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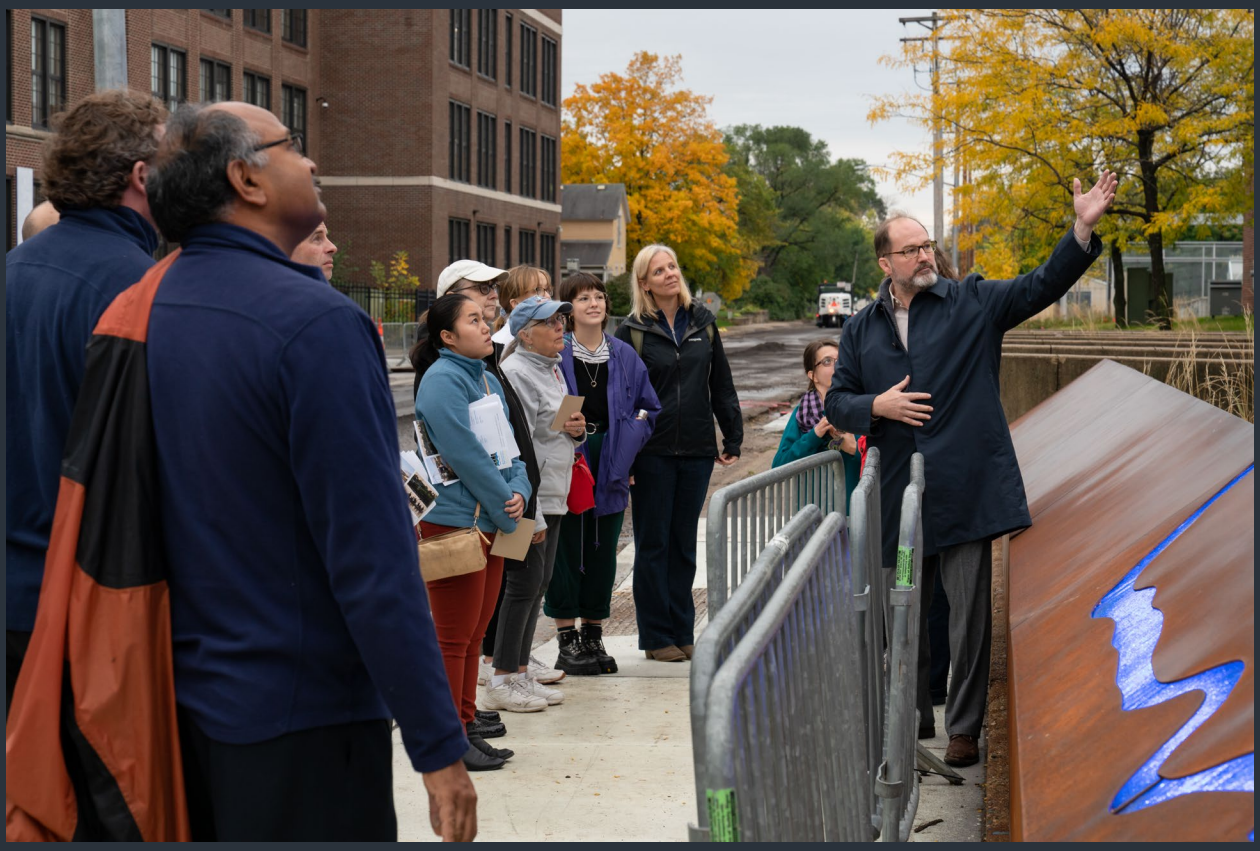
MISSISSIPPI WATERSHED MANAGEMENT ORGANIZATION

Watershed Management Plan 2021-2031

3.0 Member Authorities and Responsibilities



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3.0 Member Authorities and Responsibilities

The MWMO will work with member organizations and other water-related authorities to implement the goals and strategies of this plan. Coordination between the MWMO and member organizations requires that each organization has a clear role. This section of the plan clarifies these roles by describing the MWMO's understanding and expectations of each authority in the areas of MWMO's standards, members' local water plans, all water-related authorities in the MWMO, and MWMO funding.

3.1 Adopting MWMO's Standards

The MWMO recognizes that the control and determination of appropriate land uses is the responsibility of the local units of government. Our members and partners understand the MWMO is responsible for the protection and management of surface and groundwater systems. In this role, it is well equipped to develop resource-based standards (MWMO Standards) that will best address the impact of the surrounding land use on the quality of the surface and groundwater systems. The MWMO does not issue permits or provide approval letters for construction projects; rather, it relies on the existing permitting and enforcement bodies of its member organizations. To continue this efficiency in government, the MWMO prefers to have member organizations integrate the implementation and enforcement of MWMO Standards into their existing regulatory departments (see Appendix B). The MWMO assists its member organizations by providing additional staff expertise and funding for the writing of these standards into ordinance. The following standards have been written with the acknowledgement that cities may need to add more details to the final ordinances.

3.1.1 Volume Control in Urban Areas

The MWMO's highly urban setting and non-native soils present limitations to implementing volume controls in the watershed. The MWMO acknowledges these limitations and thinks the Design Sequence Flow Chart developed through the Minnesota Pollution Control Agency's Minimal Impact Design Standards process adequately addresses these limitations by providing suitable alternatives to volume control on difficult sites.

Volume controls are a proactive approach to watershed management and are necessary to maintain a viable ecosystem within the challenging urban environment of the watershed. The MWMO's volume control standards reduce the loading of pollutants entering receiving waters, improve consistency with adjacent watersheds' rules, and are consistent with the Minnesota Pollution Control Agency's Construction Stormwater Permit volume control requirements. The standards may also help maintain the longevity of the pipeshed system, promote groundwater recharge, and contribute to river baseflow.

