memo

Project Name |	BCWD Annual Budget	**Date** |	8/13/2024
To / Contact info |	BCWD Board of Managers		
Cc / Contact info |	Karen Kill, District Administrator		
From / Contact info |	Camilla Correll, PE and BCWD Team		
Regarding |	2025 Budget Recommendations		

Objectives

District staff has developed a list of potential activities for the BCWD Board of Managers to consider during its 2025 budget discussions. These activities reflect what the BCWD could undertake in 2025 and includes projects identified in the BCWD 2017-2026 Watershed Management Plan as well as initiatives identified in the BCWD Plan Amendment and the Brown's Creek Watershed Nine Key Element Bridge Document.

This list is intended to serve as a starting point for Board discussion recognizing that the BCWD Board of Managers will make the final determination on priorities for implementation in 2025.

Proposed 2025 Budget Recommendations

Potential activities are organized under the categories included in the BCWD 2017-2026 Watershed Management Plan as identified below. Only those categories with recommendations for implementation activities are included in this memorandum. Recommended activities that are not identified in the Watershed Management Plan (and would require a plan amendment prior to implementation) are *italicized* and marked "NEW". All the recommendations are summarized in a table on the last page of this memorandum.

- Stormwater Runoff Management (see page 12 of the 2017-2026 WMP)
- Erosion, Prevention and Sediment Control (see page 17 of the 2017-2026 WMP)
- Stream Management (see page 20 of the 2017-2026 WMP)
- Lake Management (see page 25 of the 2017-2026 WMP)
- Wetland Management (see page 29 of the 2017-2026 WMP)
- Floodplain Management (see page 32 of the 2017-2026 WMP)
- Groundwater Management (see page 34 of the 2017-2026 WMP)
- Ecological Health (see page 41 of the 2017-2026 WMP)
- Monitoring and Data Collection (see page 46 of the 2017-2026 WMP)
- Regulations (see page 50 of the 2017-2026 WMP)
- Climate Change Adaptation (see page 54 of the 2017-2026 WMP)
- Education, Outreach and Stewardship (see page 59 of the 2017-2026 WMP)
- Land Conservation (see page 65 of the 2017-2026 WMP)

ENGINEERING FEES

- Engineering Rate Increase – EOR did not request a rate increase in 2024. EOR's rate increase for its Preferred Clients in 2024 was 5%. To bring EOR's 2025 BCWD rates into alignment with the rest of our preferred clients, the District can assume a rate increase of 10% in 2025 (5% for 2024 and 5% for 2025).

Commented [KK1]:
2025 DRAFT Budget Summary:
*2.3% levy increase
*significant increase to staff for implementation activities and education & outreach
*most labor costs increasing 5+%
*CIP maintenance costs increasing as projects age and more projects implemented
*proposal balances implementation activities with planning for future projects
*internal services 8.6% of total budget

Increase Admin services from 1.5 FTE to 2.0 FTE

200-4320 & 300-4320

Commented [KK2]: 200-4500 & 300-4501 10% increase

Legal services increase 5%

Estimated Cost: NA

WATERSHED MANAGEMENT PLAN UPDATE

- BCWD Watershed Management Plan Update – The BCWD Board of Managers approved the scope for the watershed management plan update at the April 10, 2024 Board Meeting. There is $46K in the budget for Watershed Management Plan activities remaining. This remaining budget will likely be used for the wetland inventory and the groundwater dependent natural resources classification system, so it is staff's recommendation that the Board budget an additional $25K in the event that new opportunities come up during the latter stages of the planning process.
  Estimated Cost: $25,000

Commented [KK3]: 927-0000

STORMWATER RUNOFF MANAGEMENT

Includes *Monitoring and Maintenance of Stormwater Management Facilities.*

Operation & Maintenance Costs from CIP Standard Operating Procedures Manual (SOPM) – The costs in the following table reflect the anticipated annual cost from the CIP SOPM unless otherwise noted. Some of the District's projects are approaching the age that require more substantial restoration or replacement than budgeted for annually, e.g., THPP and the IESF. The District may wish to begin planning for these additional costs in their annual budget.

