WATERBODY & WATERSHED QUALITY

Issue Statements, Desired Future Conditions, 10-year Goals: APPROVED FEBRUARY 2024 & AUGUST 2024

Impaired Waters – High Priority

Issue Statement: Some lakes and streams within the Bassett Creek watershed do not meet State water quality standards; some are listed as impaired for aquatic life function and recreational use due to pollutants such as nutrients, chloride, bacteria, and other stressors.

Desired Future Condition	Goal (10-year)	Implementation Activities (some potential examples; highlight = new activity) – estimated costs in 2023 dollars	
Water quality in priority waterbodies meets or is better than applicable State water quality standards	1. Achieve State eutrophication standard in Medicine Lake (see table)	- Assess TMDL implementation status and existing conditions ($ TBD; scope being developed) - Manage curly-leaf pondweed in Medicine Lake ($14,000) - Assess feasibility/perform alum treatment to manage sediment TP load - CIP - Identify and implement stormwater treatment projects in tributary subwatersheds – CIP - Provide education to lake homeowners including shoreland restoration workshops – new activity ($5,000) - Encourage/fund buffers on private lakeshore property – new activity ($10,000) - Monitor Medicine Lake water quality ($14,000 every 3 years) - Review development and redevelopment projects for compliance with BCWMC standards (fee for service) - Ensure compliance with BCWMC standards (enforce/inspect) – new activity ($ unknown)	
	2. Make statistically significant improvement in water quality toward achieving State eutrophication standards (see table) in: o Northwood Lake o Lost Lake	- Perform subwatershed analyses for Lost and Northwood Lakes (or cooperate on TMDL) – new activity (one time $50,000 possible estimate) - Identify and implement stormwater treatment projects in tributary subwatersheds – CIP - Provide education to lake homeowners including shoreland restoration workshops new activity ($5,000) - Encourage/fund buffers on private lakeshore property - new activity ($10,000) - Monitor water quality of Lost and Northwood ($71,000 every 3 years) - Review development and redevelopment projects for compliance with BCWMC standards – fee for service - Ensure compliance with BCWMC standards (enforce/inspect) – new activity ($ unknown)	

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Desired Future Condition	Goal (10-year)	Implementation Activities (some potential examples; highlight = new activity) – estimated costs in 2023 dollars	
	3. Maintain current conditions or improve water quality in priority lakes currently meeting State eutrophication standards: ○ Cavanaugh Pond, Crane Lake, Parkers Lake, Sweeney Lake, Twin Lake, Westwood Lake, Wirth Lake,	- Monitor water quality of priority waterbodies ($30,000/lake every 1 to 3 years) - Cooperate on any future TMDLs – new activity ($ unknown) - Review development and redevelopment projects for compliance with BCWMC standards – fee for service - Ensure compliance with BCWMC standards (enforce/inspect) – new activity ($ unknown) - Education and outreach to watershed residents ($46,000 current education programs)	
	4. Reduce sources of bacteria to Bassett Creek Main Stem, North Branch Bassett Creek, Plymouth Creek, and Sweeney Branch Bassett Creek	- Establish baseline of bacteria concentrations – new activity ($20,000 possible estimate) - Identify possible sources – new activity ($20,000 possible estimate) - Install signage regarding pet waste and other best practices to reduce bacterial loading - $0 (city expense) - Identify and implement projects to improve shoreline integrity along priority streams (indirect benefit) – CIP - Continue to participate in the Metropolitan Council's watershed outlet monitoring program (WOMP) ($27,000) - Education and outreach to watershed residents ($46,000 current education programs) - Promote goose management (coordinates with lakeshore management)	
	5. Maintain or improve water quality in priority streams to achieve State eutrophication standards (see table) – Bassett Creek Main Stem, North Branch Bassett Creek, Plymouth Creek, and Sweeney Branch Bassett Creek.	- Identify and implement projects to improve shoreline integrity along priority streams - CIP - Identify and implement watershed stormwater treatment projects - CIP - Continue to participate in the Metropolitan Council's watershed outlet monitoring program (WOMP) ($27,000) - Review development and redevelopment projects for compliance with BCWMC standards – fee for service - Ensure compliance with BCWMC standards (enforce/inspect) – new activity ($ unknown)	-

