

# Bassett Creek Watershed Management Plan

2026-2035



April 2026

Certification

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the Laws of the State of Minnesota.



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April 7, 2026

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Date

# Watershed Management Plan

April 2026

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## Acronyms

AIS	Aquatic Invasive Species
BCWMC	Bassett Creek Watershed Management Commission BMPs Best Management Practices
BWSR	Minnesota Board of Water and Soil Resources
CAMP	Community Assisted Monitoring Program
CFS	Cubic Feet per Second
CIP	Capital Improvement Program
CWA	Clean Water Act
DEIA	Diversity, Equity, Inclusion, Access
DWSMA	Drinking Water Supply Management Area
EWM	Eurasian Watermilfoil
FCP	Flood Control Project
FEMA	Federal Emergency Management Agency
FQI	Floristic Quality Index
GW	Groundwater
H&H	Hydrologic and Hydraulic Model
JPA	Joint Powers Agreement
LGU	Local Government Unit
MDH	Minnesota Department of Health
MDNR	Minnesota Department of Natural Resources
MIBI	Macroinvertebrate Index of Biological Integrity
MIDS	Minimal Impact Design Standards
MG/L	Milligrams per liter
ML	Milliliters
MLCCS	Minnesota Land Cover Classification System
MnRAM	Minnesota Rapid Assessment Method
MnDOT	Minnesota Department of Transportation
MPCA	Minnesota Pollution Control Agency

MPRB	Minneapolis Park and Recreation Board
MS4	Municipal Separate Storm Sewer System
MUSA	Metropolitan Urban Service Area
MWMO	Mississippi Watershed Management Organization
NFIP	National Flood Insurance Program
NOAA	National Oceanographic and Atmospheric Administration
NWI	National Wetland Inventory
P8	Program for Predicting Polluting Particle Passage through Pits, Puddles and Ponds
SSTS	Subsurface (Individual) Sewage Treatment Systems
SWA	Subwatershed Assessment
SWCA	Surface water contribution area
SWMM	Storm Water Management Model
TAC	Technical Advisory Committee
TCMA	Twin Cities Metropolitan Area
TMDL	Total Maximum Daily Load
TP	Total Phosphorus
TRPD	Three Rivers Park District
ug/L	Micrograms per liter
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
VIC	Voluntary Investigation and Cleanup
WCA	Wetland Conservation Act
WHPP	Wellhead Protection Plan
WMC	Watershed Management Commission
WMO	Watershed Management Organization
WMWA	West Metro Watershed Alliance
WOMP	Watershed Outlet Monitoring Program
WRAPS	Watershed Restoration and Protection Strategy
WWTP	Wastewater Treatment Plant

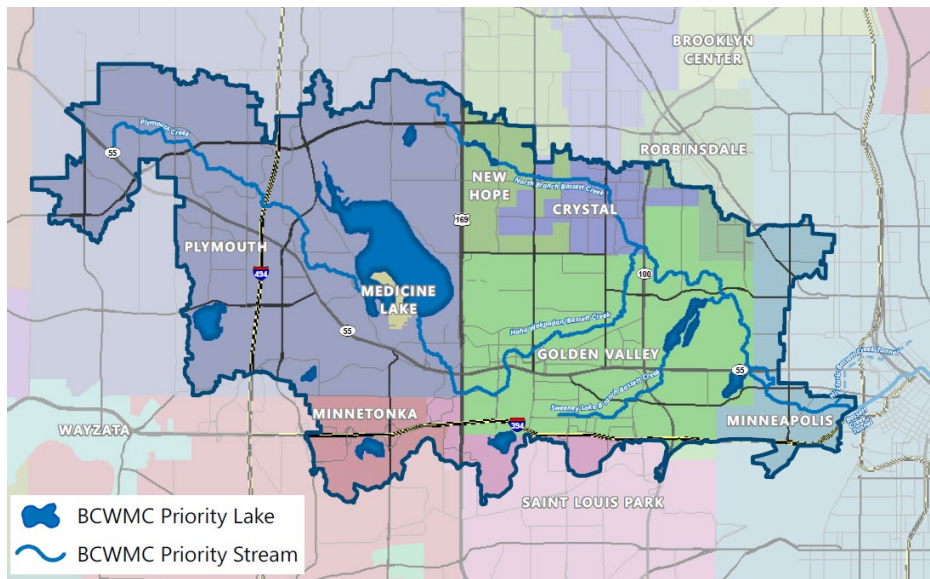
The Bassett Creek Watershed Management Plan (Plan) guides the management of water resources within the boundaries of the Bassett Creek Watershed Management Commission (BCMWC) to achieve the organization’s vision and goals for the next ten years. It was developed with significant input from watershed residents, member cities, partners, and state and local agencies. The Plan provides data and background information; identifies watershed-wide and resource-specific issues; sets measurable goals; and describes applicable tools, policies, and activities aimed at achieving the goals.