Table 1. Projects that the BCWD has obligated maintenance activities through agreements

Project (Year Complete)	Anticipated Annual Cost
THPP (Flood Mitigation - 2000) *Annual inspection of structures (culverts and drop structures) and infiltration basins (when dry), inspection reporting, vegetation maintenance (spot treatments, weed whipping), prescribed burns. Create a video of how to open the gate valve and a QR code to access the information. Estimated cost for these activities is $6,000.* *Per the THPP Trench Inspection Results memorandum, EOR recommends testing the lower elevations of the infiltration basin following the protocols of a Level 2 Assessment that is used to determine infiltration capacity or rates. The cost to perform that work can be found in the following table and will take approximately 2 days to complete the field testing and 1 to 2 days to prepare a summary of the testing. This work will primarily be performed by a geotechnical testing firm using a Double Ring Infiltrometer or similar device. Estimated cost for these activities is $6,500.*	$15,750
Kismet Basin (Flood Mitigation - 2001) *Annual inspection of structures (culverts & drop structures) & reporting, vegetation maintenance (spot treatments, weed whipping).*	$4,200
State Highway 95 & 96 Fish Baffles (Habitat Improvement - 2011) *Annual inspection & reporting.*	$500
Oak Glen Golf Course Buffer (Habitat Improvement - 2011) *Biannual inspection & reporting.*	$500
Iron-Enhanced Sand Filter at Settlers Glen (Water Quality - 2013) *(1) On-going remote monitoring with seasonal operation inspections. Coordinate pump performance inspection and vegetation maintenance with contractors (incl. estimated contractor cost), annual reporting & SOPM update - $15,000; (2) Filter media replacement budgeting for 2026 - $60,000*	$78,750
Countryside Auto Repair BMP (Water Quality - 2011) *Inspections, clearing of debris, coordination of and including system vacuum cleaning of one underground tank and velocity checks (Tanks - Biennial, last conducted 2022, scheduled 2024).*	$6,300
Brown's Creek Floodplain Restoration Project (2014) *Inspection, vegetation maintenance (mowing, invasive removal, re-plant/seed as needed).*	$4,200
Brown's Creek Park Rock Crib (Water Quality – 2017) *Inspections, clearing of debris, coordination of and including system vacuum cleaning of one underground tank (Tank -Biennial, scheduled 2024).*	$3,150
Long Lake Tributary Headcut Stabilization (Water Quality – 2018) *Inspection & Reporting; vegetation maintenance and managing invasive species.*	$4,200
McKusick Road Water Quality Improvement Project *Coordination of and including system vacuum cleaning of three underground tanks and eight sump manholes (Tanks -Biennial, last conducted 2022, scheduled 2024).*	$20,000

Applewood Golf Course Reuse (Water Quality – 2022) *Compile O& M manual, Operation and Maintenance activities.*	$33,600
Brown's Creek Restoration Project (2024) *Compile O& M manual, Operation and Maintenance activities.* *Inspection, vegetation maintenance (spot-mowing, invasive management/ treatments, reseed as needed) after Fall 2026. Note the Contractor is required to complete vegetation maintenance for 2 years after substantial completion which is anticipated to occur by August 30, 2024.*	$1,700
TOTAL	**$172,850**

Table 2. Projects that the District has an interest in providing maintenance/oversight assistance

Project	Anticipated Annual Cost
Norell Avenue Pond Water Quality Retrofit (2016) *Per the cooperative agreement, BCWD was responsible for inspections the first year following the retrofit and the City of Oak Park Heights will do inspections thereafter. The City's MS4 permit is to cover maintenance needs for this pond. The District may wish to assist the City with inspecting the sediment depth to see that the pond sediment removal efficiency is maintained.*	$500
Indian Hills Golf Course Fen Vegetation Maintenance *BCWD is not responsible for the fen but has conducted this annually in the interest of maintaining the vegetation quality of this unique natural resource.*	$4,200
Oak Glen Golf Course Reuse Water Quality Project (2022) *The golf course is responsible for ongoing operation and maintenance (O&M). The District may consider keeping budget to see that O&M activities are being conducted. These can involve system startup and winterization guidance and coordination, monthly volume accounting end of year pump monitored volume summary (runoff reuse vs. well pumped) and update the O&M Manual.*	$6,800
Tributary Floodplain Restoration Project (2022) *Compile O& M manual, Operation and Maintenance activities ($1,700).* *Three years of site inspections and maintenance are currently under contract with Minnesota Native Landscapes through September 2024. However, the District may have an interest in conducting long-term operation and maintenance work such as vegetation maintenance and occasional prescribed burns. Native species are now established but regrowth of invasive species is likely without long-term management (i.e., spot mowing and/or herbicide treatments, prescribed burning).* *The District could also pursue the following types of management/ restoration work along the tributary floodplain including:*	$14,400