Impaired Waters – High Priority

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Desired Future Condition	Goal (10-year)	Implementation Activities (some potential examples; highlight = new activity) – estimated costs in 2023 dollars	
		- Education and outreach to watershed residents ($46,000 current education programs)	
	6. Maintain total phosphorus loading to the Mississippi River of 0.35 lb/acre/year or less (as defined in the Lake Pepin TMDL)	- Identify and implement watershed stormwater treatment projects - CIP - Continue to participate in the Metropolitan Council's watershed outlet monitoring program (WOMP) ($27,000) - Review development and redevelopment projects for compliance with BCWMC standards - fee for service - Ensure compliance with BCWMC standards (enforce/inspect) – new activity ($ unknown)	
	7. Maintain or improve macroinvertebrate indices of biological integrity (MIBI) in priority streams (see table) – Bassett Creek Main Stem, North Branch Bassett Creek, Plymouth Creek, and Sweeney Branch Bassett Creek	- Encourage/fund buffers on private riparian property – new activity ($10,000) - Identify and implement projects to stabilize degraded riparian areas – CIP/channel maintenance funds - Continue MIBI monitoring ($8,000) - Data review to identify areas/zones where specific stressors are most significant – new activity ($10,000 possible estimate) - Incorporate elements to improve in-stream habitat or address stream impairment stressors on all stream-focused BCWMC capital improvement projects - CIP - Review development and redevelopment projects for compliance with BCWMC standards – fee for service - Ensure compliance with BCWMC standards (enforce/inspect) – new activity ($ unknown)	
	8. Maintain or improve lake floristic quality indices (FQIs) and number of species towards achieving State standards for aquatic vegetation in Cavanaugh Pond, Crane Lake, Lost Lake, Medicine Lake, Northwood Lake, Parkers Lake, Sweeney Lake, Twin Lake, Westwood Lake, and Wirth Lake (see table).	- Vegetation surveys of priority lakes ($1,500) - In-lake aquatic plant management (e.g., AIS treatment) (see AIS issue below) - Education and outreach to watershed residents ($46,000 current education programs)	

Impaired Waters – High Priority

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Desired Future Condition	Goal (10-year)	Implementation Activities (some potential examples; highlight = new activity) – estimated costs in 2023 dollars	
	9. Maintain or improve fish index of biologic integrity for applicable priority lakes		

Summary of Priority Lake Eutrophication Data vs. State Standards

Priority Lake	State Std TP (ug/L)	Current Condition TP (ug/L)[1]	State Std Chl a (ug/L)	Current Condition Chl a (ug/L)[1]	State Std Secchi (m)	Current Condition Secchi (m)[1]
Cavanaugh Pond	60	39	20	9.1	≥1.0	1.8
Crane Lake	60	28	20	7.0	≥1.0	0.9[4]
Lost Lake	60	95	20	50	≥1.0	0.8
Medicine Lake[2]	40	54	14	30	≥1.4	1.8
Northwood Lake	60	223	20	72	≥1.0	0.7
Parkers Lake	40	27	14	11	≥1.4	2.8
Sweeney Lake[3]	40	34	14	14	≥1.4	1.6
Twin Lake	40	15	14	3.6	≥1.4	3.5
Westwood Lake	60	32	20	4.9	≥1.0	1.3
Wirth Lake	40	28	14	8.1	≥1.4	2.8

TP = total phosphorus; Chl a = chlorophyll a; SD = Secchi disc transparency
Red = does not meet standard/goal
(1) Based on summer average data collected 2013-2022
(2) Main basin
(3) North basin
(4) Crane Lake Secchi disc depth is limited due to dense aquatic plant growth impeding travel of the Secchi disc

WATERBODY & WATERSHED QUALITY

Issue Statements, Desired Future Conditions, 10-year Goals: APPROVED FEBRUARY 2024 & AUGUST 2024

Summary of Priority Stream Water Quality Data vs. State Standards

Priority Stream	State Std TP (ug/L)	Current Condition TP (ug/L)[1]	State Std TSS (mg/L)	Current Condition TSS (mg/L)	State Std E. coli (#/100 mL)[2]	Current Condition (#/100 mL)
Bassett Creek Main Stem	100	195	30	19.7	126	168
North Branch Bassett Creek	100	91	30	73	126	--
Plymouth Creek	100	227	30	23.8	126	853
Sweeney Branch Bassett Creek	100	101	30	21.4	126	257

TP = total phosphorus; TSS = total suspended solids; E. col = Escherichia coli

Current condition is based on data collected from: 2013-2022 for Main Stem Bassett Creek, 2018 for North Branch Bassett Creek, 2020 for Sweeney Branch Bassett Creek, and 2022 for Plymouth Creek

Red = does not meet standard/goal

(1) based on summer average values (June through September)

(2) 126 organisms per 100 mL as a geometric mean of not less than five samples within any month, nor shall more than 10% of all samples within a month exceed 1,260 organisms per 100 mL (note that BCWMC monitoring is limited to fewer than 5 samples per month)

(3) A stream is considered impaired if two or more measurements exceed the chronic criterion (230 mg/L) within a 3-year period or if one measurement exceeds the acute criterion (860 mg/L)

Summary of Priority Stream Macroinvertebrate Data vs. State Standards

Priority Stream	Location	State Std MIBI	Current Condition MIBI[1]	Years of Current MIBI
Bassett Creek Main Stem	East of Brookridge	≥37	22.9	2015, 2018
Bassett Creek Main Stem	Irving Avenue	≥37	22.0	2015, 2018
Bassett Creek Main Stem	Rhode Island Avenue	≥37	17.6	2015, 2018
North Branch Bassett Creek	34th Street	≥37	23.0	2015, 2018
Plymouth Creek	Industrial Park Blvd	≥37	15.9	2015, 2022
Sweeney Branch Bassett Creek	Woodstock Avenue	≥43	45.5	2015, 2020

MIBI = Macroinvertebrate Index of Biological Integrity

State MIBI standards are based on "general use" category for Class 5 southern high-gradient streams (MIBI = 37) or Class 6 southern forest low-gradient stream (MIBI = 43)

