



## Bassett Creek Watershed Management Commission

### Minutes of Regular Meeting

Thursday, July 21, 2022

8:30 a.m.

Plymouth Maintenance Facility (14900 23<sup>rd</sup> Ave. N., Plymouth, MN 55447)

#### 1. CALL TO ORDER and ROLL CALL

On Thursday, July 21, 2022 at 8:38 a.m. Chair Cesnik brought 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	Stacy Harwell	Jane McDonald Black	Drew Chirpich
Medicine Lake	Clint Carlson	Shaun Kennedy	<i>Absent</i>
Minneapolis	Michael Welch	Jodi Polzin	Katie Kowalczyk
Minnnetonka	Maryna Chowhan	<i>Vacant Position</i>	<i>Absent</i>
New Hope	Jere Gwin-Lenth	Jennifer Leonardson	Nick Macklem
Plymouth	Catherine Cesnik	<i>Absent</i>	Ben Scharenbroich, Chris LaBounty, Amy Riegel, Hailey Olson
Robbinsdale	<i>Absent</i>	<i>Vacant Position</i>	Mike Sorenson, R. McCoy
St. Louis Park	<i>Vacant Position</i>	<i>Absent</i>	Erick Francis
Administrator	Laura Jester, Keystone Waters		
Engineers	Karen Chandler and Meg Rattei, Barr Engineering		
Recording Secretary	<i>Absent</i>		
Legal Counsel	Dave Anderson, Kennedy & Graven		
Presenters/ Guests/Public			

#### 2. PUBLIC FORUM ON NON-AGENDA ITEMS

No comments from the public were made.

[Commissioner Welch arrives.]

**3. APPROVAL OF AGENDA**

**MOTION:** Commissioner Gwin-Lenth moved to approve the agenda. Commissioner Carlson seconded the motion. The motion carried 5-0, with the cities of Robbinsdale, St. Louis Park, Minnetonka, Golden Valley absent from the vote.

**4. CONSENT AGENDA**

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

- Approval of June 16, 2022 Meeting Minutes
- Acceptance of July Financial Report
- Approval of Payment of Invoices
  - i. Keystone Waters, LLC – June 2022 Administrative Services
  - ii. Keystone Waters, LLC – June 2022 Meeting Expenses
  - iii. Barr Engineering – June 2022 Engineering Services
  - iv. Kennedy & Graven – May 2022 Legal Services
  - v. Redpath – June 2022 Accounting Services
  - vi. Stantec – WOMP Services
  - vii. Triple D Espresso – Meeting Catering
  - viii. MPCA Invoice – Review Fee for Main Stem Erosion Repair Project
  - ix. MMKR – 2021 Financial Audit
  - x. Jan Voit – June Meeting Minutes
  - xi. HDR – Website Services
  - xii. Metro Blooms – Lawns to Legumes Phase 2 Grant Project
  - xiii. Juan Del Valle Lopez – BCWMC Intern
- Receipt of Communications Related to 2012 Financial Audit
- Acceptance of 2021 Financial Audit
- Approval to Direct Commission Staff to Prepare Bid Package and Advertise for Bids for Sweeney Lake Alum Treatment
- Approval of Amendment to Grant Agreement with Hennepin County to Extend Deadline

**MOTION:** Commissioner Carlson moved to approve the consent agenda. Commissioner Gwin-Lenth seconded the motion. The motion carried 5-0, with the cities of Robbinsdale, St. Louis Park, Minnetonka, Golden Valley absent from the vote.

[Commissioner Harwell arrives.]

**5. BUSINESS**

**A. Receive Report on Parkers Lake Chloride Reduction Technical Findings Study & Consider Options for Implementation (PL-7)**

Plymouth Technical Advisory Committee (TAC) Member Chris LaBounty gave a presentation about the Parkers Lake Chloride Reduction Project and requested direction from the Commission to move forward on one or more of the possible capital projects to further analyze. He reported that Parkers Lake is impaired for chloride, which collects at the bottom of the lake. During normal conditions, the lake does not outlet. It only outlets in very high water conditions to a lift station and then into Medicine Lake.

[Commissioner Chowhan arrives.]

The watershed inflows are monitored by Three Rivers Park District and the city. Land uses to the south of the lake are primarily residential, northwest are primarily park and multifamily, and northeast are industrial/commercial. Mr. LaBounty reviewed chloride data from in-lake monitoring of chloride that's been ongoing since 2006. It is common for the lake to exceed chloride standards. He noted that watershed monitoring shows the northeast area contributes the highest amount of chlorides to the lake.