- *Spring 2025: Evaluate the banks that have more severe erosion issues to see if they self-heal as anticipated. If self-healing is lagging, BCWD should pursue active management utilizing materials on-site (e.g., using harvested woody invasive species to create brush bundles for bank stabilization) ($3,200).* - *Pursue additional opportunities for invasive species management along the corridor. The project managed vegetation within 20-50 feet of the tributary but there is a lot of buckthorn beyond that buffer width. BCWD could use any additional budget to perform buckthorn removal outside of the buffer (e.g., similar to work completed for Millbrook buffer). EOR fees to support outreach for these initiatives ($500).* - *Could revisit the Long Lake tributary repair work downstream of the Jackson WMA. There is more work that could be done in this area but would be dependent on landowner approval which was a challenge to secure. The headcut was a small component of the original project so additional work on this tributary would be beneficial. No cost estimate provided at this time due to lack of interest by adjacent landowners.* - *Wetland downstream of Boutwell (between Boutwell and the rock checks installed by the BCWD previously) is also severely downcut and could benefit from an improvement which would bring the wetland elevation up. If there was landowner willingness, this would be a good spot for additional restoration activity. Landowner outreach, site visit, topo survey, and concept design $18,000. Final design & implementation to be developed in 2025 if landowners agreements can be secured.*	
Kittentail / Bluff Prairie Restoration Work *Following initial invasive shrub & tree cutting within the approved MNDOT Highway Sponsorship Program project area in February 2022, EOR will continue to work with MNDOT, BCWD, and WCD to conduct additional invasive species management of the remnant bluff prairies identified in 2023 & 2024.*	$3,200
Brown's Creek Trail Vegetation Maintenance	$2,600
Long Lake Shoreline Vegetation Maintenance	$3,700
TOTAL	**$35,400**

Commented [KK4]: Rounded both of these to $200K in 948 CIP Maint

- BCWD Cost-Share Program - Expand participation in the BCWD's Cost-Share Program by targeting neighborhoods like Rutherford, Marylane Meadows, Gateway, BC Preserve to participate in a rain barrel program or a turf conversion which would offset the impact of additional (incidental) impervious coverage due to patios, decks, sheds, etc.
  Estimated Cost: $20,000 (Technical Assistance) and $30,000 for the cost-share (assume full replacement in 2025)

- Chlorides – Additional chloride monitoring on Long Lake and outreach. Determine if management strategies would benefit from 319 funding; if so, 2026 could use this work to include in the Nine Key Element Plan
- **Estimated Cost: $15,000**

Commented [KK5]: 929-0013 Long Lake Chloride Impairment Assessment

- *E. coli* Source Assessment – The BCWD has evaluated the sources of *E. coli* to Brown's Creek in the past. While evidence points to historic/naturally occurring sources of bacteria, the recommended action has been to continue private education to private landowners to reduce sources to Brown's Creek and coordination with Washington County. As the BCWD works towards its goal of improving stream health and increasing the number of access points along the creek, it will be important to better understand the potential impacts of this water quality concern to public health and safety in this setting. EOR will set up a *E. coli* monitoring plan for locations that have the potential for human exposure. EOR will monitor *E. coli* concentrations throughout the growing season. The data collected would set up a database to understand trends in *E. coli* dynamics along the creek to better understand the risk to human health.
  Estimated Cost: $15,800

