
4.0 Goals, Strategies, and Policies

The City has developed a number of goals, strategies, and policies for the management of stormwater and surface water resources within the City. The City of Richfield manages surface water resources proactively, reflecting the value the community places on natural resources. The goals, strategies, and policies described here are designed to continue to improve the quality and effectiveness of water resource planning and management in the City. These goals, strategies and policies have been developed to complement county, regional, and state goals, policies and management activities. Note that county, regional, and state requirements may apply in addition to the goals, strategies, and policies described herein).

4.1 Goals

While allowing for orderly development and redevelopment and providing its constituents with necessary services and infrastructure, the City wishes to:

1. Maintain and enhance surface water quality to meet applicable standards and preserve ecological functions.
2. Minimize the risk of flooding and associated negative impacts to public health, infrastructure, and the environment.
3. Protect and preserve the quantity and quality of groundwater resources.
4. Minimize erosion of soil into surface water systems and other negative environmental impacts of stormwater runoff.
5. Protect and preserve fish and wildlife habitat and shoreland integrity.
6. Preserve the quantity and quality of wetlands.
7. Minimize public expenditures related to surface water management through effective planning, education, cooperation, and implementation.

4.2 Strategies

The City has developed policies and actions to achieve the City's goals for managing stormwater and surface water resources. These policies and actions are organized into four strategies. These strategies will assist the City in targeting its main audiences for the purposes of storm water management as follows:

- Operations
- Regulation and Permitting
- Education, Training, and Outreach
- Cooperation with other governmental entities

These strategies are described in greater detail in the following sections.

4.2.1 Operations

The City performs its stormwater and water resource management responsibilities through the coordinated and targeted implementation of its own City operations. These include monitoring and

maintenance as well implementation of capital projects to address identified issues. By outlining policies related to how the City's operations will treat and manage storm water, the City can work to achieve its storm water management goals most efficiently. Policies related to City monitoring, maintenance, and capital programs are included in Section 4.3.7. The City's operational programs are described in greater detail in Section 5.0.

4.2.2 Regulation and Permitting

Many stormwater management activities are driven by regulations placed on new development or redevelopment activity. These regulations are intended to prevent future problems and assist the City in achieving its water resource management goals.

Policies related to the management of storm water are included in the regulation strategy. The policies included within this strategy outline specific storm water management elements that are required to be implemented through the development, redevelopment, and/or permitting process. The regulation strategy is targeted at the public, developers, City Staff, and City Council.

In addition to the regulation policies listed in Section 4.3, the City supports the applicable rules and requirements of the MCWD, NMCWD, and RBWMO within each of their respective jurisdictions. In some cases, the City has incorporated WMO rules and requirements into the City's official controls; in others, WMO requirements are adopted by reference. The most current version of the MCWD and NMCWD rules (note that the RBWMO has not adopted rules outside of its watershed management plan) are available at the respective WMO websites at:

- Minnehaha Creek Watershed District: www.minnehahacreek.org
- Nine Mile Creek Watershed District: www.ninemilecreek.org
- Richfield Bloomington Watershed Management Organization: www.rbwmo.org

Development and redevelopment activity within WMO jurisdictions must meet applicable WMO requirements as well as City requirements. The City has adopted WMO Rules in City ordinance by reference. The City shares permitting duties with the three watershed management organizations within its boundaries, as follows:

- RBWMO – within the jurisdiction of the RBWMO, the City is the permitting authority.
- MCWD – within the jurisdiction of the MCWD, the City is the permitting authority for projects triggering MCWD Rule B (Erosion Control), Rule C (Floodplain Alteration), Rule D (Wetland Protection), and Rule N (Stormwater Management) per a 2009 memorandum of understanding between the City and the MCWD (see Appendix A). The MCWD retains permitting authority for projects triggering other applicable MCWD Rules (see also Section 5.3.1).
- NMCWD – within the jurisdiction of the NMCWD, the NMCWD is the permitting authority projects triggering the NMCWD Rules has permitting authority for applicable NMCWD Rules through an agreement with the NMCWD (see also Section 5.3.2).