The Commission approved a feasibility study in April of 2019 with one approved project for chloride reduction in the northeast portion of the lake's watershed. The city partnered with the Hennepin County Chloride Initiative, cities, and watersheds to convene a technical cohort to look at chloride reduction projects and education strategies. Data was pooled and analyzed for similarities to better target BMPs, risks and opportunities for Parkers Lake. Partners believe that reducing the use of chlorides is the best way to solve the problem. The on-going education has helped,

but at some point, it will require more than education. The city is reducing chloride by changing fertilizer application and other practices on and near the city maintenance facility.

[Alternate Commissioner McDonald Black arrives.]

Mr. LaBounty reviewed the three primary BMPs that resulted from the technical cohort's work: 1) develop a grant program that targets chloride reduction through private applicators and private property, 2) construct a pilot program for an on-site collection system to capture chloride effluent for disposal or reuse, 3) perform in-lake chloride removal through dilution or effluent removal.

Mr. LaBounty reviewed more specifics of each option including pros and cons, general cost, general level of effort, and presumed efficacy. Commissioners discussed the options.

Commissioner Harwell noted support of an actual project rather than more study. There was discussion about previous engagement with Met Council regarding discharging chloride-laden stormwater to the sanitary sewer and noting that discussion may need to be revisited for some of the options. It was noted that discharge to the sanitary sewer bypasses other resources like Medicine Lake which is on the cusp of being impaired for chlorides. It was noted the Mississippi River still far from not meeting chloride standards and occasional discharges through the sanitary sewer may be an effective, one-time removal tool that would save watersheds and cities money in the long-term. It was noted that with any of these options, education, training, and actions like impervious surface reduction would be ongoing.

Mr. LaBounty reported that with the grant program option (#1), the program would likely be city-administered. The city would then request reimbursement from CIP funds. The CIP budget for this project is \$300,000.

For option 2 (on-site capture), Plymouth TAC Member LaBounty gave as an example the Plymouth maintenance facility, where runoff drains to a stormwater pond. The stormwater pipe would be disconnected and would by-pass into an underground system. The salty water would be stored until it could be discharged into the sanitary sewer, moved off site, or would be added to brine making. He noted that this pilot project would not likely make a big change in chloride reduction, but it could be a good pilot program. This would be done on a facility-by-facility basis. It could be replicated at other municipalities.

Commission Engineer Chandler said that if the city is doing proper salt storage BMPs, there should not be a chloride problem at the maintenance facility. She recommended the Commission move forward with the grant program and noted that in-lake removal would potentially need to be done multiple times if the source is not addressed.

Chair Cesnik said that Cargill is a local company with experience in salt. She wondered if the Cargill Foundation would be interested in funding some of this work.

Alternate Commissioner Hauer asked if the volatility of the salt loading was understood in correlation to ice and snow. It was known that a large rain event in March brought a large flush of salt.

Commissioner Welch said that this is at a stage where the Commission needs to provide direction at a high level. All the options seem expensive. Whatever direction we go, we should think in terms of pilot-level. He is not supportive of grants to help businesses not damage the lake. At some point regulatory authority must come into play. He is interested in the in-lake removal option, but a cost determination is needed.

Mr. LaBounty said that a phased study for in-lake removal would be needed. Even though it would be expensive, it would likely be the first one done in the state which may invite partnerships and grant funds.

There was further discussion with commissioners noting that eventually the Commission should explore regulatory authority regarding chlorides, a desire for more information to justify a decision on the options, more information on how the grant program would fit into the BCWMC CIP cycle, and praise for the great report and innovative approaches.

Mr. LaBounty proposed that the city bring back a scope for the Commission Engineer to perform an initial study of Parkers Lake to determine how practical in-lake removal would be. And, city staff would sample the southwest pond at the maintenance facility to determine the possible impact of on-site capture. There was consensus that this was a good approach.

Chair Cesnik stated that she had ideas for potential partners and grant sources. She will discuss this further with Administrator Jester.

Commissioner Harwell asked if it would be possible to get the unit cost for heated pavement and impervious surface. Mr. LaBounty said they have information on heated pavement.

After the discussion, Chair Cesnik introduced the new commissioner from the City of Minnetonka, Maryna Chowhan.

Commissioner Chowhan asked if there was a standard salt removal cost? Commission Engineer Chandler responded that there is not.