Commented [KK6]: 947-0017 Brown's Creek Implementation - Ecoli

- Explore feasibility of using property adjacent to OGGC for location of a rock crib - During the McKusick Road water quality improvement project, the District explored the feasibility of constructing a rock crib on the downstream end of the system along Brown's Creek. While the District decided not to move forward with this component of the project, retrofit of the manholes to connect to a rock crib is possible such that stormwater collected along McKusick Road would be routed to the rock crib before discharging to Brown's Creek. Two sizing options were considered, one that only uses the space within the existing road right-of-way (11,500 Cubic Feet), achieving 15 percent thermal load reduction above the brown trout threat temperature of 18.3°C, and one that is sized to achieve 50 percent thermal load reduction above the threat temperature which would require additional area outside of the right-of-way (69,000 Cubic Feet). The estimated construction cost is $250,000 to $950,000 for these two options.

  This cost estimate reflects the cost to conduct a feasibility study utilizing the performance data for the Brown's Creek Rock Crib for the two options. The revised cost estimates to implement the project would be included in the Watershed Management Plan update so that the work could be completed at a later date using funds made available through the Nine Key Element Plan and/or the Lower St. Croix One Watershed, One Plan.
  Estimated Cost: $26,000

Commented [KK7]: 947-0027 – implementation could be funded with MPCA grant in future cycle

STREAM MANAGEMENT

- Biological Assessment – The goals of BCWD's routine fish and macroinvertebrate assessments are to develop a more robust understanding of the variability of species composition over time and to develop a long-term trend analysis of changes to the biological

community in Brown's Creek in response to on-going water quality projects implemented in the watershed.

At the May 2023 Board meeting, Mike Majeski (EOR) and Joel Chirhart from MPCA reported on the improvements in stream health. During this presentation, the Board discussed the need to conduct macroinvertebrate sampling twice a year. The Board also discussed the changes to fish sampling given that a number of the local universities are no longer providing these services. The Board decided to reduce macroinvertebrate sampling to the collection of fall samples only as recommended by MPCA. In the spring of 2024, the DNR committed to routine fish surveys every 2-3 years so fish sampling services are no longer needed.

Macroinvertebrate sampling will occur in September of 2025, and specimens will be sent to RMB Labs for taxonomic identification. The results of the assessments will be summarized in a brief technical memo that will include a comparison of 2025 data to previously collected data.

Estimated cost: $4,100 (includes lab analysis of samples estimated at $1,800)

Commented [KK8]: 947-0018

- Brown's Creek Cove - At the February 2024 Board meeting, the Board approved moving forward with Task 1 Landowner Outreach to determine if a project is amenable by the four landowners within the proposed project area. If landowner approval is secured, EOR will seek approval from the Board to move forward with Tasks 2 & 3 (geomorphic survey/ site assessment and conceptual design/ drafting, and high-level construction cost estimate).
  Approved Task 1 cost: $2,482. Estimated Task 2 & 3 cost: $15,600

  Final Design & Permitting (2025): Develop draft and final design plans and construction documents/ specs, no-rise certificate, cultural resources survey, wetland delineation, and secure federal/state/local permits. Construction oversight & bidding fees to be part of 2026 Budget Recommendations.
  Estimated cost (excludes construction oversight & public bidding): $58,000

Commented [KK9]: Eligible for 2025-2029 MPCA grant fudning cycle
$320K grant funds available with 40% match.

Showed 40% BCWD and 60% grant
947-0026

From BCWD Watershed Management Plan – Lower Priority Implementation Plan

- Recorded Wetland Buffer GIS Map Data – The BCWD's recorded buffer GIS data was updated in 2018. Since then, the buffer rule has been applied to twelve permits (completed developments or currently under review). The Washington County property viewer does not include this linework, or linkage to the recorded declaration, therefore BCWD maintains and updates this information in-house. The GIS map data will be updated with buffers that are recorded through 2024, and it will be linked to a database containing the recorded declaration for each permit.
  Estimated cost: $10,500

