 (1.211-1.219)
1-hr	3.11 (3.09-3.13)	3.76 (3.74-3.78)	4.63 (4.61-4.65)	5.66 (5.64-5.68)	7.13 (7.10-7.16)	9.03 (8.99-9.07)	11.3 (11.2-11.4)	15.1 (15.0-15.2)
24-hr	24.0	31.7	41.9	52.1	67.7	89.1	116.6	158.2

100-year (8.99 - 17.5)

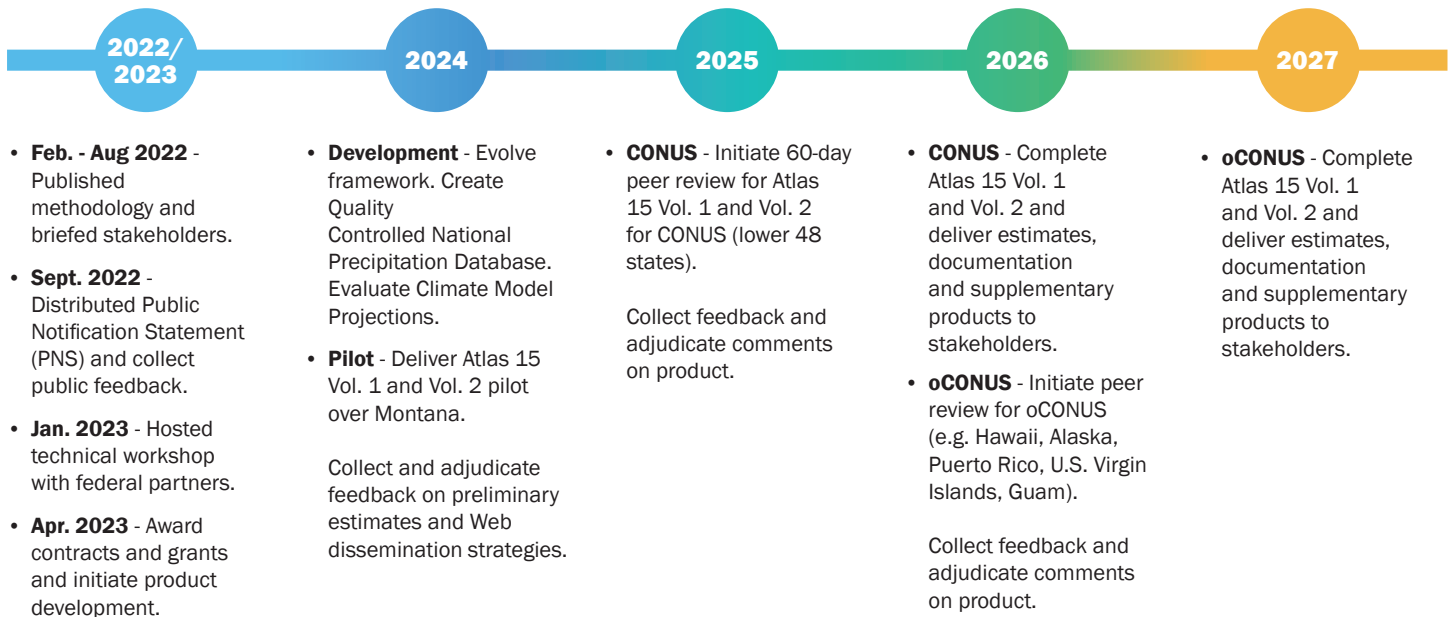
States and territories associated with each NOAA Atlas 14 volume

These updated precipitation frequency estimates will be referred to as NOAA Atlas 15 and will be presented in two volumes. **Volume 1** will account for temporal trends in historical observations, and **Volume 2** will use future climate model projections to generate adjustment factors for Volume 1. To account for a changing climate, NOAA worked with the Federal Highway Administration (FHWA) and the academic community to develop a new methodology for Atlas 15, which has undergone broad review by stakeholders and Federal partners over the past year, leveraging state of the art research in extreme value theory and climate model outputs and projections. The Atlas 15 estimates will provide critical information to support the design of state and local infrastructure nationwide under a changing climate.

The NOAA Atlas 15 update enhances the production and provision of rigorously produced, authoritative precipitation frequency estimates by:

- Leveraging the results and recommendations from the “[Analysis of Impact of Nonstationary Climate on NOAA Atlas 14 Estimates](#)” assessment report.
- Developing a seamless national analysis based on historical data and a non-stationarity assumption using the latest precipitation observations and future climate model projections. Storm durations will range from 5-minutes to 60-days and span average annual recurrence intervals of 1 to 1,000 years.
- Enhancing Web visualizations and data services, through NOAA’s Service Delivery framework initiative, to better engage stakeholders and users.

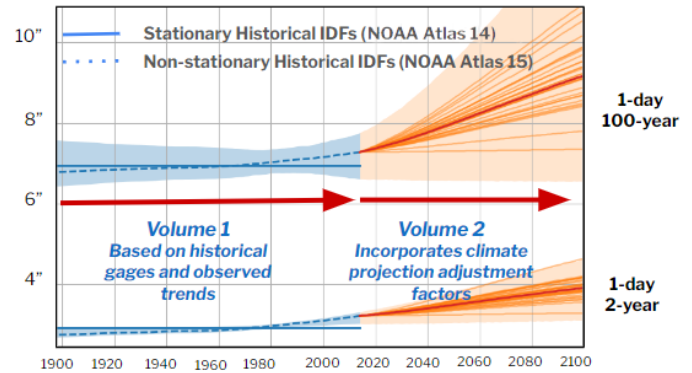
Timeline for the Development and Deployment of Updated Authoritative Precipitation Frequency Estimates Nationwide



The **FLOODS Act** signed into law in December 2022 and known as [Public Law No: 117-316](#), authorizes NOAA to establish a program, to be known as the *NOAA Precipitation Frequency Atlas of the United States*. This program would compile, estimate, analyze, and communicate the frequency of precipitation in the United States and update these precipitation frequency estimates no less than once every 10 years.

NOAA Atlas 15

New National Precipitation Frequency Standard



Historical and future intensity-duration-frequency estimates (IDFs)