Infiltration practices are used to implement a volume control standard. Among stormwater best management practices, those practices that infiltrate stormwater (thereby reducing volume) have the highest efficiency in removal of pollutants and remove the greatest numbers of pollutants. As

a result of these characteristics, infiltration practices save time, money, land, and other scarce resources because they proactively manage for future pollutants not yet identified and regulated. In addition, onsite infiltration practices replicate as close as possible a watershed's natural hydrologic cycle, limiting pollutant concentrations, and preventing higher downstream cleanup costs. Infiltration practices may attenuate 2-year, 24-hour storm event flows, i.e., the maximum rate of discharge for smaller storm events for which volume practices are size and reduce long-term wear and maintenance costs on the pipeshed. The adoption of a volume control standard, by the MWMO is promoting a consistent approach to achieving water quality goals across much of the Twin Cities. Developers who work across the Twin Cities repeatedly spoke up during the Minimal Impact Design Standards process in favor of more consistent standards among jurisdictions.

Although triggers vary, the MWMO is surrounded by watershed organizations that require retaining approximately the first 1 inch of runoff onsite. These currently include the Capitol Region Watershed District, the Minnehaha Creek Watershed District, the Rice Creek Watershed District, the Coon Creek Watershed District, the Shingle Creek Watershed Management Commission, and the Bassett Creek Watershed Management Commission. In addition, the MWMO's volume standard is in line with the Minnesota Pollution Control Agency's current Construction Stormwater Permit requirements of retaining 1-inch volume onsite. This is a requirement that all MS4s must meet.

3.1.2 Limiting Costs of Stormwater Treatment

Initially, stormwater management practices were designed to meet conditions found in new growth areas, outside of urban cores, where there were few limiting conditions to site development. However, in highly urbanized areas, where a property may have experienced multiple land uses and been redeveloped many times, there is a greater likelihood that there will be factors limiting certain types of stormwater management practices on the site. Thus, when the same stormwater management practices are fitted to the urban core, the costs may rise significantly due to site conditions such as higher land values, polluted soil conditions, inappropriate fill, or placement of existing infrastructure. Therefore, the MWMO may seek to limit the cost of stormwater treatment any site incurs in complying with the MWMO's Standards. A limit of the stormwater costs is needed to balance the environmental and financial tradeoffs to the public and private sectors to achieve the protection and restoration of the water quality and quantity in the watershed.

On occasion, the limiting conditions on urban sites may inflate the cost of site stormwater treatment to a level that exceeds what is reasonable to expect, so the MWMO will consider shifting the treatment to the next best site opportunity elsewhere in the watershed or further upstream. When this shift occurs, the opportunity is lost to manage stormwater as close as possible to its source. Source management of stormwater is the preferred option for replicating a watershed's natural hydrologic characteristics, limiting pollutant concentrations, and preventing downstream cleanup costs.

3.1.3 The MWMO's Standards Language

1. Stormwater Management Standards
Any project creating greater than one acre of land disturbance is subject to the standards below:

a. The MWMO's Standards, or higher, must be adopted by local units of government and incorporated into their stormwater ordinance or other regulatory control.
b. In order to reduce regulatory complexity, a member may request the MWMO to allow stormwater rules set forth by adjacent watershed management organizations to govern development so long as they can be shown to be substantially equal to or greater than the level of protection afforded by the MWMO Standards.
c. Road mill and overlay project activities need only to comply with MWMO erosion and sediment control standards.
d. See the land disturbance definition for activities that shall not be considered land disturbance for the purposes of determining permanent stormwater management requirements.

2. Rate Control

Runoff rates for the proposed activity shall meet the member cities and MS4s runoff rate control requirements, using the member cities' and MS4s' required critical storm events (as defined by Atlas 14 Volume 8 and/or subsequent revisions). Runoff rates for the proposed activity and pre-development shall be determined using an Atlas 14-based (nested, regional, state) rainfall distribution using NRCS-approved methodology.

All area contributing to the practice shall be accounted for in the design of the rate control practice. This includes areas offsite and beyond the public right-of-way that will be contributing to the practice.

3. Water Quality/Volume Control

a. For nonlinear projects, without limitations, that disturb one or more acre of land, 1.1 inches of runoff from the new and fully reconstructed impervious surfaces shall be captured and retained onsite.
b. For linear projects, on sites without limitations, that disturb one or more acre of land, the larger of the following shall be captured and retained onsite:
    i. 0.55 inches of runoff from the new and fully reconstructed impervious surfaces
    ii. 1.1 inches of runoff from the net increase in impervious area
c. For projects on sites with limitations, the MWMO Design Sequence Flow Chart (Appendix I) or a MWMO-approved alternative shall be used to identify a path to compliance through Flexible Treatment Options.
    i. The MWMO will develop a memorandum of understanding (MOU) with individual member cities and MS4s to address flexible treatment option #3 offsite mitigation conditions.