Commented [KK10]: 300-4704 Permit database

LAKE MANAGEMENT

- Monitor for aquatic invasive species – BCWD has established a protocol for monitoring aquatic invasive species on School Section, Lynch, Goggins and Benz Lakes on a 3-year interval. The last survey for South School Section, Goggins, and Benz was completed in 2022. Lynch Lake has not been surveyed in more than 5 years. The previous survey conducted on Lynch Lake identified a endangered plant species. A survey is recommended for all four lakes in 2025. This survey would also validate the presence/absence of the previously identified endangered species.
  Estimated cost: 15,000

- Local Long Lake Improvements – Upcoming development activities in the drainage area to Long Lake presents an opportunity to work with the development community to achieve more stormwater management that what is required within the existing regulatory framework. The BCWD could set funding aside to:
  - Waive the permitting fees for any site that achieves no net increase in stormwater runoff up to the 100-year, 24-hour event (i.e., matching what was achieved for the Bradshaw development)
  - Cost-sharing in the implementation of a demonstration project (i.e., installation of a green roof or a stormwater capture and use system)
  - Conducting the engineering analysis for more complicated components of the stormwater management plan (which would be similar to the role that the BCWD played in the TH36/CSAH15 stormwater reuse project)

  Estimated Cost: $100,000

- Brewers Pond Drainage Area BMP Assessment – Water quality has been declining in Brewers Pond and erosion issues have been identified along the storm sewer outfall from Northland Avenue. Northland Avenue and Court both drain to Brewers Pond without any stormwater treatment. This feasibility study will involve reviewing treatment options along the street as well as within the drainage and utility easement for the storm sewer corridor to Brewers Pond. Initial steps will involve utility investigation, topographic survey of select areas, and soil exploration, as needed. The City of Stillwater will be engaged to gather background information and discuss potential partnerships.
  Estimated Cost: $15,750

- De-listing Long Lake - Long Lake is ready to be removed from the impaired waters list. The delisting process requires data summary and correspondence with the Minnesota Pollution Control Agency (MPCA). EOR will summarize the data to show the required standards and trend analysis is being met. EOR will coordinate correspondence with the MPCA throughout the de-listing process.
  Estimated Cost: $3,700

Commented [KK11]: 959-0004 Resource Assessment AIS

Commented [KK12]: 929-0000 Long Lake Implementation

Commented [KK13]: 929-0014

Commented [KK14]: 929-0000 Long Lake

- Coordinating De-listing Event - Removing a lake from the impaired waters list is a momentous accomplishment that should be celebrated by the community that made it possible. EOR will coordinate with BCWD to host a celebration for Long Lake that brings together the County, City of Stillwater, residents, state representatives from BWSR and MPCA, etc. The event will celebrate community partnership and all the work that has been done over the past decade to delist Long Lake. At the event, EOR will present engineering work that has been done to achieve the delisting. EOR will partner with BCWD and Washington County to coordinate space rental and refreshments.
  Estimated Cost: $5,000

Commented [KK15]: Combined all Long Lake 929-0000

WETLAND MANAGEMENT

- Mendel Wetland – Given the 2021 drought, and lack of data, groundwater monitoring was carried through 2022. Provision for further restoration concept refinement and associated cost-benefit analysis and/or landowner engagement is recommended for 2025 ($31,500 estimated for 2023 budget).
  Estimated Cost: $35,000

Commented [KK16]: 961-0000 Mendel Wetland

FLOODPLAIN MANAGEMENT

- Hydrologic and Hydraulic Model Update – The BCWD H/H model is typically updated every few years to reflect new development land use, or land cover changes, as well as new hydraulic structure data.
  Estimated cost: $5,500