Red = does not meet standard/goal

(1) based on average of listed years

WATERBODY & WATERSHED QUALITY

Issue Statements, Desired Future Conditions, 10-year Goals: APPROVED FEBRUARY 2024 & AUGUST 2024

Summary of Priority Lake Floristic Quality Index (FQI) and Species Richness vs. State Standards

Priority Lake	State Std FQI	Most Recent FQI[1]	10-year Average FQI[2]	State Std Species Richness	Most Recent Species Richness[1]	10-year Average Species Richness[2]	Year of Most Recent Data	Years of Average Data
Cavanaugh Pond	>17.8	25.0	25.0	11	19	19	2019	2019
Crane Lake	>17.8	18.6	18.8	11	13.5	14	2021	2016, 2021
Lost Lake	>17.8	20.6	11.8	11	8.0	14.5	2022	2017, 2022
Medicine Lake	>18.6	27.6	25.3	12	21	23.5	2020	2016, 2020
Northwood Lake	>17.8	14.1	14.5	11	11.2	11	2022	2016, 2019, 2022
Parkers Lake	>18.6	19.5	18.9	12	13	13	2021	2018, 2021
Sweeney Lake	>18.6	25.2	21.7	12	15.3	19.5	2020	2014, 2017, 2019, 2020
Twin Lake	>18.6	28.3	24.7	12	19	23	2020	2014, 2017, 2019, 2020
Westwood Lake	>17.8	20.1	19.0	11	13.7	15.5	2021	2015, 2018, 2021
Wirth Lake	>17.8	--	--	11	--	--	--	--

FQI = Floristic Quality Index; FQI is a measure of the quality of aquatic vegetation

Red = does not meet standard/goal based on 10-year average FQI

(1) Reflects the average of June and August measurements during the most recent monitoring year

(2) Reflects average of all measurements in the 10-year period from 2014-2023

Chloride Loading – High Priority

Issue Statement: High chloride loading from use of winter deicers across the Bassett Creek watershed negatively impacts lakes streams, and groundwater water quality.

Desired Future Condition	Goal (10-year)	Implementation Activities (some potential examples; highlight = new activity)	
Priority waterbodies meet applicable State chloride standards.	1. Reduce chloride loading to and concentrations in lakes and streams at risk of chloride impairment and those not meeting State standards.	- Perform subwatershed analyses for chloride-impaired lakes to identify pollution hotspots and to target implementation – new activity ($75,000 possible estimate) - Aside from the above, identify waterbodies and/or subwatersheds at greatest risk to chloride pollution or impairment (overlays?) – new activity ($10,000 possible estimate) - Incentivize/require Smart Salt training – new activity ($2,000) - Require winter maintenance plans for applicable projects/locations – new activity $0 - Develop/identify/require(?) design strategies to minimize salt use – new activity ($10,000 possible estimate) - Update development and redevelopment standards (watershed-wide or select areas?) – new activity ($ unknown; could do during plan development) - Develop plans for priority waterbodies similar to Parkers Lake Chloride Reduction Study – new activity ($45,000 per lake) - Education targeted to private applicators – new activity ($10,000) - Monitor chlorides in priority waterbodies ($ included with monitoring budgets) - Provide or improve methods for residents to report oversalting – new activity	
	2. Reduce average chloride concentrations in Bassett Creek by 10% at the Watershed Outlet Monitoring Program (WOMP) station.	- *All action items from goal above*	

Summary of Priority Lake Chloride Data vs. State Standards

Priority Waterbody	State Chronic Std Chloride (mg/L)	Current Condition Average Chloride[1] (mg/L)	State Acute Std Chloride (mg/L)	Current Condition Maximum Chloride[2] (mg/L)	Number of Observations
Cavanaugh Pond	230	59	860	70	12
Crane Lake[4]	230	718	860	820	6
Lost Lake	230	31	860	33	12
Medicine Lake	230	162	860	375	318
Northwood Lake	230	104	860	274	12
Parkers Lake[4]	230	257	860	716	103
Sweeney Lake[4]	230	276	860	371	48
Twin Lake	230	117	860	139	26
Westwood Lake	230	81	860	99	12
Wirth Lake	230	200	860	512	306
Bassett Creek Main Stem[3,4]	230	165	860	664	259
North Branch Bassett Creek	230	88	860	219	12
Plymouth Creek	230	180	860	382	25
Sweeney Branch Bassett Creek	230	218	860	348	18

Red = does not meet standard/goal
(1) Based on all measurements 2013-2022
(2) Based on maximum concentration observed between 2013-2022
(3) As measured at watershed outlet monitoring program (WOMP) location
(4) A stream is considered impaired if two or more measurements exceed the chronic criterion within a 3-year period or if one measurement exceeds the acute criterion

WATERBODY & WATERSHED QUALITY

Issue Statements, Desired Future Conditions, 10-year Goals: APPROVED FEBRUARY 2024 & AUGUST 2024

Streambank and Gully Erosion – Medium Priority

Issue Statement: Excessive erosion along streambanks and gullies negatively impacts stream geomorphology, water quality, aquatic habitat, and floodplain function.