**B. Consider Recommendation from TAC to Adopt Updated XP-SWMM Model**

TAC Chair Mark Ray explained that there has been a lot of discussion by the TAC regarding their recommendation to adopt an updated hydrologic and hydraulic model (XP-SWMM model). The discussion included ways to streamline the process for requesting and gathering information from cities for future model updates. There are separate, ongoing discussions with the Department of Natural Resources (DNR) regarding FEMA floodplains and protecting upland storage.

Commissioner Harwell asked about the frequency of updating the model. Mr. Ray said that while there is not a set schedule, Commission Engineers will annually review changes in the watershed from BCWMC CIP projects and information from cities to determine if there are enough changes to warrant a model update. Commissioner Harwell noted she would like to help with the information-gathering process for future model updates.

[Plymouth TAC Members Scharenbroich and LaBounty left the meeting.]

Commissioner Welch made a motion to adopt the updated model as the official BCWMC model along with associated flood elevations; update Table 2-9 in the 2015 Bassett Creek Watershed Management Plan with new flood elevations and to direct the Commission Engineer to finalize the model, subdivide the whole model into the three areas for easier transmission to users, and prepare new flood inundation maps for use by cities and others. Commissioner Carlson seconded the motion. Discussion was held regarding modeling, model integrity, model encryption, and user agreements. The motion carried 7-0, with the cities of Robbinsdale and St. Louis Park absent from the vote.

[A break was taken from 9:45 – 9:55.]

**C. Receive Results of 2021 Water Quality Monitoring**

Commission Biologist Meg Rattei with Barr Engineering presented the 2021 water quality monitoring results for Crane Lake, Parkers Lake, and Westwood Lake. She also presented the 2020-2021 flow and water quality monitoring results and biotic index monitoring results for the Sweeney Lake Branch of Bassett Creek. She explained the drainage area of each monitored lake and stream.

The lake monitoring parameters include total phosphorus (TP), chlorophyll a, Secchi disc transparency, and chloride. Biological monitoring parameters include aquatic plants and animals that provide food for aquatic life such as phytoplankton and zooplankton.

*Crane Lake*

The TP and chlorophyll a met water quality standards. The trend analysis showed a significant reduction in TP over the last 25 years. There were no measurable changes in Secchi disc readings or chlorophyll a during that time period. Chloride concentrations met the maximum water quality standard set by the Minnesota Pollution Control Agency (MPCA) however, chloride levels did not meet the chronic standard. Between 2016 and 2021, the chloride concentrations in the lake more than doubled, getting close to the maximum standard. Water frequently flows from Crane Lake to Medicine Lake, which is very close to being added to the impaired waters list for chloride. Reducing the chloride load from Crane Lake's watershed is needed. Much of the drainage area is impervious surface around Ridgedale Center. Winter maintenance practices within cities and businesses should be reviewed to reduce the chloride load to the lake.

The trend line shows a statistically significant decline in zooplankton over the past 22 years due to increasing chloride levels. Regular transfer of chloride from Crane Lake to Medicine Lake could cause the same trend in Medicine Lake.

The number of aquatic plant species was better than the DNR plant IBI threshold; the quality of the aquatic plants (measured by the Floristic Quality Index (FQI)) did not meet the DNR plant IBI threshold in June, but was better than the DNR plant IBI threshold in August.

Recommendations: work with partners in the watershed to review maintenance practices to reduce chloride loads to the lake; and continue the water quality and biological monitoring at a five-year frequency.

*Westwood Lake*

All values met the MPCA and Commission's water quality standards. The lake's water quality has been very stable over time. There were no significant changes in the past 10 years. Chlorides met MPCA's maximum and chronic standards. Phytoplankton and zooplankton were within the ranges observed since 1982. The number of aquatic plant species and their quality (FQI) were better than the DNR's plant IBI thresholds. Bearded stonewort, first found in the lake in 2019, was again present in 2021 and continued expanding its extent. Recommendations: continue to provide education and information to the Westwood Hills Nature Center and lake users to reduce the chance of AIS introduction; and continue water quality and biological monitoring at a three-year frequency.

*Parkers Lake*

TP, chlorophyll a, and Secchi disc met water quality standards. A trend analysis showed a statistically significant reduction in TP over time. There were no significant changes in Secchi disc or chlorophyll a over the last 10 years. The lake met the maximum water quality standard for chloride, but failed to meet the chronic standard at the lake bottom. The lake is on the impaired waters list for chlorides. The number of aquatic plant species and their quality (FQI) were better than the DNR's plant IBI thresholds in June, but did not meet the DNR's thresholds in August. Curly-leaf pondweed and Eurasian watermilfoil was found in greater abundance. If introduced, the water quality would support AIS such as rusty crayfish, faucet snail, zebra mussels, starry stonewort, and spiny waterflea.