Commented [KK17]: 923-0000

- 2D Evaluation in Market Place - Review of the Atlas 14 100-year rainfall event in the Long Lake drainage area revealed flooding concerns around stormwater ponds within this urban area of the subwatershed. The modeled flood footprints will result in road overtopping along County Road 5, Washington Avenue, the Trunk Highway 36 Frontage Road, and Curve Crest Boulevard. The pond flooding footprints have impacted re-development decisions near the Lakeview Medical ponds and Washington Avenue Pond, e.g., Curio Dance Permit 23-10, future Lakeview EMS service center garage. Model refinements are required to better characterize the flood extent, the timing of this potential flooding, and overflow routes. It is recommended that a 2-dimensional hydraulic model be created for discrete portions of the Marketplace Area. This will allow the District to conduct a more thorough analysis of the flood risk and create visualization tools which will help the City, local businesses and residents better understand potential for flooding in this portion of the subwatershed. The Stillwater storm sewer GIS data does not contain comprehensive information for model construction. Surveying and updating the GIS with as-built information is assumed to be accomplished by the City of Stillwater or assumptions can be made within the model for invert and pipe slope. The accuracy of these parameters is less important when the objective is flooding review since storm sewer systems are often designed for the 10-year event and larger events result in overland and street flow. In addition to model construction, visualizations such as inundation mapping, reporting, and presentations to District staff, Board, and city are

assumed. Next steps will be identified, though iterations of proposed improvements would be part of a future phase.
Estimated cost: $37,000 (Carry-forward from 2024 Budget Recommendation as this isn't anticipated to occur in 2024)

Commented [KK18]: 923-0000

- Modifications to Long Lake Outlet Structure – The elevation of the Long Lake outlet structure was based on studying high water levels and lake uses when the 100-year event was 5.9 inches in 24 hours versus 7.2 inches predicted now. The greater rainfall depth results in a higher lake water level that increases the risk of flooding on additional properties on the east side of the lake. The 2020 Long Lake Flood Risk Evaluation identified the number of properties that are at risk of flooding for events up to the 500-year event. It also included an analysis of how removal of the weir wall on the outlet structure could reduce flood risk for roads and properties surrounding the lake. To further assess this scenario, a feasibility study will be conducted to quantify impacts of removing the weir such as average seasonal water levels, wetland, residential, and recreational uses. Required permits will be explored as well as outlining necessary community engagement, and cost estimating.
  Estimated cost: $30,000

Commented [KK19]: 923-0003

GROUNDWATER MANAGEMENT

Groundwater Level Measurements

- Annual Groundwater Level Measurements - EOR recommends that BCWD continue to collect groundwater levels from its network of residential and golf course wells once every year. By sponsoring this data collection effort over several years, BCWD has started to accumulate a significant database of changing groundwater elevations over time in different aquifers and in different parts of the district. This data has been helpful in documenting and understanding the very low baseflow observed in Brown's Creek in 2013 and the extraordinarily high water levels experienced in Kimbro Basin in 2020. The data has also been useful in calibrating the regional groundwater model produced by consultants for 3M. The key value to this data has been the consistency in data collection and the duration of the data set.
  Estimated cost: $4,700

Commented [KK20]: 942-0004

Groundwater Coordination

- Continue to participate in the North and East Metro Groundwater Management Area Plan project advisory team.
- Provide government agencies with new information so that the North and East Metro Groundwater Model can be updated. DNR and Met Council continue to revise and improve the model. Working with their consultants to add BCWD data to the DNR model will help in the future when BCWD is ready to create a groundwater model that focuses on Brown's Creek.

- Continue to participate in meetings held by the Metropolitan Council to discuss the groundwater model being used to investigate the impacts of climate change on TCMA groundwater levels.
- Continue to investigate the effect of high volume pumping wells on Brown's Creek. This could include reviewing pumping records from Oak Glen golf course wells (and the new stormwater reuse system) and the City of Stillwater wells. Pumping records would be compared to changes in groundwater levels recorded in DNR observation wells and in stream piezometers (if installed in 2023).
- Continue discussing the possibility of installing other observation wells as part of MNDNR's Observation Well Program.
- Collaborate with the Minnesota Department of Health to resolve differences In the Drinking Water Supply Management Areas (DWSMA) and aquifer vulnerability assessments delineated by Stillwater and Oak Park Heights.

Total Estimated Cost: $8,500

Commented [KK21]: 942-0011

ECOLOGICAL HEALTH

See the activities identified as part of the Interactive Unique Species Inventory in Education and Outreach.

MONITORING AND DATA COLLECTION

- Weather Station - Continue collecting climatology data in 2025. This information is being collected to support a variety of District programs such as hydrologic and hydraulic model upgrades and calibration (which require 15-minute precipitation data), thermal modeling efforts, and other projects including the Settlers Glen iron-enhanced sand filter, THPP, and the Biological Monitoring Program. Recommend calibrating precipitation logger and making any replacements to sensors if needed.