Desired Future Condition	Goal (10-year)	Implementation Activities (some potential examples; highlight = new activity)
Streambanks and gullies throughout the watershed are naturally stable with no excessive erosion that negatively impact the beneficial functions of waterbodies or infrastructure.	1. Achieve stable streambanks along all priority streams (Bassett Creek Main Stem, North Branch Bassett Creek, Plymouth Creek, and Sweeney Branch Bassett Creek) such that streambanks are not contributing to pollution downstream nor threatening infrastructure or public health. 2. Stabilize gullies that most significantly contribute to reduced water quality downstream.	- Monitor and evaluate stream habitat and macroinvertebrate communities. ($8,000/creek) - Biennially assess the condition of streambanks along BCWMC priority streams and prioritize areas for action – new activity ($25,000 possible estimate) - Monitor and evaluate impact of eroding streambanks and gullies on water quality in downstream impaired waters including lakes and streams partially new activity ($ unknown) - Identify and implement streambank restoration projects to stabilize banks, limit erosion, and improve ecological health - CIP - Continue setting aside funds in Channel Maintenance Fund – ($25,000) - Require vegetated buffers adjacent to priority streams for projects triggering BCWMC review (ensure enforcement of existing stream buffer standards) $0

Lakeshore Erosion – Medium Priority

Issue Statement: Erosion along lake shorelines degrades water quality and negatively impacts lake ecology.

Desired Future Condition	Goal (10-year)	Implementation Activities (some potential examples; highlight = new activity)
Shorelines along priority lakes have buffers with native vegetation and no excessive erosion.	1. Establish a baseline of lakeshore conditions along all priority lakes. Increase percentage of properties with native buffers on nutrient impaired lakes.	- Inventory lakeshore conditions in priority lakes – new activity ($10,000/lake) - Provide education to lake homeowners including shoreland restoration workshops – new activity ($5,000) - Encourage/fund buffers on public or private lakeshore property – new activity ($10,000)

WATERBODY & WATERSHED QUALITY

Issue Statements, Desired Future Conditions, 10-year Goals: APPROVED FEBRUARY 2024 & AUGUST 2024

		- Sponsor vegetated buffer project for purpose of public education for shoreland property owners and general public (need more info) - Support existing city/partner programs to stabilize shorelines	

Wetland Health and Restoration – Medium Priority

Issue Statement: The function, value and quantity of wetlands within the Bassett Creek watershed have been negatively impacted by development and the changing climate.

Desired Future Condition	Goal (10-year)	Implementation Activities (some potential examples; highlight = new activity)	
Wetland function and values are sustained and enhanced, and no additional wetland acres are lost to development.	1. Establish baseline wetland conditions through watershed wide wetland inventory and assessment; identify priority wetlands	- Inventory wetlands and their conditions throughout watershed - Require vegetated buffers adjacent to wetlands for projects triggering BCWMC review $0 - Ensure enforcement of existing wetland buffer standard – new activity ($ unknown) - Assist partners with education to residents on wetland health and native buffers – ($46,000 current education programs)	
	2. Restore or enhance priority wetlands as opportunities arise or adjacent CIP projects are planned	- Work with cities to create list of priority wetlands in need of restoration - Encourage cities to restore or enhance wetlands during city projects or through development processes - $0 - Identify opportunities for wetland restoration and enhancement through BCWMC CIP projects	

Aquatic Invasive Species – Medium Priority

Issue Statement: Aquatic invasive species (AIS) present in the Bassett Creek watershed can negatively impact water quality, lake and stream ecology, and are exacerbated by climate trends.

Desired Future Condition	Goal (10-year)	Implementation Activities (some potential examples; highlight = new activity)	
	1. Prevent new AIS infestations in lakes or creeks throughout the watershed.	- Implement BCWMC's aquatic plant management/aquatic invasive species (APM/AIS) policies ($40,000)	

No new AIS infestations in lakes or creeks. Existing AIS managed such that they are not negatively impacting beneficial functions.		- Assist TRPD, Hennepin County, and others with AIS inspection programs ($5,000) - Work with partners and agencies to identify and track emerging AIS threats – new activity ($ unknown) - Work with Hennepin County, member cities, and other partners to provide signage, education, and early detection training to residents, boaters, anglers, and lakeshore landowners ($46,000 current education programs)	
	2. Mitigate the impact of existing AIS infestations through application of BCWMC policies and practices.	- Implement BCWMC's aquatic plant management/ aquatic invasive species (APM/AIS) policies ($40,000) - Work with TRPD and MnDNR to manage and assess curly-leaf pondweed, starry stonewort, and zebra mussels in Medicine Lake (included in $40,000 above) - Follow AIS Rapid Response Plan when needed - $ unknown	

Groundwater – Surface Water Interactions – Medium Priority

Issue Statement: The complexity of groundwater and surface water interactions complicates our ability to protect, restore, and responsibly manage natural resources.

