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### IV. ESTABLISHMENT OF GOALS AND POLICIES

The City of Bloomington has developed a number of goals and policies that conform to the overall purpose that is specified in Minnesota Statutes Section 103B.201. These goals and policies have been developed to complement County, Regional or State goals and policies. They have also been developed to preserve and use natural water storage and retention systems in order to:

- A. Limit public capital expenditures that are necessary to control excessive volumes and rates of runoff.
- B. Improve water quality.
- C. Prevent erosion of soil into surface water systems.
- D. Promote ground water recharge.
- E. Promote green infrastructure techniques and practices
- F. Protect and enhance fish and wildlife habitat and water recreational facilities.
- G. Secure the other benefits associated with the proper management of surface water.

The City of Bloomington Surface Water Management Plan requires water quality treatment systems provide complete and effective runoff management by managing peak runoff rates, managing runoff volume, and providing effective water quality treatment to remove sediment, pollutants and nutrients from storm water prior to discharge to surface water bodies and wetlands leading to nondegradation of surface water bodies in the City. Requirements of the City's Storm Water Pollution Prevention Program also apply to development and redevelopment. Under the requirements of the NPDES permit (MNR040000), the SWPPP outlines specific BMP's aimed at construction site as well as post-construction storm water management to reduce impacts of storm water runoff.

The City's SWPPP is incorporated into this Comprehensive Surface Water Management Plan by reference.

The goals and policies that the City has developed address issues related to water quantity, water quality, recreation, fish and wildlife, enhancement of public participation, information and education, public ditch system management, ground water management, wetland management and soil erosion management. Outlined below are the goals and policies that have been developed for each of the above areas of concern.

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### A. Water Quantity

#### Goal:

Maintain or decrease surface water discharge rates and volumes and limit public capital expenditures that are necessary to control excessive volumes and rates of runoff.

#### Policies:

1. Surface water discharge rates from new development and redevelopment resulting in a disturbance of land greater than or equal to one (1) acre must, at a minimum, not exceed existing discharge rates.
2. Surface water discharge from new development resulting in a disturbance of land greater than or equal to one (1) acre shall achieve a no net increase from pre-project conditions (on an average annual basis) of storm water discharge volume.
3. Surface water discharge from redevelopment resulting in a disturbance of land greater than or equal to one (1) acre shall achieve a net reduction from pre-project conditions (on an average annual basis) of storm water discharge volume.
4. Surface water discharge rates and volumes from new development and redevelopment on sites disturbing less than one (1) acre of land must be reviewed for surface water discharge purposes by the City Engineer if the development will result in an increase in rate, volume, or change in location of surface water runoff. Increases in surface water runoff rate and volume may be subject to the requirements outlined in Policies 1, 2 & 3 of this section.
5. Drainage calculations for the critical 1%, 10%, and 99% chance storm events must be submitted and approved as part of any development applications prior to the issuance of any building or grading permit.
6. The design of all major storm water storage facilities shall attempt to accommodate a critical duration event with a 1% chance of occurrence.
7. Design storm events shall utilize a Soil Conservation Service (SCS) Type II distribution as follows:

Frequency	99%	10%	1%
Duration	24-hour	24-hour	24-hour
Rainfall	2.4 inches	4.2 inches	7.5 inches

Alternative distributions or methodologies may be utilized as approved by the City Engineer.

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8. New storm sewer systems shall be designed to accommodate discharge rates with 10% chance of occurrence.
9. Wetlands will be protected in conformance with the City's Wetland Protection and Management Plan and the Wetland Conservation Act.
10. The City will utilize natural ponding areas, such as wetlands and lakes, naturally occurring low areas and constructed low areas as necessary and appropriate for the impoundment of surface water runoff as appropriate.
11. The City will use both designated and non-designated areas to detain or retain surface water runoff. Non-designated areas include general depressions, low points, and streets where structures and/or property are not damaged and any inundation that occurs is temporary.
12. Storm water volume management practices shall be the equivalent of infiltrating or retaining the first one inch of precipitation over the new impervious surface of the site. Sites that create one or more acres of impervious surface shall capture and retain on site 1.0 inches of runoff from the new and/or fully reconstructed impervious surfaces.

The use of infiltration techniques are prohibited when the infiltration structural storm water BMP will receive discharges from, or be constructed in, the following areas:

1. Where industrial facilities are not authorized to infiltrate industrial storm water under an NPDES/SDS Industrial Storm water Permit.
2. Where vehicle fueling and maintenance occur.
3. Where less than three (3) feet of separation from the bottom of the infiltration system to the elevation of the seasonally saturated soils or the top of bedrock exists.
4. Where high levels of contaminants in soil or groundwater will be mobilized by infiltrating storm water.