Volume Control Guidance (recommended procedures for volume control projects)

a. Infiltration volumes and facility sizes shall be calculated using the appropriate hydrologic soil group classification, ASTM Unified Soil Class Symbol, and design infiltration rate from **Table 4**. Select the design infiltration rate from **Table 4** based on the least permeable soil horizon within the first five feet below the bottom elevation of the proposed infiltration management practice. The information provided in **Table 4** is intended to be used in the following manner:

    i. For preliminary design purposes, refer to the Natural Resources Conservation System (NRCS) soil survey to identify the hydrologic soil groups found onsite. This information provides a preliminary indication of the infiltration capacity of the underlying soils.
    ii. After volume control/infiltration practices have been located on the grading plans, perform soil borings in the exact location of the proposed practices and in the quantity as described in the Minnesota Stormwater Manual Wiki (Minnesota Pollution Control Agency, 2014) as amended. Soil borings should be logged using the United States Department of Agriculture (USDA) Soil Textural Classification System and the ASTM Unified Soil Class Symbol.
    iii. The combination of all the aforementioned information will allow the designer to identify the appropriate design infiltration rate. As the Minnesota Stormwater Manual States, "these infiltration rates represent the long-term infiltration capacity of a constructed infiltration practice and are not meant to exhibit the capacity of the soils in the natural state". A permit applicant can submit field measurements and revised rates, using the correction factors provided in the Minnesota Stormwater Manual if there is reason to believe the long-term infiltration rates will be other than the design infiltration rates provided in **Table 4**.

b. A geotechnical investigation shall be performed in the location of the proposed volume control practices to confirm or determine underlying soil types, the depth to the seasonally high groundwater table, and the depth to bedrock or other impermeable layer.
c. Infiltration BMPs shall drawdown in the time specified in the Minnesota Stormwater Manual Wiki for that BMP, or less if required by another entity with jurisdiction. Drawdown time and maximum ponding depths are defined in the Minnesota Stormwater Manual Wiki.
d. Infiltration stormwater management practices must be designed to include adequate pretreatment measures before discharge of runoff to the primary infiltration area, consistent with the Minnesota Stormwater Manual Wiki.
e. Design and placement of infiltration stormwater management practices shall be done in accordance with the Minnesota Department of Health guidance called "Evaluating Proposed Stormwater Infiltration Projects in Vulnerable Wellhead Protection Areas." (Most recent version to govern)
f. Specific site conditions may make infiltration difficult, undesirable, or impossible. Some of these conditions are listed in **Table 3**. A more comprehensive list is provided in the MWMO Design Sequence Flow Chart in Appendix I.

Table 3: Site Conditions Considered Undesirable for Infiltration Stormwater Management Practices

Type	Specific Site Conditions	Submittal Requirements
Potential Contamination	Potential Stormwater Hotspots (PSHs)	PSH locations and flow paths, Remediation Alternatives Considered
	Contaminated Soils	State Permitted Brownfield Documentation, Soil Borings, Remediation Alternatives Considered, Site design alternatives considered
Physical Limitations	Low Permeability (Type D Soils)	Soil Borings
	High Permeability (soils infiltrating greater than 8.3 inches/hour)	Soil Borings
	Bedrock within 5 vertical feet of bottom of infiltration area	Soil Borings
	Potential Adverse Hydrologic Impacts (e.g., impacting perched wetland)	Documentation of Potential Adverse Hydrologic Impacts
	Seasonal High Groundwater within 5 vertical feet of bottom of infiltration area	Soil Borings
	Karst Areas	Soil Borings
	Steep Slopes	Steep Slope Determination
Land Use Limitations	Utility Locations	Site Map, Alternatives considered
	Zoning or Land Use Limitations (Parking, Density, Setbacks, etc.)	Alternatives considered, Documentation of Infeasibility
	Adjacent Wells within 200 feet or inside Wellhead Protection Area or Drinking Water Supply Management Areas (DWSMA)	Well Locations or DWSMA
	Building Foundation	Ten (10) feet

Source: Modified from Minnesota Pollution Control Agency Minimal Impact Design Standards Design Sequence Flow Chart, December 5, 2013

Note: the most recent version of the Minnesota Stormwater Manual should be used; **Table 3** is provided as optional guidance to the cities

Table 4: Design Infiltration Rates

Hydrologic Soil Group	Soil Textures[1]	ASTM Unified Soil Class Symbols	Rate Per Hour
A	Gravel, sandy gravel, silty gravel	GW, GP, GM, SW	1.63 in
	Sand, loamy sand, sandy loam	SP	0.80 in

Hydrologic Soil Group	Soil Textures[1]	ASTM Unified Soil Class Symbols	Rate Per Hour
B	Loam, silt loam	SM	0.45 in
		MH	0.30 in
C	Sandy clay loam	ML	0.20 in
D	Clay, clay loam, silty clay loam, sandy clay, silty clay	CL, CH, OH, OL, GC, SC	0.06 in

Source: Minnesota Stormwater Manual Wiki, October 2014

Note: Design infiltration rates from the most recent version of the Minnesota Stormwater Manual should be used

1 Adapted from the U.S. Department of Agriculture, Natural Resources Conservation Services, 2005. National Soil Survey Handbook, title 430-VI.

Maintenance

- Practices must continue to perform as approved. Owners must follow an inspection and maintenance schedule that has been approved by the permitting entity and correct any post-construction performance issues that arise.
- All stormwater management structures and facilities, including volume reduction stormwater management practices, shall be maintained to ensure that the structures and facilities function as originally designed. The maintenance responsibilities must be assumed by either the municipality's acceptance of the required easements dedicated to stormwater management purposes, by the applicant executing and recording a maintenance agreement, or by another enforceable means acceptable to the local government unit (LGU). If used, the recordable executed agreement must be submitted to the municipality before project approval is issued from the city. Public developments will require a maintenance agreement in the form of a Memorandum of Agreement, an approved Local Water Management Plan, or be in compliance with an MS4 Permit that details the methods, schedule, and responsible parties for maintenance of stormwater management facilities for permitted development. A single Memorandum of Agreement for each LGU may be used to cover all stormwater management structures and facilities required herein, including volume reductions management practices, within the LGU's jurisdiction. This maintenance plan shall address snow management.