  Estimated cost: $3,900

Commented [KK22]: 957-0000

- THPP Monitoring – The BCWD has committed to monitoring the THPP on a 3-year cycle and the last monitoring effort was completed in 2021. As a result, it is recommended that the District budget for the installation of 3 level loggers to monitor infiltration rates at the Basin 1-3 complex, as well as a temperature logger at the THPP outlet to record temperatures during discharge events. This budget includes infiltration data analysis and preparation of a memorandum.

  Estimated cost: $6,500 (carry forward)

Commented [KK23]: 903-0001

- Comprehensive Stormwater Structure Inventory – The Management Plan includes an estimated cost of $20,000 to develop a comprehensive stormwater structure inventory database, combining and categorizing all surveyed structures with available structure data from the communities within the District. Washington County is in the process of inventorying the stormwater structures, though a completion date remains unknown. Oak

Park Heights recently became an MS4 community in which the Stormwater Pollution Prevention Program requires storm sewer mapping and waterbody inventorying. It is recommended that the District's Stormwater Structure Inventory follow the completion of the community datasets. However, this may be a more valuable initiative if it were to expand county-wide which is perhaps more appropriately led by Washington County with input from all communities, watershed districts and organizations. District staff will plan to meet with Washington County to explore the need to create a clearinghouse for establishing and maintaining a centralized stormwater structure atlas.

Estimated cost: TBD (pending conversations with Washington County and Water Consortium)

REGULATIONS

Rule Review

- Rule Revisions – As the District continues to implement its rules, it evaluates the how well the rules are understood and applied via the permitting program. In 2024, the BCWD will be hosting conversations with member communities and the development community which will explore the need to make updates/revisions to the current rules and/or regulatory program. This cost estimate reflects potential updates to the rules in 2025 as a result of these discussions.

  Estimated cost: $30,000 (carry forward)

Commented [KK24]: 909-0000

CLIMATE CHANGE ADAPTATION

See the activities identified as part of the H/H model update.

EDUCATION, OUTREACH AND STEWARDSHIP

Most of the BCWD's education and outreach activities are carried out by the East Metro Water Resources Education Program (EMWREP) with supplemental (i.e., project specific) outreach being carried out by increased administrative staff services and/or EOR. EMWREP is being proposed to increase from 1.5 FTE to either 2.0 FTE or 3.0 FTE.

Estimated cost: 3.0 FTE - $31,000

Commented [KK25]: 300-4810

EMWREP Activities included management plan activities:

- Groundwater Education - Develop and implement an expanded education program for citizens and public officials on the interaction between groundwater and surface water, why water levels are so high, the value of and need to protect groundwater recharge areas and wetlands, and implementation of BMPs and LID and redevelopment strategies to protect groundwater resources.

  Estimated cost: Included in the overall budget recommendation above.

- Maintenance Programs – In an effort to improve relations and provide support to member communities, the BCWD could offer to develop education, outreach, and communications on the subject of stormwater BMP maintenance. These communications would be developed to

speak to a range of audiences in the watershed including residents, commercial businesses, service-related businesses (i.e., landscaping and snow removal businesses), developers, etc. to help them better understand the need for and importance of effective maintenance activities.
Estimated cost: Included in the overall budget recommendation above.

General Education and Outreach Activities:

Ongoing actitivies such as annual community event, signage, event materials
Estimated cost: $25,000

Commented [KK26]: 910-0000

New Education and Outreach Efforts: These activities are priced for support from EOR; however, if increase in administrative services from 1.5 to 2.0 FTE, several of these activities could fit within that budget/hours.