Recommendations: implement BMPs to reduce chloride loading to the lake, identify management measures to improve the quality of the lake's plant community and survey vegetation annually to facilitate early detection of AIS, and continue water quality and biological monitoring at a three-year frequency.

*Sweeney Lake Branch of Bassett Creek*

2020-2021 water quality monitoring results show the stream failed to meet MPCA standards for E. coli, chlorides, and total suspended solids (TSS). MPCA standards were met for temperature, pH, dissolved oxygen, metals, and river eutrophication standards (total phosphorus, chlorophyll a, and DO flux). In 2020, MPCA monitored this branch for macroinvertebrates and calculated the Minnesota Index of Biotic Integrity (M-IBI). The Commission assessed habitat in the stream. The 2020 habitat assessment was compared with the 2015 habitat assessment. Evidence of both habitat improvement and degradation were found. There were areas of increased and decreased bank erosion. Evidence of habitat degradation included an increase in sediment deposits in the substrate, and decreases in algae and woody debris. The M-IBI score was 42.1, just below the impairment threshold. MPCA will not list this reach as impaired, even though it has declined since 2015 because it is so close to the threshold. The lower M-IBI score may be due to MPCA's changed monitoring location.

Recommendations: identify the cause of the high concentrations of TSS, chlorides, and E. coli and implement BMPs to reduce these concentrations, evaluate the stream corridor for erosion and identify and implement management measures to repair the erosion, continue education efforts to reduce chloride use in the watershed, support MPCA efforts to complete a stressor ID by providing requested data, and continue monitoring stream habitat, flow, water quality, and macroinvertebrates.

[Crystal TAC Member Ray left meeting.]

Alternate Commissioner Hauer asked why Westwood Lake does not have a chloride impairment. Commission Biologist Rattei explained that the watershed is mostly residential and does not contain large areas of impervious surfaces that require a lot of salt.

Commissioner Harwell requested that additional information about each lake's subwatershed be added to future reports.

Alternate Commissioner Kennedy asked about the source of the E. coli in the Sweeney Branch. Commission Biologist Rattei responded that there were very high levels in the 1970s and 1980s. They never could pinpoint the cause. The whole system has always had high bacteria levels.

Commissioner Harwell asked whether it was necessary to monitor Westwood Lake so often given how stable the water quality has been. Commission Engineer Chandler explained this would be discussed during the watershed plan update.

Alternate Commissioner McDonald Black said there is a project for chloride on Parkers Lake. She wondered if there were other lakes that would be a better focus for chloride efforts and wondered how Parkers was chosen. Administrator Jester explained that Parkers Lake is a landlocked lake where chlorides continue to accumulate. The City of Plymouth brought a CIP recommendation for a project in the lake's subwatershed to reduce erosion in a drainage channel to address phosphorus and suspended solids. It was the recommendation of the Commission to also look at chloride. A pilot project at Parkers Lake could be replicable elsewhere.

Commission Biologist Rattei provided historical background on the development around Crane Lake and the impact on water quality since Ridgedale Center was built in 1975.

Commission Engineer Chandler said that this is a great opportunity to support the work of MPCA for stressor ID. In the plan update we wanted to look at how to analyze streams.

Administrator Jester recommended that she talk with the City of Minnetonka about their influence and impact on the winter maintenance around Ridgedale Center as there may be an opportunity for the city to partner with businesses to reduce chloride given the situation with the lake. She also recommended that she speak with the City of Golden Valley to assess erosion in the Sweeney Branch. There was consensus that the Engineer and Administrator should develop recommendations on how to utilize the data presented and address issues, as possible.

**D. Review Results of Plan Steering Committee Workshop and Consider Directing Commission Engineer to Develop Scope for Deeper Analysis of Issues**

Because she was appointed chair of the July 11 Plan Steering Committee meeting, Alternate Commissioner Hauer provided a recap of the issue identification workshop. She noted that after a high-level overview of the planning process and input to date, small groups categorized issues, opportunities, and gaps into one of three categories: issue is adequately addressed by current Commission policy or program; issue needs additional analysis to define the Commission's role; or issue is important but Commission's role to lead. She noted that the memo in the meeting packet shows the results of the categorization exercise and indicates where the majority of groups categorized each issue.

Administrator Jester outlined the request from the memo for the Commission to authorize the Engineer and Administrator to develop a more detailed scope of activities to address the issues that require more in-depth analysis to determine the Commission's role. She noted that some items would be addressed through work by the Administrator, Plan Steering Committee, Commissioners, and TAC, rather than through analysis by the Commission Engineer.