The Bassett Creek Watershed Management Commission (BCMWC) established the following vision to provide strategic direction to its work.

***Stewardship of the Ḥāḥá Wakpádaŋ / Bassett Creek Watershed to improve ecosystem health and reduce flood risk.***

## About Us – who we are

The BCMWC is a special purpose unit of local government that manages surface water resources, like lakes and streams, within 40 square miles in the northwestern area of the Twin Cities. It encompasses all the land that ultimately drains to Ḥāḥá Wakpádaŋ / Bassett Creek, including all or part



of nine cities. The largest portion of the watershed lies in the cities of Plymouth and Golden Valley. The watershed also includes parts of New Hope, Crystal, Robbinsdale, Minneapolis, St. Louis Park, and Minnetonka, and the entire small city of Medicine Lake. There are ten priority lakes and four priority streams in the watershed. The final 2.2 miles of the creek flows under downtown Minneapolis in the Bassett Creek tunnel.

The BCMWC acknowledges that the waterways of the Ḥāḥá Wakpádaŋ / Bassett Creek encompass the homeland of the Dakota peoples, who nurtured the land and waters as relatives. The streams, lakes, and wetlands are living waters that are part of a broader ecosystem.

## Executive Summary

The BCWMC was originally formed as a joint powers organization among the nine cities as the Bassett Creek Flood Control Commission in 1968 to address significant flooding along the creek. In 1984, the Flood Commission revised its joint powers agreement and became the BCWMC in accordance with provisions of the 1982 Metropolitan Surface Water Management Act. Much of the significant flooding in the watershed has been corrected, primarily through the extensive Bassett Creek Flood Control Project. And while flooding remains a concern and an area of focus for the BCWMC, much of our work is now centered on protecting and improving the quality of water in priority lakes and streams.

The BCWMC is managed by a nine-member Board of Commissioners – one commissioner and one alternate appointed from each member city. Each city also appoints a staff person to the Commission’s technical advisory committee (TAC). The TAC provides recommendations on technical aspects of studies and projects, and provides input on budgets, policies, etc.

Work of the BCWMC is primarily funded with an operating budget and capital improvement program funds. Operating funds come mostly from assessments to the nine member cities, while capital improvement projects are funded through a tax on all watershed properties levied by Hennepin County on the BCWMC’s behalf. State and local grant funds and development review fees often augment the BCWMC budgets, becoming an important source of current and future funding.

### Priority Issues & Goals – what we’re working on

Many of the lakes and streams in the watershed have degraded water quality and habitats, impacting aquatic life and recreation opportunities. Significant pollutants, coming mainly from stormwater runoff, include chloride (i.e., salt from winter deicers), nutrients, sediment, and bacteria. In addition, water quantity concerns – including flooding and drought conditions – also impact water resources and watershed communities.

To focus work for the next ten years, the BCWMC identified discrete watershed issues early in the planning process through input from state and local agencies and member cities, commissioner workshops, an online public survey, and a public open house. Issues were grouped into four categories: Waterbody and Watershed Quality, Flooding and Climate Resilience, Education and Engagement, and Organizational Effectiveness.

#### **Purpose of Watershed Management Organizations (WMOs)**

Because water does not follow political boundaries, the 1982 Surface Water Management Act required the formation of WMOs across the Twin Cities.

Purposes of WMOs include:

1. Protect, preserve, and use natural surface and groundwater storage and retention systems.
2. Minimize public capital expenditures needed to correct flooding and water quality problems.
3. Identify and plan for means to effectively protect and improve surface and groundwater quality.
4. Establish more uniform local policies and official controls for surface and groundwater management.
5. Prevent erosion of soil into surface water systems.
6. Promote groundwater recharge.
7. Protect and enhance fish and wildlife habitat and water recreational facilities.
8. Secure the other benefits associated with the proper management of surface and groundwater.