- Expanding the District's Network / Partnership Development:
  - **Coffee, Conservation and Conversation Series –** EOR or expanded staff to design and implement a twice annual coffee social inviting watershed partners and the public. Events will include opportunities for conversations about work underway by the watershed and identify evolving connections between watershed partners, the public, and the BCWD's work.
  - **Seasonal Partnership Events** – EOR or staff to assist with the identification of event opportunities in Spring, Summer, and Fall for the BCWD to participate in. EOR will assist BCWD with the preparation of a checklist of base materials to use at all events. EOR will provide additional support for specific events if there are localized projects or initiatives to highlight in addition to the base event materials

  Estimated cost: $15,000

- Awards and Ribbon-Cutting Program – EOR or expanded staff to provide support with the design and implementation of up to three (3) ribbon-cutting events to highlight projects implemented by the BCWD such as new rain gardens, stream restorations, etc. to raise awareness of BCWD's and its partners' roles in implementing these projects and their connection to watershed issues. EOR will prepare display materials highlighting information about the project, support organizing the logistics of the ribbon-cutting event and attend events to help speak to details of the project.
  Estimated Cost - $4,500

- HOA Maintenance Support – Engineering support to address the questions people have regarding maintenance of stormwater BMPs and how to create the materials needed to provide education and outreach re: maintenance. This may include support for an annual HOA conference. This equates to half of the estimated cost or $10,000. Additionally, it is recommended that the BCWD provide an additional $10,000 to provide support to the UMN HOA Stormwater Certification Program (i.e., pay for an HOA representative to participate in the program).

Estimated cost: $20,000

- Flood Management Program – While the discussion of Flood Management will be important to revisit as part of the watershed management plan update, the District may want to budget for those items identified during the BCWD Plan Amendment discussions which took place in 2022:
    - Develop outreach and guidance materials (or make existing materials available) related to flood-risk management. (Assume $2,500)
    - Develop a request for proposals template for homeowners seeking engineering design and construction services. (Assume $4,000)
    - Provide technical assistance to homeowners experiencing or at risk of flooding. (Assume $2,500 each instance)

  Estimated Cost - $16,500

- Youth Engagement – During the Enhanced Engagement interview process, Karen Kill connected with Julie Balfanz from Synergy Project which is working with Stillwater Public Schools. Synergy Project focuses on working with middle school and high school students to use Minecraft as an educational tool. By building spaces at various scales in Minecraft, students learn to apply technology to everyday problems. Following the interview, Julie worked with her students to build a Minecraft digital twin of the Brown's Creek watershed. If the BCWD Board of Managers are interested in supporting this educational program and engaging with a sector of the public which it hasn't had a lot of engagement with historically, it is our recommendation that the Board set aside funds to continue the development of the Brown's Creek watershed simulation. This exercise could be tailored to engage younger audiences in the exploration of issues/concerns related to the watershed management plan update.

  Estimated Cost - $15,000

- Interactive Unique Species Inventory – One of the initiatives started during the 2017-2026 Watershed Management Plan is the Unique Species Inventory. The goal for this project was to better describe the physical characteristics of Brown's Creek within the headwaters, middle section, and lower portions of the system as well as the flora and fauna that is supported by the stream and it's surrounding habitat. Since the 2017-2026 WMP Update, the BCWD has identified a number of new species which should be added to the inventory. Additionally, CAC members have been keeping a comprehensive list of plant, animal and bird populations at the 110th Street property which could be added to the database. As a next step, it is recommended that the Unique Species Inventory be updated to reflect all of the information collected to date and that the District develop a more interactive tool for the public to engage in this work. This cost reflects updates to the Story Map which was created during the 2017-2026 WMP as well as the development of an iNaturalist project so the public can more easily (and accurately) contribute to the District's database.

  Estimated cost: $7,500

Total Estimated cost: $78,500

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LAND CONSERVATION

- Acquisition of Easements – The BCWD has been setting aside funds for the potential acquisition of property as the opportunity arises (e.g., acquisition of the property at 110th street in partnership with Washington County). The District currently has $100K in its budget for a future acquisition and should plan to grow this by $50K annually.
  Estimated cost: $50,000

- Easement Restoration – The BCWD has an easement over the property at 110th Street which is called the Brown's Creek Conservation Easement. In 2017 the District developed the Brown's Creek Conservation Area Management plan which identifies restoration activities for this easement. The following budget amount builds the funds available for larger restoration efforts slated for the future.
  Estimated cost: $25,000

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