Drainage Alterations

No person shall alter stormwater flows (resulting in an increase in stormwater flows or a change in existing flow route) at a property boundary by changing land contours, diverting or obstructing surface or channel flow, or creating a basin outlet, without first obtaining any necessary permits from the city.

Bounce and Duration Control

- The project must meet hydroperiod standards adapted from "Stormwater and Wetlands Planning and Evaluation Guidelines for Addressing Potential Impacts of

Urban Stormwater and Snowmelt Runoff on Wetlands," (Minnesota Stormwater Advisory Group, June 1997), as follows:

i. **Wetland Susceptibility Class** = Highly Susceptible;
Permit Storm Bounce = Existing;
Inundation Period for 2-Year event = Existing;
Inundation Period for 10-year or Greater Event = Existing
ii. **Wetland Susceptibility Class** = Moderately Susceptible;
Permit Storm Bounce = Existing plus 0.5 feet;
Inundation Period for 2-Year event = Existing plus 1 days;
Inundation Period for 10-year or Greater Event = Existing plus 7 days
iii. **Wetland Susceptibility Class** = Slightly Susceptible;
Permit Storm Bounce = Existing plus 1.0 feet;
Inundation Period for 2-Year event = Existing plus 2 days;
Inundation Period for 10-year or Greater Event = Existing plus 14 days
iv. **Wetland Susceptibility Class** = Least Susceptible;
Permit Storm Bounce = No Limit;
Inundation Period for 2-Year event = Existing plus 7 days;
Inundation Period for 10-year or Greater Event = Existing plus 21 days

Flood Control

Flood control for the proposed activity shall meet the member cities or MS4's flood control requirements. Member cities and MS4's flood control requirements should minimize property damage due to excess water.

Erosion and Sediment Control

- Erosion and sediment control measures shall meet the standards for the General Permit Authorization to Discharge Stormwater Associated with Construction Activity Under the National Pollutant Discharge Elimination System/State Disposal System Permit Program, Permit MN R100001 (NPDES General Construction Permit), issued by the Minnesota Pollution Control Agency, except where more specific requirements are required.
- Activity shall be phased to minimize disturbed areas subject to erosion at any one time.
- All construction site waste—such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site—shall be properly managed and disposed of so they will not have an adverse impact on water quality.
- If silt fence is installed, it shall conform to sections 3886.1 and 3886.2, Standard Specifications for Construction, Minnesota Department of Transportation (MnDOT) (2005 ed.), as it may be amended.

3.1.4 Implementation of the MWMO's Standards

With respect to the financial impact of these standards, the MWMO does not foresee a significant increase in administrative, permitting, and enforcement costs for LGUs adopting these standards. However, studies conducted by the MWMO demonstrated that it will cost more to meet the Minimal Impact Design Standard (MIDS) than the existing cities standards. Yet, when it comes to linear projects the MWMO's new MIDS based standard is anticipated to be less costly than MWMO's previous 90% total suspended solids (TSS) standard.

As required by statute, each member organization shall amend their local water plans and adopt local ordinances and/or official or local controls that are consistent with the MWMO Standards in this plan. The MWMO is committed to ensuring the implementation of its standards in cooperation with member organizations. To promote consistency in application of the MWMO Standards, the MWMO recommends members adopt its ordinance-ready MWMO Standards language into their local ordinances and/or their official or local controls. In addition, the MWMO may provide training for local staff to ensure their familiarity with the standards. The MWMO may also provide funding or staff to assist local inspection and enforcement efforts.

The MWMO may allow a member community to comply with the rules and regulations of another watershed if the MWMO deems the standards of the other watershed management organization to be comparable to MWMO Standards set forth in this plan. The MWMO Board of Commissioners reserves the right to review and comment on site alteration plans that affect the quality and quantity of water within and across its watershed and subwatershed boundaries. If this action is taken, a process will be coordinated with the subject city's development review approval timelines.

To ensure ongoing improvement of the standards and their enforcement, the MWMO plans to convene meetings, on an as needed basis, with member organizations and adjacent watersheds to review implementation of the standards and enforcement procedures. Based on the results of these meetings, the MWMO may revise the MWMO Standards and/or work with the cities to design more efficient and effective implementation and enforcement processes that ensure the protection of natural and water resources in the MWMO.

If the MWMO determines that a member organization is not adequately carrying out the adoption, implementation and enforcement of the (stormwater-related) local controls then, the MWMO may pursue all actions necessary to ensure the MWMO's standards are being efficiently adopted, and effectively implemented and enforced. During this period of time the MWMO may withhold project funding or services from the entity and or the jurisdictional area that is not in compliance with the MWMO's Standards.

Evaluation of the effectiveness of MWMO's Standards and enforcement will be based in part on monitoring the water resources and installed practices in the MWMO. The MWMO may also conduct periodic onsite reviews of permitted activities within member organizations' jurisdictions.

3.2 Local Water Plans and Local/Official Controls: Adoption Timeline

Member organizations are responsible for preparing and adopting a local water plan that is consistent with the MWMO Plan. The local water plan must include information on land use, stormwater runoff, stormwater storage, water quality, and implementation methods to protect local resources. The specific content requirements of local water plans are found in sections 3.2, 3.3, 3.4 of this plan; defined in Minnesota Statue 103B.235; and defined in Minnesota Rule 8410 (the MWMO will follow the most recent versions of these documents).