The use of infiltration techniques may be restricted when the infiltration device will be constructed in areas:

1. With predominately Hydrologic Soil Group D (clay) soils
2. Within 1,000 feet up-gradient, or 100 feet down-gradient of active karst features
3. Within a Drinking Water Supply Management Area (DWSMA) as defined in Minn. R. 4720.5100, subp. 13
4. Where soil infiltration rates are more than 8.3 inches per hour

In these restricted areas, the City Engineer may request additional information and/or testing to ensure that infiltration basins will perform properly and that groundwater is adequately protected.

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If volume and pollutant management controls cannot be constructed on-site, off-site locations where the controls can be met must be identified. Guidance for best management practices and standards for these mitigation processes should follow the Minimal Impact Design Standards (MIDS) Design Sequence Flowchart for flexible treatment options contained in the Minnesota Stormwater Manual.

For linear projects, a reasonable attempt must be made to obtain right-of-way during the project planning process for volume control practices. For linear projects where the lack of right-of-way precludes the installation of volume control practices, refer to the MIDS Design sequence Flowchart for flexible treatment options in the Minnesota Stormwater Manual. Road reconstruction projects, mill and overlay projects, sidewalk projects and trail projects that do not create one or more acres of new impervious surfaces are exempt from these storm water requirements. These projects may be subject to other requirements.

When infiltration practices are employed, a construction staging plan must be included preventing construction disturbance and compaction to the proposed infiltration area. Provision for deep soil ripping, soil amendments, and/or verification of infiltration rates/capacity are required and must be approved by the City Engineer.

13. Storm water management and maintenance plans must be submitted for all developments and redevelopments utilizing storm water BMPs with a preference given to green infrastructure techniques and practices.

The design and planning of all storm water management facilities shall include detailed maintenance and repair procedures to ensure their continued function. These plans will identify the parts or components of a storm water management facility that need to be maintained and the equipment and skills or training necessary, expected maintenance frequency, and estimated cost. Provisions for the periodic review and evaluation of the effectiveness of the maintenance program and the need for revisions or additional maintenance procedures shall be included in the plan. All private storm water BMPs shall be maintained by the owner(s) such that the BMP performs the intended treatment function.

The applicant must ensure access to all storm water treatment practices at the site for the purpose of inspection and repair on a permanent basis. It is intended that the storm water management and maintenance plan be a filed document with Hennepin County. These maintenance documents will be recorded with the plan and will remain in effect even with transfer of title to the property. The maintenance plan must be signed by the property owner and include provisions for submitting an annual report of operation to the City upon request.

14. The City intends to address problems associated with structural inundation caused by overland flow for the 1% chance rainfall event in 24

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hours or lesser rainfall event by working with property owners to identify and implement cost-effective solutions to minimize impacts to existing structures in flood prone areas.

15. The City performs the Local Government Unit (LGU) role and works with the Watershed Districts to ensure all projects conform to regulatory agency guidelines.
16. The City requires a minimum of two (2) feet of freeboard elevation between the low point of entry elevation and the 1% chance event high water elevation in a given area for all new and redeveloped structures.
17. The City has adopted by ordinance a MDNR approved Flood Hazard Overlay District. The FH District regulates development in flood plain areas to reduce the potential for property damage due to flooding.
18. The City is a participating community in FEMA's Flood Insurance Program.
19. The City's storm sewer inspection, maintenance, and mapping program is described in the SWPPP

### **B. Water Quality**

#### **Goal:**

Maintain or improve the quality of water in lakes, streams or rivers within or immediately downstream of the City.

#### **Policies:**

1. The City maintains existing regional storm water treatment facilities. Regional facilities do not currently exist in all locations of the City. Locations of regional facilities can be found at the Water Resources Library.
2. In the design and construction of new, or modifications to existing storm water conveyance systems, treatment of all storm water runoff from the parcel shall be treated to at least sixty percent (60%) annual removal efficiency for phosphorus, and at least eighty percent (80%) annual removal efficiency for total suspended solids. The onsite retention of runoff may be included in demonstrating compliance with the total suspended solids and phosphorus removal requirements.
3. Surface water discharges from new development resulting in a disturbance of land greater than or equal to one (1) acre shall achieve a no net increase from pre-project conditions (on an average annual basis)

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of storm water discharges of total suspended solids (TSS) and total phosphorus (TP).

Surface water discharges from redevelopment resulting in a disturbance of land greater than or equal to one (1) acre shall achieve a net reduction from pre-project conditions (on an average annual basis) of storm water discharges of total suspended solids (TSS) and total phosphorus (TP).