Desired Future Condition	Goal (10-year)	Implementation Activities (some potential examples; highlight = new activity)	
Areas with significant groundwater – surface interaction are identified and potential negative impacts due to interaction are minimized.	1. Identify areas of groundwater-surface water interaction corresponding to BCWMC priority waterbodies.	- Work with Met Council or other agencies to map groundwatersheds and evaluate groundwater-surface water interactions and groundwater dependency of BCWMC priority waterbodies – new activity ($50,000 possible estimate) - Lobby Hennepin County to develop county-wide groundwater management plan (similar to Dakota and Washington Counties) – new activity $0 - Consider identifying groundwater-surface water interactions when performing subwatershed analyses	
Hennepin County develops and	2. Reduce or mitigate negative impacts of groundwater-surface	- Assist with development of regional or statewide policies regarding infiltration of stormwater – new activity ($5,000 possible estimate)	

implements county groundwater plan.	water interactions during development and project implementation.	- Through BCWMC Requirements Document: maintain requirements detailing circumstances where stormwater infiltration is limited or prohibited for the protection of groundwater resources (consistent with the MPCA Construction Stormwater General Permit) – fee for service - Consider updating BWCMC requirements so infiltration is also consistent with MDH guidance - Through BCWMC project reviews, require information on groundwater-surface water interactions where groundwater contamination is suspected to have potential for negative impacts to surface water quality	

Degradation of Riparian Areas – Low Priority

Issue Statement: Degraded vegetated buffers in riparian areas result in decreased ecological function and habitat and allow excess pollutant loading to water resources, contributing to impairments (water quality and biological).

Desired Future Condition	Goal (10-year)	Implementation Activities (some potential examples; highlight = new activity))	
Riparian areas throughout the watershed are ecologically healthy with well established, diverse native vegetation.	1. Require establishment and maintenance of native vegetation along streams through BCWMC buffer requirements, wherever triggered.	- Require vegetated buffers adjacent to priority streams for projects triggering BCWMC review (ensure enforcement of existing stream buffer standard – new activity $ unknown) - Provide education to creek homeowners including riparian protection/ restoration workshops – new activity ($5,000)	
	2. Restore degraded riparian areas adjacent to all applicable BCWMC CIP projects (e.g., creek restoration projects or those adjacent to waters or wetlands).	- Assess the condition of riparian areas on BCWMC priority streams and lakes and prioritize areas for action – new activity ($ included in activities under other issues) [*determine where this activity would apply – along all waters or only where CIP projects are proposed?*] - Incorporate elements to improve riparian areas on all stream-focused and lake-adjacent BCWMC capital improvement projects. - CIP	

Degradation of Upland Areas – Low Priority

Issue Statement: Natural areas in uplands may be threatened by development pressure, lack of proper management, and negative impacts from climate change.

Desired Future Condition	Goal (10-year)	Implementation Activities (some potential examples; highlight = new activity)
Natural areas throughout the watershed are well managed, ecologically healthy, and accessible to the public, where possible. High quality uplands are not lost or negatively impacted by development projects.	1. Consider and support preservation or enhancement of upland natural areas and green corridor connections within BCWMC interest and authority.	- Evaluate aesthetics, habitat, and accessibility during CIP project selection and prioritization - CIP - Encourage and support public and private landowners to maintain, preserve or restore open space and native habitats ($46,000 current education programs) - Member cities shall consider opportunities to maintain, enhance, or provide new open spaces and/or habitat. $0 - Cooperate with the MDNR and other entities, as requested, to protect rare and endangered species under the State's Endangered Species Statute. The BCWMC will review the Natural Heritage Information System during the design phase of Commission projects – CIP - Cooperate, when appropriate and as resources allow, with partners and organizations that identify and work to preserve connected greenway corridors and other natural areas - Incorporate trails, parks, and natural areas into BCWMC watershed map. (to be included with current map update)

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Issue Statements, Desired Future Conditions, 10-year Goals: APPROVED FEBRUARY 2024 & AUGUST 2024

Groundwater Quality – Low Priority

Issue Statement: Groundwater quality impacts public health as a source of drinking water and may be threatened by infiltration of stormwater and associated pollutants, such as chloride

Desired Future Condition	Goal (10-year)	Implementation Activities (some potential examples; highlight = new activity)
Groundwater is safe to drink, meets all drinking water standards, and is not adversely impacted by pollutants.	1. Reduce negative impacts to groundwater quality from proposed projects reviewed by the BCWMC.	- Through BCWMC Requirements Document: maintain requirements detailing circumstances where stormwater infiltration is limited or prohibited for the protection of groundwater resources (consistent with the MPCA Construction Stormwater General Permit) – fee for service - Review all MDNR groundwater appropriation permit applications in the BCWMC excluding applications for temporary appropriations permits - $3,000 - Consider updating BWCMC requirements so stormwater infiltration practices are consistent with MDH guidance
	2. Prevent negative impacts to groundwater quality from BCWMC projects.	- Evaluate CIP projects for potential impacts to groundwater before implementation - CIP

FLOODING & CLIMATE RESILIENCY

Issue Statements, Desired Future Conditions, 10-year Goals: APPROVED AUGUST 2024

Impact of climate change on hydrology, water levels, and flood risk – High Priority

Issue Statement: Extreme fluctuations in precipitation amounts and intensities increase flood risk and prolonged drought cycles that contribute to significant changes to water level and stream flow and may negatively impact the natural and built environment, (e.g. ecology, water quality, public health and safety, economy, and recreation)