To comply with the 8410 Rules (revised in 2015) all local water plans are required to be adopted during a two-year window prior to their next comprehensive plan update deadline. As such, the MWMO recommends cities set up a local water plan pre-draft meeting 6 months before the beginning of this two-year window to discuss MWMO's content requirements, schedule future preliminary reviews, and schedule the future 60-Day draft review period. See **Table 5** for deadlines to be scheduled with each city prior to the final submittal deadline of their local water plan.

The local water plans must be consistent with all the watershed management plans that fall within the municipal boundary. Each local water plan shall be adopted not more than two years before the local comprehensive plan is due. Extensions of local comprehensive plan due dates do not alter the local water plan schedule. Each local water plan must be adopted and implemented in accordance with the time requirements of Minnesota Statutes, section 103B.235, subdivision 4 as summarized below.

The updated local water plan must be submitted for review to the MWMO, County, and Metropolitan Council. The County and Metropolitan Council have 45 days to review and provide comment on the updated plan. The MWMO has 60 days to complete its review and approve or disapprove the local water plan or parts of the local water plan. The review by Metropolitan Council, County, and the MWMO runs concurrently. If the Metropolitan Council fails to complete its review and make comments to the MWMO within the 45-day period, the MWMO will conclude its own review. If the MWMO fails to complete its review within the prescribed 60-day period, the local water plan shall be deemed approved unless an extension is agreed to by the city.

After approval of the local water plan by the MWMO, the local government unit shall adopt and implement its local water plan within 120 days and shall amend its official controls accordingly within 180 days. Each city must notify MWMO and the Metropolitan Council within 30 days of adoption and implementation of the local water plan or local water plan amendment, including the adoption of necessary official controls.

Table 5: Local Water Plan and Local/Official Controls Review, Approval and Adoption Schedule

Year - Month	Task
2026 - June / July	Discuss Local Water Plan Content Requirements and set Schedule for any Previews of Preliminary Drafts and MWMO's 60 Day Review and Comment Period
2026 - August / Varies by City	Previews of Preliminary Drafts or Meetings with the MWMO[1]
When Draft is Ready Start 60-Day Review Period	Submittal of Local Water Plans to MWMO, County, and Metropolitan Council
When Draft is Ready Start 60-Day Review Period	Submittal of Member Organizations Preliminary Local/Official Controls[2]
Within the 60-Day Review Period	MWMO Approves or Denies Local Water Plans and Local/Official Controls or Member Organizations Agree to Extension
Within the Extension Review Period	Extended Deadline for Local Water Plan and Local/Official Controls Approval or Denial by MWMO
120 Days After Approval of Local Water Plan	Deadline for Member Organizations to Adopt Local Water Plans if Approved by MWMO
180 Days After approval of Local/Official Controls	Member Organizations Adopt, Implement and Enforce Local/Official Controls

[1]MWMO is requesting a preview of preliminary drafts from our larger member cities of Minneapolis and St Paul.
[2]MWMO will require Local/Official Controls and all other supporting documentation for the local water plan to be to be available for review with the local water plan.

Over time, the MWMO will determine the effectiveness of stormwater management efforts in the watershed by correlating the intended impacts of stormwater management practices installed in a given subwatershed with changes in pollutant concentrations found in that subwatershed. In this manner, monitoring data on the end of the pipe concentrations discharging to the river will be used to adjust management efforts over the long term. The MWMO will also collect in-stream Mississippi River data and review the long-term cumulative impact occurring from all pipes discharging into the Mississippi River within the MWMO. Ultimately these findings will guide decisions on whether the MWMO's Standards are sufficient to achieve the goals of the MWMO and its members.

If the MWMO determines that a member organization is not taking the necessary steps to complete, within the timeframe provided in **Table 5**, one or more of the following actions will be taken:

- Amending its local water plan

- Adopting local controls
- Enforcement/implementing enacted local controls.

The MWMO will pursue all actions necessary to ensure the MWMO's standards are being efficiently adopted, and effectively implemented and enforced. During this period, the MWMO may withhold project funding or services from the entity or jurisdictional area which is not in compliance with the MWMO's Standards.

3.3. Local Water Plans: Content Requirements

Minnesota Statutes, section 103B.235 and Minnesota Rule 8410, discuss the particular requirements and format of a local water plan (see most recent version of MN Statutes and Rules). The MWMO is especially interested in problems identified in the local water plan and corrective actions that affect the MWMO concerns stated in this plan or that may require MWMO collaboration.

Member organizations may adopt by reference all, or part, of this plan. If a member organization does not adopt the plan, their local water plan must meet the requirements outlined in Minnesota Statutes, section 103B.235 and Minnesota Rule 8410 as well as the content in the MWMO's **Table 6**. If a member organization partially adopts the MWMO Plan, then any requirements in the MWMO Plan not adopted must be completed and included in their local water plan, along with the content described in **Table 6**. Member organizations that adopt by reference all of the MWMO Plan into their local water plan also need to complete and include content elements found in **Table 6** in their local water plan.

Cities should use information currently available to complete **Table 6** requirements. No new studies are required to provide the information requested in **Table 6**. Organizations only need to cite the source of information requested in **Table 6** if it is already a part of another organizational document. The table may require content that goes beyond what is requested by other agencies. However, if there is a conflict between another agency's requirements and **Table 6** the MWMO will defer to the agency's requirement. If available, each local water plan must contain the following information regarding the management of its water and natural resources.

Table 6: Local Water Plan Content Requirements

Water, Natural Resources, and Land Use Goals and Policies
1. Include an executive summary that summarizes the highlights of the local water plan. Highlights may include local water plan goals, policies and implementation programs that address problems identified in the MWMO's Plan (Focus Statements in Section 2.7); corrective actions that affect these MWMO concerns; and any actions requiring MWMO's collaboration.
2. Provide a citation and brief description of (Annotated bibliography) water resource management-related agreements that have been entered into by the community, including joint powers agreements related to water management that the LGU may be party to between itself and watershed management organizations, adjoining communities, or private parties.