4. The City recognizes the MPCA “Protecting Water Quality in Urban Areas” Best Management Practices Manual as well as the “Minnesota Stormwater Manual” and “Minnesota Urban Small Sites BMP Manual” that address the proper management of storm water discharges.
5. This Comprehensive Surface Water Management Plan is to be implemented in conjunction with the City’s Storm Water Pollution Prevention Program as part of the NPDES Phase II permit and the City’s Wetland Protection and Management Plan.
6. The City has adopted Shore Area Management Regulations.
7. The City has a street sweeping program that is detailed in the SWPPP.
8. The City has a surface water/storm water education program/education activity implementation plan that meets all the requirements of the NPDES permit. The education activity implementation program outlines specific BMPs, goals, and target audiences for the six minimum control measures of the permit.
9. The City recognizes the Nine Mile Creek Watershed District Rules and requires projects conform to District rules
10. The City recognizes the Riley Purgatory Bluff Creek Watershed District rules and requires projects conform to District rules.
11. The City recognizes the cost-share programs offered by different Watershed Districts in the city and when provided information by the District(s) the city will promote such opportunities on the city’s website.
12. The City is continuing to work with property owners to establish native vegetative buffers around wetlands and water bodies consistent with the Wetland Protection and Management Plan buffer policy.
13. The City performs the LGU responsibilities for the Wetland Conservation Act.
14. The City operates and maintains a storm water monitoring program.

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15. The City has a zero phosphorus fertilizer ordinance restricting the use and sale of fertilizers containing phosphorus. This ordinance is also in conformance with the Minnesota State Phosphorus Fertilizer Law.
16. This plan incorporates the results and recommendation of the approved Use Attainability Analysis completed to date by the Nine Mile Creek Watershed District including Bush Lake UAA, Nine Mile Creek UAA, Nine Mile Creek/City of Bloomington UAA, and the Riley Purgatory Bluff Creek Watershed Districts to attain the water quality goals outlined in District Plans and Use Attainability Analyses. All other wetland/water bodies are intended to be managed as outlined in the City's Wetland Protection and Management Plan.

### **C. Recreation, Fish and Wildlife**

#### **Goal:**

Protect and enhance recreational facilities and fish and wildlife habitat.

#### **Policies:**

1. The City will cooperate with the Minnesota Department of Natural Resources, the Corps of Engineers, the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, and other appropriate agencies in promoting public enjoyment and protecting fish, wildlife, and recreational resources in the watershed.
2. Wetlands that are identified as habitat or habitat corridors shall be maintained and protected from encroachment as provided for in the Environmental Protection Element of the City Comprehensive Plan.
3. Wetlands will be protected in conformance with the goals and policies outlined in Section IV, Subpart G, Wetlands.
4. The City will sweep the streets twice annually in all areas with early spring sweeping completed in priority areas shown on Figure E-1 in Appendix E.

### **D. Enhancement of Public Participation, Information, and Education**

#### **Goal:**

Provide educational opportunities and inform the public on pertinent water resource management issues and increase public participation in water management activities.

#### **Policies:**

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1. The City has a storm water education program and education activity implementation plan outlined in the Storm Water Pollution Prevention Program. The education program and EAIP identifies target audiences and educational goals for each audience outlined for each of the six minimum control measures of the NPDES General Permit:
  - Public Education and Outreach
  - Public Participation
  - Illicit Discharge Detection and Elimination
  - Construction Site Storm Water Runoff Control
  - Post-construction Storm Water Management
  - Pollution Prevention/Good Housekeeping for Municipal Operations.
  - Activities include best management practices such as educational brochures, water resources articles and information on the City web site and local paper, Clean Water Fest/Environmental Fair, and training opportunities for municipal operations.
2. The education program and education activity implementation plan are incorporated into this plan and can be found in **Appendix F**.

### **E. Public Ditch Systems**

#### **Goal:**

Provide a mechanism through which public ditch systems will be managed.

#### **Policies:**

1. County Ditch #1 is part of Nine Mile Creek and is located downstream of West 84<sup>th</sup> Street to the Marsh Lake Dam. This public ditch is managed by the Nine Mile Creek Watershed District.

### **F. Ground Water**

#### **Goal:**

To coordinate activities and/or manage surface water runoff to the degree necessary to meet requirements for ground water protection or management as required by Hennepin County, Minnesota Pollution Control Agency, the Minnesota Department of Health, and the Department of Natural Resources.

#### **Policies:**

1. Cooperate with state and regional agencies on ground water monitoring, inventorying or permitting programs.
2. The City requires the development of spill prevention, control, and counter measure plans that are consistent with State and/or Federal

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regulations (i.e. Minnesota Statutes 115E and the Federal Oil Pollution Act 33 USCA Sec. 2701-2761). The contact within the City for spill prevention and control is the division manager of Environmental Health Services (952) 948-8970.