## Executive Summary

Each issue was assigned a priority level of high, medium, or low. Some issues span multiple areas of watershed management, including the intent to deliver projects and programs with an emphasis on diversity, equity, inclusion, and access. While specific issues regarding equity are categorized as a “medium” priority, helping to address current or past inequities will be incorporated across all BCWMC work – from representation on the Board of Commissioners, to building relationships with diverse audiences and selecting projects in vulnerable communities.

Once issues were identified and prioritized, goals were developed to describe the change or desired outcome expected by the end of 10 years. A process of adaptive management will be used to track progress and adjust activities depending on new data or changing conditions.

The high priority issues and associated goals include:

Category	High Priority Issue	High Priority Goal(s)
Waterbody and Watershed Quality	Impaired waters (degraded water quality) (see Section 3.1)	Improve water quality in Medicine Lake such that it is removed from impaired waters list for nutrients (WQ1)
		Significantly improve water quality in Lost Lake and Northwood Lake (WQ2)
		Improve/maintain water quality and ecology in all other priority lakes and streams (WQ3 – WQ9)
	Chloride pollution (salt from winter deicers) (see Section 3.2)	Reduce chloride pollution to lakes and streams (CHL1)
		Reduce chloride concentrations in H̄ah̄a Wakp̄adaŋ / Bassett Creek by 10% (CHL2)
Flooding and Climate Resilience	Impact of climate change on hydrology, water levels, and flood risk (see Section 3.11)	Reduce flood risk in vulnerable areas (FLD1 – FLD4)
		Enhance climate resiliency (FLD5)
	Bassett Creek Valley flood risk reduction and stormwater management opportunities (see Section 3.12)	Collaborate on regional improvements in Bassett Creek Valley (BCV1)
Organizational Effectiveness	Organizational capacity and staffing (see Section 3.17)	Assess organizational structure, staffing needs, and funding mechanisms; implement recommendations (ORG1 – ORG2; FUND1 – FUND3)
	BCWMC funding mechanisms (see Section 3.18)	
	Progress assessment (see Section 3.19)	Assess progress toward plan goals (PRG1 – PRG2)

## Executive Summary

Issues that were assigned medium or low priority levels are also addressed in this Plan. However, these issues may receive lower levels of resources and effort, and may be primarily addressed in collaboration with partners, or as opportunities arise. These issues include:

- Aquatic invasive species
- Carbon Footprint
- Ditch Management
- Education
- Erosion
- Equity
- Groundwater
- Recreation
- Riparian Areas and Uplands
- Wetlands

### Primary Tools and Activities – the work we’re doing

The BCWMC uses various tools to make progress toward its goals including policies and requirements, education and engagement, and construction of capital improvement projects. Other important activities include inspection and maintenance of the Bassett Creek Flood Control Project structures; monitoring water quality and quantity; performing studies; mapping floodplains; and assisting with aquatic invasive species (AIS) management. Much of the work performed by the BCWMC is done in collaboration with partners such as member cities, Hennepin County, Three Rivers Park District, Minneapolis Park and Recreation Board, state and local agencies, lake groups, and others.

Over the next 10 years, the BCWMC will build on the success of many existing programs and activities with few changes. However, some new or expanded tools and activities will be used to better address priority issues and make accelerated progress toward goals. New activities are shown in red in the graphic below. The implementation schedule of the activities and capital improvement program can be found in Table 4-5 and Table 4-6, respectively, although the timing of some programs and projects may shift with a change in opportunities, partnerships, and available funds. While many of the activities are performed on a regular, routine basis, other discrete projects and studies are one-time activities and are scheduled in order to inform future work. Examples include sub-watershed assessments that are used to target and prioritize capital improvement projects or other programs to improve conditions in a specific waterbody. Similarly, development of a social vulnerability index will help prioritize work in areas where it is most needed and most impactful.

The annual budget (in 2025 dollars) is estimated to be between \$1 million and \$1.3 million for programs and activities (Table 4-5) and an average of \$5 million per year for capital improvement projects (Table 4-6).