Water, Natural Resources, and Land Use Goals and Policies
3. Describe the city's current water resource and ecosystem health-related problems and any problems that are expected to worsen or emerge over the next 10 years given the projected changes in the city's growth and land use. Identify how MWMO can help address these problems through: implementation programs; monitoring or research needs; temporary maintenance activities associated with innovative projects; capital improvement programs; or where MWMO funding, technical expertise, project management assistance is desired.
4. As a part of the Local Water Plan and City Comprehensive Plan development process, LGUs should carefully examine how water resources and ecosystems management and protection can be integrated into land use planning and development. The MWMO will look for each local plan to do the following:
a. Describe how decisions on land use, regional water and natural resource needs are being reconciled to secure the greatest degree of long-term water resource and ecosystem protection (see 2.7 e.g. water quality and ecosystem health focus areas)
b. Address the order of authority between city: planning, policies, ordinances, permitting (e.g. city: policy, comprehensive plan, permitting, zoning ordinances).
c. The MWMO is interested in increasing opportunities for stormwater infrastructure that treats runoff from multiple parcels. In particular, we are interested in opportunities that provide increased greening, habitat potential and options for stormwater reuse. Note any modifications to ordinances or best practices that could improve these opportunities. Consider how ordinances can better accommodate the co-location of stormwater treatment for multiple sites or provide more flexibility in locating stormwater treatment when limitations are present due to the soil type, geology, slope, groundwater and contaminated soils. Some example ordinances and best practices to review are as follows: zoning ordinances related to parcel combination, setbacks and parking requirements etc…; subdivision ordinance design standards for large lots; building code; ordinances related to stormwater, street sweeping, sanitary, potable supply systems, etc...; ordinances related to groundwater, protection of natural features, the critical area, shoreline protection, etc..
d. Identify a future amendment process and schedule for reassessing ordinances that impact water resources and ecosystem protection.
e. Describe efforts to integrate Safe Drinking Water Act and other wellhead protection plans, as well as the protection of sensitive surface- and groundwater resources, into the local zoning code.
f. Describe how water resource and ecosystem protection priorities will be integrated into local parks, open space, recreation and land acquisition plans.
g. Describe how local authority to require land or easement dedication as a part of redevelopment regulation is being used for water resource and ecosystem protection purposes
Infrastructure Assessments and Programs
5. Include a local implementation program that covers the term of the local water plan. The local implementation program must describe nonstructural, programmatic, and structural solutions to existing or potential water resource and ecosystem health-related problems identified by the city. The local implementation program shall include:

Water, Natural Resources, and Land Use Goals and Policies
a. Describe the existing and proposed physical environment and land use. Include wetlands, natural resources, and land conservation areas identified by the municipality
b. Define drainage areas and the volumes, rates, and paths of stormwater runoff, including a map of the stormwater system.
c. Include a stormwater system map that shows ponds, streams, lakes and wetlands that are part of your system; structural pollution control devices (grit chambers, separators, etc.) that are part of your system; pipes and pipe sizes and other conveyances in your system; and outfalls and all other points of discharge from your system that are outlets.
d. Include a table that briefly describes each component of the implementation program and clearly details the schedule, estimated cost, and funding sources for each component including annual budget totals;
e. Include a table for a capital improvement program that sets forth, by year, details of each contemplated capital improvement that includes the schedule, estimated cost, funding source and a description of the water quality protection methods used to meet the MWMO's Standards (Section 3.13).
f. Provide a schedule and annual process for assessing the need for water resource-related capital improvement programs or projects in the city
g. Clearly define the responsibilities of the local government unit from that of the MWMO and other entities for carrying out the implementation program components
6. Explain interdepartmental coordination of water and natural resource issues in the city:
a. Identify a communications process the city uses to coordinate activities between departments making policy, planning or regulatory decisions that impact surface and groundwater resources, stormwater and sanitary sewer systems. How is coordination between city council initiatives and policies; land use planning; management and planning of parks; development reviews; construction site inspections, permitting, and enforcement; operations and maintenance of city streets and infrastructure carried out? Explain what the city is does to avoid inconsistency and inefficiencies between the departments' activities. Identify a staff position/s contact in each department. (e.g. Representatives from the Mayor's Office, Parks & Recreation Department, Planning & Economic Development, Public Works, Regional Water Services, and Safety & Inspection Department)
b. Provide a description of the interdepartmental city process that facilitates the approval and installation of innovative stormwater management facilities (a liaison and roadmap for navigating
7. Provide a summary of the member organization's Storm Water Pollution Prevention Program and conformance with the requirements of the Environmental Protection Agency's National Pollutant Discharge Elimination System (NPDES) for municipal separate storm sewer systems (MS4s) or summarize relevant plans and programs of the member organization that address:

Water, Natural Resources, and Land Use Goals and Policies
a. Inspection and maintenance plans (wet ponds, infiltration basins, raingardens, stormsewer systems, etc.)
b. Street sweeping, right-of-way maintenance, road icing, salt storage, snow plowing, and snow storage programs
c. Spill response and containment plans d. Identify who (e.g. private, city, state entities) is responsible for inspection, operation, and maintenance of all storm water infrastructure, public works facilities, and natural and artificial watercourses within in the MWMO's city boundaries.
MWMO Standards and Agency Regulations 8. Describe your permitting process for land and wetland alteration work 9. Identify city ordinances that address permitting, site review and enforcement processes for implementing MWMO Standards 10. Describe how the city will comply with County groundwater plan requirements 11. List any lakes within the city that are on the Metropolitan Council's priority lake list
12. List any lakes within the city that are on MPCA's list of impaired waters
13. Summarize all Total Maximum Daily Load (TMDL) compliance requirements for the city
14. Summarize all current activities completed to date to comply with TMDL requirements
Surface Water Appropriations
15. Identify city administration of appropriations from small watercourses in accordance with MS 103B.211 Subd. 4
Evaluation
16. Identify how protections and improvements to water and natural resources will be measured through implementation of the local water plan

The member organizations should determine if other management programs are necessary to meet their local water plan goals and the goals of this plan.