Desired Future Condition	Goal (10-year)	Strategy, Action, or Task (some potential examples; highlight = new activity)
Watershed residents, businesses, and infrastructure are protected from flood damages and water fluctuations	1. Identify areas, populations, and ecosystems most vulnerable to flooding and hydrologic risk resulting from existing and future climate trends	- Perform a risk analysis and prioritization considering vulnerable populations, critical infrastructure, and priority resources Acknowledge projected future climate trends in flood risk analyses - Identify potential flood risk reduction projects - Maintain/update watershed-wide hydrologic and hydraulic model - Encourage/assist cities or partners with development of flood emergency response plans - Map areas of higher risk where additional flood storage is needed
	2. Reduce flood risk for structures and infrastructure within the floodplain	- Update implementation program to include flood risk reduction projects that increase watershed storage and/or reduce peak flows – CIP - Create a grant or cost-share program to reduce flood risk for habitable structures - Review development and redevelopment projects for compliance with BCWMC floodplain requirements – fee for service - Help with promotion of FEMA's Flood Insurance Study and Community Rating System among residents and property owners - Review overall BCWMC Flood Control Project for effectiveness; continue inspection and maintenance program - Maintain H&H model - Implement CIP projects that reduce flood risk on structures or infrastructure
	3. Implement at least 3 CIP projects that reduce flood risk on structures or infrastructure.	
Waterbodies are resilient to changes in water levels and climate such that	4. Evaluate impacts of climate trends on hydrology, ecology, and recreation of priority streams and lakes.	- Monitor water quality of priority waterbodies - Maintain/update watershed-wide hydrologic and hydraulic model - Develop climate resilience study/plan that evaluates potential impacts to priority waterbodies

their beneficial functions are maintained or enhanced		- Work with Met Council or other agencies to map groundwatersheds and evaluate groundwater-surface water interactions – new activity ($50,000 possible estimate)	
	5. Enhance climate resilience through BCWMC projects and programs by incorporating climate mitigation and adaptation functions, including in the majority of BCWMC CIP projects.	- Develop climate resilience study/plan that evaluates climate adaptation strategies (e.g., tree planting to increase canopy, incorporating native plantings, etc.) and potential impacts to priority waterbodies - Continue to implement APM/AIS rapid response plan - Update APM/AIS rapid response plan (if needed based on findings of above study/plan) - Encourage and support public and private landowners to maintain, preserve or restore open space and native habitats to improve climate resiliency ($50K in 2024 for current education programs) - Implement CIP projects to protect or restore ecological functions of priority waters and tributary watersheds - CIP - Evaluate CIP projects relative to climate trends before implementation. – CIP	

Bassett Creek Valley flood risk reduction and stormwater management opportunities – High Priority

Issue Statement: Current conditions in the Bassett Creek Valley present significant challenges to sustainable development and resilient, healthy ecosystems and people due to floodplain extents, environmental hazards, and limited space for stormwater management.

Desired Future Condition	Goal (10-year)	Strategy, Action, or Task (some potential examples; highlight = new activity)	
The Bassett Creek Valley supports healthy ecosystems and communities with reduced flood risk, improved water quality, and neighborhood access to the creek corridor.	1. Collaborate on evaluation, sequencing, and implementation of multi-beneficial projects within the Bassett Creek Valley to create regional flood storage, reduce floodplain by at least 8 acres, improve regional stormwater	- Assist multi-jurisdictional partners with evaluating and prioritizing multi-benefit project opportunities within the Bassett Creek Valley - Implement CIP project(s) to increase storage, reduce peak flow, and/or improve water quality in the Bassett Creek Valley while providing multiple benefits - CIP	

	management, and improve creek access.		

Groundwater quantity – Low Priority

Issue Statement: Groundwater levels may be negatively impacted by overuse, loss of recharge, or extreme changes in precipitation.

Desired Future Condition	Goal (10-year)	Strategy, Action, or Task (some potential examples; highlight = new activity)	
Groundwater levels support drinking water needs and do not negatively impact groundwater-sensitive resources	1. Reduce negative impacts to groundwater quantity from proposed projects in the Bassett Creek watershed.	- Review development and redevelopment projects for compliance with BCWMC requirements – fee for service - Review MDNR groundwater appropriation permit applications in the BCWMC that are forwarded to the BCWMC - $3,000 - Coordination with the MDNR to ensure its review of proposed water appropriation projects prevents negative impacts to groundwater quantity (i.e., ensure water appropriations are not negatively impacting adjacent creeks, lakes, wetlands and other water resources, including groundwater)	
	2. Incorporate stormwater reuse practices into 2 BCWMC CIP projects.	- CIP projects are evaluated relative to groundwater quantity impacts before implementation. - CIP	
	3. Increase the use of groundwater conservation practices among watershed residents	- Encourage and support public and private landowners to pursue conservation practices ($50K in 2024 for current education programs) - Support cities in the implementation of their water conservation grant or cost-share programs - Advocate that Hennepin County map and prioritize groundwater recharge areas	
	4. Increase groundwater recharge through required and encouraged stormwater infiltration practices	- Enforce BCWMC stormwater infiltration requirements	

