

Project Name	Brown's Creek Watershed District (BCWD) Watershed Management Plan Update	Date	8-20-2024
Meeting Location	Stillwater Public Library		
Regarding	Watershed Management Plan Update; Stormwater Management; Stream Management		
Attendee(s) + Info.	TAC Members		
Full attendance in Appendix A	CAC Members		
	Board Members		
	District Staff and Consultants		
Recorded By	Alexander Furneaux, EOR		

Meeting Overview

EOR staff attended the Technical Advisory Committee (TAC) to lead a discussion on two issues in the BCWD Watershed Management Plan (WMP) update. Camilla and Alexander provided a summary of the initial plan meeting of the WMP, the work completed since the TAC last met, and the list of issues to be discussed with the TAC. The remainder of the meeting was used to discuss two issue categories “Stormwater Management” and “Stream Management”.

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** and **Table 2**, and separated by content discussed that is Within the Plan Currently¹, New to the Update, or Out of Scope of the District’s authority (if applicable).

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).

¹ This refers to content within the Plan currently that was discussed by TAC members. More content on the Issue is available but was not referenced by participants.

Table 1. Stormwater Management

	Concerns/Threats	Management Strategies	Monitoring Opportunities	Engagement Opportunities
Within the Plan Currently	<ul style="list-style-type: none"> • Poor maintenance record of BMPs, some residents find maintenance challenging; HOAs not investing in maintenance. • Developers under-designing stormwater management for property alterations (e.g. pool, larger driveway). • Infill becoming more challenging to proactively address needed changes. • Stormwater is considered late in the development process. • Increasing impervious surface, generally. 	<ul style="list-style-type: none"> • Improving relationships between township leadership and BCWD Board. • Retrofit opportunities remain on areas before watershed rules (stormwater treatment in Croixwood for Long Lake). • Reviewing rule triggers to reflect current state of infill development. • Continue conservation easement/credits. • Below-ground storage with optiRTC. • Maintenance cost-sharing with BCWD. 	<ul style="list-style-type: none"> • Examine monitoring to optimize data efficiently. • Continue partnering with SAFL connecting monitoring to latest research. 	

	Concerns/Threats	Management Strategies	Monitoring Opportunities	Engagement Opportunities
New to the Update	<ul style="list-style-type: none"> Greater consideration of the ramifications (cost) if operation and maintenance needs are not met. <i>BCWD has not conducted a cost-benefit analysis.</i> 	<ul style="list-style-type: none"> Revisiting rules regarding infiltration, MDH willing to review/strength with guidance for ground/drinking water protection. Encouraging oversizing BMPs based on anticipated climate change impacts to precipitation. Targeted restorations that would reduce flooding. Encouraging natural landscaping for new large lot developments; developing rules to discourage blue grass lawns. Sensitivity analysis ensuring freeboard is sufficient for 200-year events. <i>Tie-in to Floodplain Management.</i> Incorporate larger scale water reuse opportunities (challenging for internal use due to code). 	<ul style="list-style-type: none"> Support/partner on efforts to understand impacts of infill groundwater quality. <i>Tie-in to Groundwater Management.</i> Groundwater monitoring in response to pumping/wells in north. <i>Tie-in to Groundwater Management.</i> PFAS surface water monitoring. 	<ul style="list-style-type: none"> Educating new HOA owners when the development is completed, plus a 5-year follow-up. Sharing stormwater management resources with approachable language. <i>Tie-in to Groundwater Management.</i> Using multiple communication approaches (e.g. signage, social media) to share information. <i>Tie-in to Groundwater Management.</i> Personalizing stormwater management experiences to make them more relatable. <i>Tie-in to Groundwater Management.</i>

	Concerns/Threats	Management Strategies	Monitoring Opportunities	Engagement Opportunities
Out of Scope		<ul style="list-style-type: none">• Ordinance change to encourage preferred development patterns/outcomes. <i>BCWD does not have land use authority, can work with municipalities to explore and encourage other development patterns</i>• Protect mature trees in development (conservation development approach), strengthen tree replacement policies. <i>BCWD cannot regulate this but can work with municipalities to establish goals.</i> <i>Tie-in to Land Conservation.</i>		

Table 2. Stream Management

	Concerns/Threats	Management Strategies	Monitoring Opportunities	Engagement Opportunities
Within the Plan Currently	<ul style="list-style-type: none"> Climate change resulting in more short but intense storms, less infiltration, more runoff (TSS, nutrient runoff, erosion, water temperature issues). Increased impervious surface and turfgrass conversion. Over pumping of groundwater due to increased development. Denuded soils in floodplains and gorge slopes due to Buckthorn, TSS impacts. 	<ul style="list-style-type: none"> Promoting natural landscapes, reduce turf grass. Habitat, wetland, and floodplain preservation. Remediating the Brown’s Creek buffer zone to improve water quality. 	<ul style="list-style-type: none"> Most critical: TSS, stream temperature, dissolved oxygen, flow monitoring, and nutrient concentrations. Habitat monitoring surveys (birds and plants). 	<ul style="list-style-type: none"> Demonstration projects for native plantings and education about turf alternate options. Involving leaders, attending Council meetings. Support for local permit reviews. Engaging community development and land use planners (Met Council subregional engagement).
New to the Update	<ul style="list-style-type: none"> PFAS contamination Chloride from SSTS (water softener). Areas of unknown legacy loading, CMSCWD working on this. 	<ul style="list-style-type: none"> Separate areas of concern by the north and south portions of the watershed, different concerns. <i>Would create a new format for the Plan.</i> Reduce irrigation <i>from the groundwater system. Water conservation strategy. Tie-in to Groundwater Management.</i> 	<ul style="list-style-type: none"> Important to monitor trends in PFAS and chlorides. Challenge to determine frequency of monitoring. 	<ul style="list-style-type: none"> Continuing education credits and targeted engagement for developers, HOA maintenance management companies. Education on soil health.

Appendix A – Attendance

Roles	Name	Organization
Board	Klayton Eckles	
	Celia Wirth	
CAC	George Vania	
	Anne-Maule Miller	
TAC	Abby Shea	Minnesota Department of Health
	Jen Kader	Metropolitan Council
	Jay Riggs	Washington Conservation District
	Mike Isensee	Carnelian-Marine St. Croix Watershed District
	Dan Scallon	Minnesota Department of Natural Resources
District Staff	Karen Kill	Brown's Creek Watershed District
	Cameron Blake	
	Camilla Correll	Emmons & Olivier Resource Inc. (EOR)
	Alexander Furneaux	