The MWMO will discuss with each member organization the options that address its circumstances and will collaboratively determine the most practical approach to meeting the requirements of this plan and Minnesota Rules Chapter 8410. The MWMO understands the need to be sensitive to consistency with adjacent watershed districts and water management organizations. Coordination is required to successfully implement watershed standards and projects and maintain the integrity of the MWMO's goals. The MWMO will work closely with cities as needed in local water plan preparation, review, and implementation. The MWMO will apply its goals, objectives, and policies to its review of local water plans.

3.4 General Compliance Requirements

1. Make Local Water Plans available at city offices and provide the MWMO an office reference copy.

2. The MWMO requires member cities to have a Department of Natural Resources-approved Floodplain Ordinance and a Department of Natural Resources approved Shoreline Ordinance.

If no ordinance is applicable, the MWMO requires that there be no encroachment on floodways that results in reduced capacities or expedited flood flows. The only structures allowed in the flood zone are those that have been flood proofed and approved by the Department of Natural Resources.

3. Member cities are required to comply with TMDL requirements as required by their respective MS4 permits.
4. Member cities are required to address the following stormwater management and stormwater maintenance standards in a manner consistent with MWMO Standards, applicable TMDL, and NPDES standards for MS4s:
    - Target pollutant loads
    - Maximum allowable runoff rates (MWMO standard)
    - Design criteria for stormwater facilities to address target pollutant loads
    - Schedule for street sweeping, stormwater facility inspection, and maintenance
    - Spill containment and clean-up plan
5. Member cities are required to notify the MWMO of all pre-development plans requesting a variance from the MWMO's Standards.
6. Member cities in Anoka, Hennepin, and Ramsey counties are required to carry out administration of appropriations from small watercourses in accordance with MS 103B.211 Subd. 4. unless an alternative agreement was established with the MWMO.

3.5 MWMO and All Water-Related Authorities

The MWMO members pursuant to Minnesota Statutes, Section 471.59 to jointly and cooperatively by agreement exercise powers common to the contracting bodies have formed a Joint Powers Agreement for the management of water resources pursuant to Minnesota Statutes, Section 103B.201 to 103B.253. Joint Powers Agreements may have a narrowing or broadening effect on the authorities allotted to watershed management organizations by Minnesota Statute Section 103B. Authorities held in common by all member cities may be transferred to the Watershed Management Organization, with the exception of revenue-related authorities. The MWMO's current Joint Powers (Cooperative) Agreement does not narrow or expand the authorities allotted by Minnesota Statute Section 103B.

The Water Resource-Related Activities of MWMO Member Organizations (included as Appendix C) identifies the water resource-related activities of each member organization and the MWMO. The Wetland Conservation Act authority held in common by the cities is an example of an authority that could be wholly or partially transferred to the MWMO. This table may also be used to identify partnership opportunities that generate synergies and efficiencies in managing water resources in the watershed.

Appendix C is organized by the "regulated water feature" (e.g. wetland, surface waters, navigable waters, and so on). These water categories were chosen because they often have a spatial dimension and they reflect common areas for water resource laws and regulations. Within each water category there are related subtopic areas.

This information is from a more extensive study the MWMO completed to identify all the entities with water-related jurisdictional authorities and responsibilities operating within the MWMO. Contact the MWMO to request a copy of this study.

3.6 MWMO Capital Project Funding

The goal of MWMO Capital Improvement Projects (CIPs) is to support implementation of water and natural resource infrastructure to improve water quality, reduce flooding, and improve habitat. MWMO prefers capital projects designed through a systems-based approach leading to multiple public benefits.

MWMO's staff expertise and funding is available to assist with development and implementation of projects and program efforts. Projects need to align with MWMO goals to qualify for funding. Member organizations and others seeking funding will need to seek out and propose high value, innovative projects to cost-effectively improve water quality and habitat.

To streamline the funding of capital improvement projects, members' implementation schedules for water resource-related capital improvement projects should align with the MWMO's planning and annual budget processes. Applicants seeking capital project funding are encouraged to involve MWMO staff early in the project's schematic design process. To ensure sufficient time for final design and bidding to be completed before a MWMO budget cycle, it is recommended that applicants provide a one-year funding request notice, preferably in the spring. For example, the funding application period starting in the spring of 2021 will close in the spring of 2022, and approved projects from that round would be included in the MWMO's 2023 budget cycle.

In addition to the CIPs included within the Plan, there are also capital project grants described on MWMO's website. These grants have up to two application cycles per year. A feasibility study including design alternatives, cost estimates, and pollution reduction estimates should be completed prior to the start of a capital project grant.

All CIPs proposed to the MWMO will be assessed by the MWMO's CIP selection considerations. Stormwater projects must meet or exceed the MWMO's Standards (or alternative design sequence if site conditions do not allow for meeting Standards). Project components that go above and beyond stormwater requirements may be eligible for funding if it is shown that the project would provide a public benefit (i.e. aligns with MWMO's mission and watershed management goals (as seen below). Project components required by regulatory authorities cannot be funded by MWMO.