EDUCATION & ENGAGEMENT – with potential additional activities in response to Plan TAC comments
Issue Statements, Desired Future Conditions, 10-year Goals: APPROVED DECEMBER 2024; REVISED APRIL 2025

1. Public awareness and action – Medium Priority

Issue Statement: Lack of knowledge and resources for action limit the ability and interest of watershed residents and stakeholders to be good caretakers of the BCWMC waterbodies and ecosystems

Desired Future Condition	Goal (10-year)	Strategy, Action, or Task (some potential examples; highlight = new activity)	
Watershed residents and stakeholders understand their relationship with and impact on waterbodies and ecosystems and are good caretakers of these ecosystems through their actions and behaviors.	1A. Increase public knowledge of and participation in programs or practices for waterbody and ecosystem caretaking	- Participate as active member of West Metro Watershed Alliance - Collaborate and coordinate with member cities on creating and delivering education - Support implementation of small-scale BMP cost-share program (could be with some small amount of funding as incentive in conjunction with workshops?) [could be similar to channel maintenance fund where cities are implementing the cost share with residents or others] - Advertise existing grant programs maintained by partners - Utilize CIP projects to educate adjacent communities - Incorporate targeted outreach to watershed residents as part of CIP projects, where applicable - Events: creek clean ups, water ceremonies, trainings/workshops – keep track of numbers of events and number of engagements/participants - Use a survey of public knowledge at start of plan implementation and again near end of plan life. Might also consider using data from city surveys and/or asking city surveys to incorporate water resources knowledge	
	1B. Increase the number of people who access watershed information and improve accessibility to information.	- Support development and distribution of educational materials through West Metro Watershed Alliance - Maintain the BCWMC website - Provide BCWMC communications in multiple languages - Incorporate targeted outreach to watershed residents as part of CIP projects, where applicable - Update BCWMC website and key documents in compliance with ADA requirements - $20,000 estimate - Consider ADA accessibility during planning and design of CIP projects. - Track metrics such as number of people accessing website, number of people engaged at events; number of handouts distributed; etc.	
	1C. Support community science and volunteer efforts	- Continue supporting CAMP program including recruiting and coordinating volunteers - Track current and future number of volunteers so can measure if there is an increase over the years	

		- Support volunteer activities such as native plantings, invasive species removals, clean ups, etc.	

2. Engagement of diverse communities – Medium Priority

Issue Statement: Efforts are needed to engage and build relationships with communities that have been under-represented in past BCWMC planning, programs, and projects.

Desired Future Condition	Goal (10-year)	Strategy, Action, or Task (some potential examples; **highlight** = new activity)	
All communities, and especially those historically and currently under-represented, are positively engaged in relevant BCWMC planning, programs, and projects.	2A. Establish and maintain relationships and communication avenues with under-represented communities 2B. Seek, consider, and respond to input from all impacted communities as part of the BCWMC's plans, programs, and projects.	- Identify diverse, minority, and underrepresented communities and their representative contacts - Develop and implement plans for an engagement, communication, and relationship building - Regularly submit communications to neighborhood newsletters or other publications - Annually attend meetings or events in diverse, minority, or underserved communities - Provide BCWMC communication materials in multiple languages - Cooperate with partners (e.g., Metro Blooms) on implementing projects and programs in environmental justice communities - Partner with cities already doing DEIA -related work.	
	2C. Incorporate Dakota place names, history, culture, and Indigenous knowledge into BCWMC projects and programs.	- Use both Dakota and English names for Bassett Creek on maps, documents, and signage. - Promote Ȟaȟá Wakpádaŋ oral history project and pronunciation video. - Learn about Native land and water care practices - Participate in annual water ceremony	

3. Recreation Opportunities – Low Priority

Issue Statement: Opportunities to protect or enhance recreational use of, and access to, natural areas in the watershed may be lost without proactive consideration by the BCWMC and its partners in their activities.

Desired Future Condition	Goal (10-year)	Strategy, Action, or Task (some potential examples; **highlight** = new activity)	
Recreational uses and access are maintained or enhanced, as appropriate, for priority waterbodies	3A. Support recreational uses of and access to lakes, streams and natural areas, particularly in underserved communities.	- Inventory/list priority waterbody recreation access/functions (i.e., what will be maintained) - Provide technical and other support for city and partner projects impacting recreational access to/use of priority waterbodies. - Incorporate trails, parks, and natural areas into BCWMC watershed map or other BCWMC communications. (to be included with current map update)	

EDUCATION & ENGAGEMENT – with potential additional activities in response to Plan TAC comments
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		- Maintain interactive Bassett Creek paddling map in partnership with City of Golden Valley. (found here)	
	3B. Consider protecting and enhancing recreational functions of and access to waterbodies and natural areas during BCWMC planning and projects.	- Consider opportunities for recreation enhancement when designing BCWMC projects	

ORGANIZATIONAL EFFECTIVENESS – with potential revisions in response to Plan TAC comments
Issue Statements, Desired Future Conditions, 10-year Goals: APPROVED DECEMBER 2024; REVISED APRIL 2025

1. Organizational capacity and staffing – High Priority

Issue Statement: Current BCWMC staff capacity and organizational structure are likely not sufficient to achieve intended goals and effectively execute projects and programs.