Alternate Commissioner Polzin said that she thought that Diversity, Equity, and Inclusion (DEI) should be addressed with each issue throughout the planning process rather than a standalone item.

Commissioner Anderson asked if there was going to be a separate document explaining where it was held, when, and who was in attendance since a quorum of commissioners were in attendance. Administrator Jester will work with the Commission Attorney to determine what would be most appropriate.

Commissioner Welch said that this is a good summary and he believed the tasks were delineated correctly in terms of engineer involvement. There are certain items identified as needing more analysis. He does not want the Commission to explore items that they don't believe will end up in the plan. It is important to be good stewards of our resources. It would be good to have this as part of the scope review.

Chair Cesnik said that narrowing down the options would be useful. Commission Engineer Chandler commented that determining the Commission's role may be more appropriate than a deep dive into the topic. It may be that some items can be addressed earlier than originally planned. Administrator Jester said there is also the opportunity to see what other watersheds or other Barr clients are doing with these issues.

[Commissioner Carlson left the meeting.]

**E. Consider Submitting Resolutions to the Minnesota Association of Watershed Districts (MAWD)**

Administrator Jester explained that this process happens every year. These could be resolutions that MAWD brings forward to the legislature or policy resolutions. Commissioner Welch said that submitted resolutions do not necessarily go to the legislature but rather direct MAWD on legislative policy. Resolutions expire after five years. Nine Mile Creek Watershed District provided the original resolution on the chloride limited liability. They are likely to renew this resolution but if they don't, the Commission should consider doing so. It is important for the Commission to attend the annual conference to vote in support of resolutions important to the Commission. Administrator Jester

will contact NMCWD to see if they are submitting a resolution about limited liability and will provide a recommendation to the Commission if they are not.

[Commissioner Welch left the meeting.]

**F. Consider Administrator’s Request to Attend One Water Summit with Met Council Delegation**

Administrator Jester was invited by the Metropolitan Council to join their delegation to the One Water Summit being held in September in Milwaukee, Wisconsin. She participates in the Council’s 2050 Water Resource Policy Plan Advisory Group. The Council would pay the conference fee. The Commission would pay her time to attend the conference and travel costs. The approximate cost is \$1,805.

**MOTION:** Commissioner Harwell made a motion to approve Administrator Jester’s attendance at and expenses for the One Water Summit. Commissioner Carlson seconded the motion. Discussion was held regarding the possibility of moving the September meeting date so Administrator Jester could attend the entire conference. It was her recommendation to leave the meeting as scheduled. The costs would come from the administrator line in the budget and should not exceed the budgeted amount. The motion carried 7-0, with the cities of Robbinsdale and St. Louis Park absent from the vote.

**6. COMMUNICATIONS**

**A. Administrative Report**

Administrator Jester reminded the commissioners that the next meeting would be at the Westwood Nature Center. Following the meeting staff will be giving a tour. Starting in September she is hoping the Commission will have a permanent home at the Plymouth Community Center.

Administrator Jester reported that Hennepin County commissioners considered the Commission’s maximum levy request at their committee of the whole meeting. There were no questions and it was approved unanimously.

Commissioner Chowan commented that whatever the Commission does to protect the water quality is pennies on the dollar later. Protecting it now is a lot easier than having to clean it up in the future.

**B. BCWMC Intern**

No report was given.

**C. Chair**

- i. Report on Freshwater Event

Administrator Jester reported that she and Commissioner Welch attended this event. Commissioner Welch spoke briefly about BCWMC.

**D. Commissioners**

- i. Commissioner Harwell stated that she met with one of her neighbors who is Native American. She had the opportunity to explain how the Commission works. Her neighbor has concerns about habitat and water quality. They discussed the possibility of an indigenous committee that would look at the environment from the Dakota perspective. She encouraged her neighbor to work with the Commission as the new plan is developed.
- ii. Discussion was held regarding attendance at the Salt Symposium.

**E. TAC Members**

- i. August Meeting Cancelled

**F. Committees**

No reports were given.

**G. Legal Counsel**

No report was given.

**H. Engineer**

No report was given.

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

- A. BCWMC Administrative Calendar
- B. CIP Project Updates <http://www.bassettcreekwmo.org/projects>
- C. Grant Tracking Summary and Spreadsheet
- D. Wetland Conservation Act Notices – Minnetonka, Plymouth

**8. ADJOURNMENT**

**MOTION:** Commissioner Chowhan made a motion to adjourn the meeting at 11:20 a.m. Commissioner Harwell seconded the motion.