3. The City encourages the protection of ground water recharge areas in order to maintain quality and productivity of ground water resources.
4. The City will cooperate with the Department of Health to insure that all unsealed or improperly abandoned wells within the City are properly sealed. Technical requirements for the abandonment of these wells will be in conformance with the local and state regulations.
5. The City will sweep the streets twice annually in all areas, with early spring sweeping completed in priority areas.
6. The City has developed and implemented a wellhead protection plan. This plan is incorporated by reference.
7. In accordance with the City's SWPPP and MS4 permit, the City has incorporated BMPs into the SWPPP to protect drinking water sources potentially affected by storm water discharges. Refer to the City's SWPPP and Part IX, Appendix C and MNR040000 which are incorporated by reference.

### **G. Wetlands**

#### **Goals:**

The City will protect wetlands in conformance with the requirements of the City's Wetland Protection and Management Plan and the Wetland Conservation Act of 1991.

#### **Policies:**

1. The City will continue to implement the policies, programs, capital improvements, and ordinances detailed in the Wetland Protection and Management Plan. A copy of the plan is available in the Water Resources Library at Public Works.
2. The City will continue to act as the Local Government Unit (LGU) for wetland management according to the City's Wetland Protection and Management Plan.
3. Prior to issuance of any city grading or building permits, all development and redevelopment activities must comply with the Wetland Conservation Act. A copy of the Wetland Conservation Act Rules can be found in the Water Resource Library.

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4. The City will not allow any burning, filling, or draining of an existing wetland without the City's expressed written approval as per the City's Wetland Ordinance in **Appendix G**, the Wetland Protection and Management Plan and the Wetland Conservation Act.
5. The City will promote and encourage all properties adjacent to lakes, streams, and wetlands to establish a vegetative buffer strip consisting of native non-mowed vegetation. This policy is included in **Appendix G**.
6. The City will sweep the streets as outlined in the Storm Water Maintenance Plan (**Appendix E**)
7. The City requires that the development or redevelopment of all structures shall be outside the recommended buffer zone outlined in the Wetland Protection and Management Plan or at least 10 feet back from the wetland edge as delineated by a qualified delineator and/or verified by the City Staff.

### H. Erosion

#### Goals:

To prevent soil erosion and sedimentation.

#### Policies:

1. The City has developed and implemented a SWPPP that includes components and BMPs to reduce pollutants in storm water runoff from construction activities and post-construction development and redevelopment. The SWPPP additionally addresses pollution prevention for municipal operations that includes inspection and training components aimed at reducing and preventing erosion and sedimentation.
2. The City requires the submission and approval of Erosion and Sediment Control and Grading Plans prior to the issuance of any grading or building permits. These plans shall conform to the general criteria set forth by the MPCA and City ordinances and SWPPP.
3. The City will sweep the streets as outlined in the Storm Water System Maintenance Plan (**Appendix E**).
4. The City will require any development or redevelopment to comply with the erosion control ordinance and the steep slope ordinance, which are included in **Appendix G**.
5. The City has established an erosion control hotline number for receiving erosion control related calls. The Engineering Division is responsible for this task and can be reached at (952) 563-4533.

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6. The City requires erosion and sediment control training for staff that are responsible for inspecting erosion control on City and Private construction projects.
7. The City conducts erosion control inspections on all building and grading projects to be in compliance with City ordinance and the Storm Water Pollution Prevention Program.
8. The City has a steep slope ordinance in place to protect areas with steep slopes (12% or greater) from erosion caused by surface runoff due to development. See **Appendix G** for a copy of the ordinance.
9. The City requires inlet protection on all storm sewer inlets on construction projects exposed to construction runoff.
10. The City will continue to provide timely turf reestablishment/permanent erosion control on all City improvement projects.

### I. **Minnesota River Valley**

#### **Goals:**

To continue to protect and preserve the Minnesota River bluff, Minnesota River, and associated wetlands.

#### **Policies:**

1. Work cooperatively with the US Fish and Wildlife Service, Lower Minnesota River Watershed District and State agencies in the development of resource management and implementation plans.
2. Work cooperatively with Federal and State agencies in the development of resource management and implementation plans affecting the Minnesota River valley.
3. Develop storm water management plans complementary with Lower Minnesota River Watershed District, US Fish and Wildlife Service or State agency resource management plans in the Minnesota River valley.
4. Work cooperatively with all entities that manage or have regulatory authority over wetlands within the City to develop a long-term systematic water quality monitoring program. The City will continue its present storm water monitoring program to assess the quality of the storm water entering City ponds, the storm sewer system, and the Minnesota River.
5. Work cooperatively with the Lower Minnesota River Watershed District in the development of water quality improvement projects in the Minnesota River valley.