The implementation schedule and corresponding budget is ambitious. A shift in organizational structure and/or an expansion of funding mechanisms may be needed to realize full implementation potential and desired outcomes. Options for significant changes to the operations of the BCWMC will be analyzed through comprehensive assessments early in the life of the plan (See Table 4-5, activities EA-4 and EA-5).

# Executive Summary

## Implementation Tools:

### CAPITAL IMPROVEMENT PROJECTS

- Up to 36 projects scheduled over 10 years
- Projects start with feasibility study
- Examples: streambank restoration, pond creation or expansion, flood risk reduction, stormwater reuse
- Use Indigenous land/water care practices, where appropriate (new activity)
- Public-private partnerships (potential new activity)

### DEVELOPMENT REQUIREMENTS

- Appropriate stormwater management – infiltration and treatment
- No impacts to 100-year floodplain
- Stream and wetland buffer requirements
- Winter maintenance plans required (new activity)
- Construction erosion control

### EDUCATION & ENGAGEMENT

- Build communication and engagement with diverse communities (new emphasis)
- Partner with West Metro Water Alliance and Hennepin County
- Watershed map, displays, educational materials
- Signage and Indigenous art (new activity)
- Trainings for commissioners and local officials (expanded activity)
- Volunteer opportunities

### MONITORING, MODELING, STUDIES

- Routine, comprehensive monitoring of priority waters
- Hydrologic modeling (water flow and quantity after rainfall and snowmelt)
- Floodplain mapping
- Surveys and assessments to target future work (expanded activity)

### FLOOD CONTROL PROJECT

- Routine inspections of structures
- Minor maintenance by cities
- Major repair by BWCMC, as needed

### OTHER TOOLS

- Administration, operations, technical assistance
- Inter-agency planning and collaboration
- Aquatic invasive species (AIS) management
- Evaluation and reporting

## Executive Summary

### Member City Responsibilities

As noted earlier, portions of nine cities lie within the Ĥaĥá Wakpádaŋ / Bassett Creek Watershed and the BCWMC exists as a joint powers organization among these “member cities.” Member cities are very involved in the work of the BCWMC, and they have corresponding responsibilities. Each city appoints a BCWMC board commissioner, alternate commissioner, and technical advisory committee member. Each city contributes funds to the BCWMC operating budget through “city assessments” which are based on the area of land in the watershed and the tax valuation of that land. In many cases, the BCWMC enters agreements with cities to construct and maintain BCWMC capital improvement projects. The technical advisory committee, comprised of city staff, often reviews and makes recommendations to the Board of Commissioners on technical studies, projects, budgets, etc.

Actual requirements of member cities are the same or similar to requirements included in the 2015 watershed management plan.

Subject Area	Policy No.	Requirement
Local Plans/ Controls	5	Member cities must update their local water management plans to incorporate consistency with BCWMC goals, policies, and requirements. The BCWMC will review city local water management plans for consistency with BCWMC goals.
Local Plans/ Controls	6	Member cities must inform the BCWMC regarding updates to city ordinances or comprehensive plans that will affect stormwater management.
Development Requirements	9	Member cities must incorporate standards and requirements included in the Requirements document into their official controls (e.g., ordinances). Member cities must inform developers and other project applicants regarding BCWMC requirements.
Development Requirements	12	Member cities shall not issue construction permits or other approvals relevant to controls intended to protect water resources, until the BCWMC has approved the project.
Development Requirements	13	For projects subject to BCWMC review and erosion and sediment control standards, the BCWMC requires that member cities perform regular erosion and sediment control inspections.
Data submission	19	Upon request (typically annually), member cities shall provide the BCWMC with information on development, redevelopment, and BMPs constructed within their city such that the BCWMC can appropriately update the models.
Aquatic Invasive Species	20	The BCWMC requires that member cities annually inspect wetlands classified as Preserve (or equivalent) for terrestrial and emergent aquatic invasive vegetation, such as buckthorn and purple loosestrife, and attempt to control or treat invasive species, where feasible.
Flood Control Project	25	Member cities must formally notify the Commission Engineer regarding their completed maintenance and repair actions on any of the FCP project features.
Flood Control Project	25	Member cities are responsible for routine maintenance and repair of FCP features as outlined in Table 4-4.