Desired Future Condition	Goal (10-year)	Strategy, Action, or Task (some potential examples; **highlight** = new activity)	
BCWMC organization exists in its most efficient and effective structure to achieve its identified goals	1A. Identify the options, benefits, and challenges of various organizational structures for effective and efficient management of the Bassett Creek watershed through a comprehensive assessment undertaken in first year of Plan implementation.	- Complete comprehensive assessment of BCWMC organization structure and staffing options, benefits, and challenges. - $50K estimate - Restructure organization, as needed, pending results of comprehensive assessment and as approved by the BCWMC.	
	1B. Improve organization capacity, efficiency, and effectiveness as warranted and desired by implementing outcomes of organizational assessment.		

2. BCWMC funding mechanisms – High Priority

Issue Statement: Additional funding sources and/or alternate funding mechanisms for BCWMC administration and implementation are needed to achieve the most efficient, equitable, and robust outcomes

Desired Future Condition	Goal (10-year)	Strategy, Action, or Task (some potential examples; **highlight** = new activity)	
BCWMC operations are adequately funded for ongoing administration and robust implementation	2A. Identify potential funding mechanisms for BCWMC work related to various organizational structures through an assessment undertaken in the first year of Plan implementation.	- In conjunction with assessment of organization structure options, complete comprehensive assessment of funding mechanisms available to BCWMC. - Establish maintenance levy for BCWMC CIP projects through Hennepin County in accordance with MN Statute 103B.251.	
	2B. Expand potential funding streams through grants and partnerships with public and private entities.	- Develop a framework or process to streamline private-public funding partnerships - Apply for competitive project and planning grants, as appropriate	
	2C. Improve funding capacity in conjunction with changes to the organizational structure and functions of the BCWMC.	- Implement new funding mechanisms, as needed based on the results of funding and organizational structure assessments.	

3. Progress assessment – High Priority

Issue Statement: Evaluation of progress toward achieving 10-year goals is critical to process improvement.

Desired Future Condition	Goal (10-year)	Strategy, Action, or Task (some potential examples; highlight = new activity)	
BCWMC is effective in its implementation through evaluation and adaptive management.	3A. Understand the effectiveness of implementation and progress towards reaching each of this plan's 10-year goals	- Complete progress assessment biennially (every two years) (MN Rule 8410) and use assessment results to guide future policy decisions and implementation activities.	
	3B. implementation activities are adapted to reflect changing conditions or pace of progress.	- Amend Watershed Plan, as needed, as new data become available or conditions, organizational structure, or priorities change	

4. Projects and programs implemented through a DEIA lens – Medium Priority

Issue Statement: Additional focus is needed to ensure equity in the delivery of BCWMC projects, programs, and decision making.

Desired Future Condition	Goal (10-year)	Strategy, Action, or Task (some potential examples; highlight = new activity)	
BCWMC work is equitably implemented.	4A. Prioritize and implement programs and projects with guidance from social vulnerability metrics.	- Develop and use social vulnerability indices for project and program prioritization. - Incorporate equity metric in CIP prioritization table	
	4B. Diversify representation on BCWMC Board of Commissioners, contractors, consultants and vendors such that they reflect community diversity	- Implement outreach, communication, and engagement activities in diverse communities - Seek contractors, vendors, etc. that represent diverse communities - Encourage cities to seek Commissioner applicants from diverse communities	

5. Public ditch management – Low Priority

Issue Statement: The Plan must address management of the public ditches within BCWMC jurisdiction (per MN Statutes 103B)

Desired Future Condition	Goal (10-year)	Strategy, Action, or Task (some potential examples; highlight = new activity)	
Public ditches in the watershed are either transferred to municipal authority or abandoned, where appropriate.	5A. Public ditches function in a manner that allows their current use as streams and altered waterways.	- Encourage member cities to petition Hennepin County to transfer authority over public ditches in the BCWMC to the member cities (per MN Statute 383B.61). - Support the efforts of other entities to pursue legislation abandoning public ditches on land zoned non-agricultural, in consideration for the original function of public ditches to provide drainage of agricultural lands.	
	5B. If ditch authority is transferred to the member cities, the BCWMC and cities will manage the ditches similar to other BCWMC waterways.	- Manage abandoned or transferred public ditches that are part of the BCWMC trunk system consistent with this Plan. Member cities will be responsible for management of abandoned or transferred public ditches that are not on the BCWMC trunk system, but are currently part of their municipal drainage system.	

6. Carbon footprint of BCWMC projects – Low Priority

Issue Statement: Carbon released in the construction and ongoing maintenance of BCWMC projects is not currently considered and contributes to climate change

Desired Future Condition	Goal (10-year)	Strategy, Action, or Task (some potential examples; highlight = new activity)	
The BCWMC understands the carbon footprint or lifecycle impacts of its activities and considers mitigative measures during implementation.	6A. Consider use of tools available to assess the impact and mitigate the effects of BCWMC activities on greenhouse gas emissions.	- When appropriate, use carbon footprint assessment tools when prioritizing projects or options. - Encourage use of renewable energy and carbon release reduction practices in projects and programs.	