In addition to the criteria MWMO has used, we will now also consider such things as systemic racism, present-day land use practices and patterns, historic infrastructure condition and standards, and operations and maintenance needs when assessing a projects viability for funding. Climate change impacts have brought to the forefront unresolved social, economic, and environmental issues. Climate change impacts are generating greater inequity within communities of black, indigenous, and people of color. When developing plans for equity and climate change the MWMO will be evaluating what additional considerations, if any, will be used

to prioritize MWMO's CIP selection. This may include minimum requirements for community engagement, restoring equity in communities, increasing the watershed's resilience to climate change, and improving habitat in the watershed.

The list of capital improvement project selection considerations below will be used to help determine MWMO funding awards. Please contact staff or see the MWMO's website for the most recent CIPs approved for funding by the MWMO Board.

MWMO will look for alignment with its mission, plan goals and standards. These include such items as: improved water quality, surface water rate and volume control, increase habitat connectivity and restoration of natural areas, stabilization of eroding riverbanks, and improvement of riparian habitat using bio-engineering techniques. Additionally, project timeliness is important; generally, projects that cannot be completed within three years of applying are not likely to be funded.

Types of projects not eligible for MWMO funding include: paving (impervious roads, trails), maintaining or replacing pipes or other gray infrastructure, road-reconstruction projects with status-quo stormwater design, or projects under $50,000 (projects under $50,000 may potentially be referred to the Stewardship Fund grant program) If the project is not eligible, the CIP selection process ends for the applicant.

Projects passing through the first general review will be asked to submit information to provide MWMO with enough data and design to fund the project. These submittals will include some of the following depending on the type and scope of the project.

Project Location:

- Is the project on public land within a MWMO member community (all else being equal, MWMO will give public CIPs higher priority than projects on private land)?
- Does it provide a measurable, demonstrable public benefit?
- Can it provide stormwater treatment for connected parcels and areas of land (district treatment) or for offsite parcels and areas of land (regional treatment)?
- Does it consider and provide synergistic benefits with other infrastructure and land uses (i.e., the sum of the whole is greater than its parts)?
- Does it offer high visibility and educational or research value?

Design:

MWMO is interested in stormwater projects with:

- long life spans (at least 20 years)

- replicable in other locations
- offers innovative stormwater control technology
- ideally offers potential for significant pollutant removal
- habitat or water conservation
- climate resiliency
- measure and produce net positive for environmental, social, and economic outcomes
- engage black, indigenous, and people of color communities

Natural Resource-Oriented Land Management and Ecological Restoration:

The MWMO wants to support the restoration of diverse and functional natural landscapes, enhance areas of biological significance, and protect rare or endangered species. The MWMO seeks projects that are aligned with long-term planning and management efforts to create more connected landscapes, reduce habitat fragmentation, and enhance habitat complexity.

Public Support and Partnerships:

The watershed does not own property except for the MWMO facility at the Stormwater Park and Learning Center. The MWMO needs to find partners to implement the vast majority of its projects. The MWMO is looking for strong partnerships and/or community support, including neighborhood involvement, matching funds and/or in-kind commitments and educational components to enhance learning and awareness for all projects.

Opportunity and Timing:

Projects with completed preliminary investigation (e.g. soil analysis, surveys, and title work) or projects with opportunity costs related to not participating may be given extra consideration. For example, if we wait, we miss our chance to retrofit the site's stormwater features; e.g., a road reconstruction corridor with known flooded sites in the corridor.

Operations and Maintenance Plan:

Maintenance and operations are an increasingly important part of the MWMO's decision-making. With the costs of projects consistently on the rise the MWMO needs to build and maintain efficient and effective projects to achieve goals.

The MWMO does not take on the long-term operations and maintenance of the capital projects funded. As such, we work with landowners to establish a design, and long-term maintenance plan that reflects the abilities of our partners to maintain the long-term performance of the BMP's installed throughout their lifecycle. This typically requires a 20-year maintenance or habitat

management plan and estimated life-cycle costs. MWMO will also need access to inspect and monitor the project's performance.

"But-for" Test:

The MWMO has long applied the "But-for" test. For example, "But-for MWMO's funding and guidance, a project that is highly beneficial to the public would not happen."

Finally, if the project envisioned is less than $50,000 then the MWMO's Stewardship Fund Grant program is the best place to start.

The Stewardship Fund Grant program is separate for the Capital Grant program. Stewardship Fund Grants support public efforts to manage stormwater, control pollution, and improve water quality and habitat. For more information on funding assistance for projects under $50,000, please see the Stewardship Fund grant program website.

3.7 Financial Impact of This Plan on Member Organizations

This plan lays out requirements for local water plans, sets standards to be implemented by the member organizations, and outlines MWMO partnership and funding opportunities for member organizations. The plan does not outline specific capital improvements or other projects for member organizations. Costs to member organizations associated with the implementation of the requirements of this plan will include the development or revision of local water plans, the development or revision of ordinances to address MWMO standards, the implementation of standards in member organization projects, and the completion of project reviews based on adopted standards. The MWMO may assist member organizations in paying for capital improvement projects that meet the goals and standards of the MWMO. MWMO also provides expertise to assist with planning, monitoring, science, assessments, communications, and outreach activities.

The most recent version of member organizations', counties, and agencies Capital Improvement Programs/Projects (CIPs) or similar documents will be used to guide future MWMO funding requests. In addition, the MWMO will reference planning documents that identify implementation actions and capital projects related to flooding, water quality, and habitat improvements.