minutes

Project Name |	Brown's Creek Watershed District (BCWD) Watershed Management Plan Update	**Date** |	2-25-2025
Meeting Location |	Washington County Conservation District Office		
Regarding |	Watershed Management Plan Update; Floodplain Management; Groundwater Management; Erosion Prevention and Sediment Control		
Attendee(s) + Info. ***Full attendance in Appendix A*** |	TAC Members CAC Members District Staff and Consultants		
Recorded By |	Alexander Furneaux, EOR		

Meeting Overview

EOR staff attended the Technical Advisory Committee (TAC) meeting to lead a discussion on three Issues that will be revised as part of the BCWD Watershed Management Plan (WMP) update. Camilla and Alexander provided a summary of the work completed since the TAC last met, including updating them on the CAC and Board meetings, and the list of Issues to be discussed with the TAC. EOR also shared the approach to considering climate change impacts and DEI in the planning process. The remainder of the meeting was used to discuss three Issue categories "Floodplain Management", "Groundwater Management", and "Erosion Prevention and Sediment Control".

TAC members were asked to identify concerns/threats, management strategies, monitoring opportunities, and engagement opportunities associated with these Issues. Of importance was understanding how these Issues are evolving and what updates are required to ensure the relevance of the Issue for the coming 10 years.

Discussion

The following summary of the meeting discussion includes input received from the TAC during the meeting, input on these Issues received following the meeting (if any), and input on the Issue received through prior engagement as part of the Watershed Management Plan Update.

This input is summarized in **Table 1, Table 2,** and **Table 3.** Information from these tables will be used to update the following subsections of the Issue Statements in the Plan in the following ways:

- **Concerns/Threats –** Informs potential updates to the General Issue Statement (3.X.1), Relevance to the District (3.X.2), and Sub-Issue Areas (3.X.3).
- **Management Strategies –** Informs potential Goals (new or updated).
- **Monitoring Opportunities -** Informs potential Implementation Items (new or updated).
- **Engagement Opportunities –** Informs potential Implementation Items (new or updated).

Other Topics

Through discussions on these Issues, additional considerations were noted related to the Lake Management issue:

- Follow-up with landowners to understand where well and septic systems are located. Most people responded during previous outreach efforts however there are a few the BCWD didn't hear back from. These are the 180 gaps noted in the presentation table under "Accomplishments: Floodplain Management" (Slide 10).
- MDH noted private wells are not included in the County well index.

  - EOR used the County Well Index and MN Well Index Data layers, and acknowledged there are gaps. For example, location reporting was not required until the 1970s meaning some wells pre-dating the requirement may not be captured.
- MDH has educational materials on well protection they can share. This should be referenced in the Plan. Also included risks and steps homeowners can take from community meeting presentations.
- Consider in the Land and Water Resource Inventory (LWRI). There are no Nonmunicipal Community Water Supply Systems servicing residential properties in the BCWD. They are just servicing workplaces and schools. If we want more information about which workplaces and which schools, contact MDH.
- Verify DWSMA for City of Minneapolis drinking water system. Include in LWRI if applicable.

Table 1. Floodplain Management

	Concerns/Threats	Management Strategies	Monitoring Opportunities	Engagement Opportunities
Within the Plan Currently	• Loss of flood storage • Groundwater contributing to flooding • Urban flash flooding • Determining roles and responsibilities of the District (e.g. Kimbro Basin flooding) • More severe precipitation events and prolonged wet cycles • Flooding in landlocked basins	• Ensuring no net loss of flood storage through regulatory standards • Assessing potential for flooding • Special attention to minimizing flood risk in landlocked basins	• Lake level and stream flow monitoring	

New to the Update	• Inadequate freeboard • Insurance companies pulling coverage • Changes to FEMA floodplain footprints • Soil compaction during development still an issue • Deteriorating soil health • Flooding impacts to wells • Reduced infiltration in high intensity storm events • DEI consideration: days without clean drinking water when wells flooded	• Flood vulnerability assessment with H/H model updates to NOAA Atlas 14 • Greater regional stormwater management • Acquisition of at-risk properties where there are co-benefits, identifying qualifying co-benefits • Rule language change; allow mitigation without exacerbating on-site flood risk • Partnering with cities to implement stormwater management retrofits or regional treatment solutions • Green infrastructure and soil health BMPs • Turf reduction programs • Public ownership of stormwater facilities (stormwater ponds in outlots) • Update to Atlas 15 when it comes out • Requiring planning for existing conditions in the Rules while providing information about projected conditions ○ High value, critical, and infrequently replaced infrastructure should be futureproofed to projected conditions • Consider active management with a smart outlet system • Discussion of cost-benefit of maintaining water levels for some on Long Lake while risking flooding to others	• Identify large waterbodies where rising water levels could threaten infrastructure • Mapping areas of flooding and intersections with infrastructure (e.g. septic systems, lift stations, and other infrastructure)*, to date only done for lakes in the District* • Collaboration with HOAs on monitoring and identifying flooding issues • Met Council Blue Dot Model/Localized Flood Map Screening Tool	• Help landowners better understand their changing flood vulnerabilities (requiring mitigation to current levels, while informing about projected levels) • Using updated H/H model in municipal comprehensive review process to understand vulnerabilities and develop a comprehensive approach. • Sharing data with communities, neighborhoods, and County as a technical resource, including emergency management • Engage emergency management professionals in floodplain mapping review • Community reporting. Social media campaign to get pictures of where flooding is happening to help ground-truth the model • Determine watershed role in emergency flood preparedness and resident education

Table 2. Groundwater Management

	Concerns/Threats	Management Strategies	Monitoring Opportunities	Engagement Opportunities
Within the Plan	• Groundwater flooding • Maintaining baseflow to groundwater dependent natural resources	• Working towards pre-settlement conditions • Sealing unused wells • Regulatory standards • Groundwater preservation practices	• Groundwater data collection (only monitoring level currently) • Groundwater data sharing with municipalities	• Lawn and road maintenance BMPs
New to the Update	• PFAS contamination • Chloride loading changing soil structure, sealing off infiltration • Data centers and high-volume water users • Reduced groundwater availability in drought • Potential for increase groundwater temperature (warmer water infiltrating) impacting baseflow temperature to resources • Soil compaction during development still an issue • Deteriorating soil health • Flooding impacts to wells • Reduced infiltration in high intensity storm events due to climate change • Pet waste • Potential impacts of geothermal heat exchange from buildings to ground and groundwater system; *adoption of the technology is still low so impact is likely small but may evolve in future, not studied well.*	• Abatement of unused septic systems • Limiting infiltration and pollution generating development in high vulnerability DWSMAs • Soil amendments and enhancements • Incentivize healthy soil systems to reduce irrigation needs (e.g. native and drought-tolerant landscaping) • Ordinances for groundwater conservation • Discouraging groundwater-based irrigation systems • Incentives for septic inspection	• Groundwater monitoring in landlocked basins • Consider monitoring groundwater temperature	• Promoting mindful use of groundwater; education regarding septic systems, salt storage and application, overuse and degradation of groundwater; water testing resources • PFAS engagement • Promoting water harvest and re-use rather than groundwater pumping for irrigation • Support local governments in drought plan development • Identify groundwater impacts for local plan reviews • Engagement with MPH

Table 3. Erosion Prevention and Sediment Control

	Concerns/Threats	Management Strategies	Monitoring Opportunities	Engagement Opportunities
Within the Plan Currently	• Soil disturbance due to development • Soil disturbance due to agriculture, *being deemphasized in the Plan given declining agriculture in BCWD*	• Cost-share erosion and sediment control retrofits by private properties • Addressing bluff instability projects • Assistance for agricultural landowners implementing soil BMPs, *supporting WCD work going forward*	• Annual stream channel assessments (alternative foot surveys and drone flights) • Determining sediment and chloride loading from gravel roads and parking lots • Site inspection during construction to monitor erosion and sediment control	
New to the Update	• Soil moisture variation impacting its functions and values • Shoreline erosion under climate change and wind erosion ○ DNR noted ice ridges/heaving can have benefits, residents have the option to leave these in-place. **Cross reference in Lake Management.** • Deteriorating soil health • Upland and shoreline invasive species increasing erosion • Soil movement due to development and HOA landscaping • Chlorides in dust suppressants	• Rule revision allowing natural landscapes as a stormwater BMP in new development to meet permit requirement • Rotational livestock (sheep, goats) grazing to maintain turf in parks/HOAs • Incentive program for turf conversion retrofits • Invasive species management • Enforcement of topsoil and soil compaction mitigation regulations • Manage utilities (including irrigation) to better facilitate soil restoration and protection to promote health	• Soil chlorides • Inventory degraded soil areas e.g. Buckthorn denuded slopes • Soil restoration load reduction benefits study	• Share MDA, BSWR, DNR and other actions related to limiting soil disturbance; e.g. new homeowner packets, Lawns to Legumes promotion • Work with HOAs to see value in biodiverse and resilient landscapes and their ongoing habitat, stormwater management, and improved water quality • Educate developers and HOAs regarding value of low disturbance landscapes • Buckthorn removal events • Working with County Master Gardeners • Hobby farm education regarding BMPs

Appendix A – Attendance

TAC Members

- Jen Kader, - Met Council
- Debra Sahulka- BCWD board
- Celia Wirth-BCWD Board
- Dan Scallon- MN DNR
- Jay Riggs-WCD
- Abby Shea- MDH
- Anneke Munsell - MDH
- Jesse Farrell- City of Stillwater
- Michelle Jordan- BWSR
- Kate MacDonald- MPCA

Staff

- Karen Kill
- Hannah Peterson
- Camilla Correll
- Alexander Furneaux