The City may consider assuming additional permitting authority from the MCWD and/or NMCWD in the future, in conformance with the process established by each WMO in their respective watershed

management plans. In that scenario, the City and WMOs will sign an agreement establishing the City as the permitting authority. At present, the City wishes to continue to defer permitting authority to the NMCWD.

The City's official controls and project review process is described in Section 5.5.

4.2.3 Education, Training, and Outreach

The purpose of the this strategy is to foster responsible water resource management practices by educating residents, business owners, City Staff, City Council, and developers about the impact of human behaviors on natural resources and the benefits of appropriate storm water management practices. Informed residents and stakeholders exercising and demonstrating responsible behaviors will positively impact water resources and minimize the need for City maintenance and management efforts. This education strategy has also been designed to comply with City NPDES requirements (see Section 5.1). The policies associated with this strategy are described in Section 4.3.1.

4.2.4 Cooperation with Other Governmental Entities

The City is one of many local, regional, and state governmental entities tasked with the management of stormwater and natural resources within the City. These organizations collect data, educate residents, implement projects, and regulate activities within the City. The City recognizes the roles of other governmental entities and will cooperate and coordinate with these agencies to minimize duplication of efforts and maximize efficiency in the pursuit of common objectives. This strategy is incorporated into the policies described in Section 4.3.

This Plan is in conformance with but does not restate all other agency rules that are applicable to water quality and natural resource protection. The other agency rules and policies include rules, policies, and guidelines associated with the following organizations:

- Minnesota Department of Health www.health.state.mn.us
- Minnesota Pollution Control Agency www.pca.state.mn.us
- Board of Water and Soil Resources www.bwsr.state.mn.us and the Wetland Conservation Act www.bwsr.state.mn.us/wetlands/wca/index.html
- Minnesota Department of Natural Resources www.dnr.state.mn.us
- US Army Corps of Engineers www.mvp.usace.army.mil
- US Fish and Wildlife Service www.fws.gov
- Minnehaha Creek Watershed District www.minnehahacreek.org
- Nine Mile Creek Watershed District www.ninemilecreek.org
- Richfield-Bloomington Watershed Management Organization www.rbwmo.org

While these other agency rules, policies, and guidelines are not all restated in this Plan, they are applicable to projects, programs, and planning within the City. The *Minnesota Stormwater Manual*, which is a document intended to be frequently updated, is incorporated by referenced into this Plan and can be found at www.pca.state.mn.us/water/stormwater/stormwater-manual.html.

4.3 Policies

The City has developed policies to implement the strategies described in Section 4.2. Policies are organized according to strategy and/or topic area and numbered for ease of reference. The City has identified target audiences for the policies outlined in each strategy. The target audiences and strategies are as follows:

Audience	Strategies
Public – Residents and Business Owners	Education, Regulation
City Staff and City Council	Cooperation, Education, Operation
Developers	Education, Regulation
Other Governmental Entities	Cooperation
Schools, churches, and other institutions	Education, cooperation

Based on the target audience and the strategy, the City has developed a number of policies. These policies are outlined below.

4.3.1 Education and Outreach Policies

1. The City will continue to implement the public education elements of its NPDES Municipal Separate Storm Sewer System (MS4) permit, including an annual public meeting to review the City's Stormwater Pollution Prevention Plan (SWPPP), this Surface Water Management Plan, and stormwater best management practices.
2. The City will continue to use the City website to convey stormwater and surface water management information at: <http://www.richfieldmn.gov/>
3. The City will develop and distribute newsletters, mailings, or other media to promote appropriate water resource management practices in cooperation with WMOs, as applicable. Topics may include (but are not limited to):
 - Wetland buffers
 - Infiltration, filtration, and groundwater protection
 - Management of aquatic invasive species
 - Water conservation and reuse
 - Pollution prevention (including proper hazardous waste disposal and illicit discharge)
 - Yard waste management
 - Pet waste disposal
4. The City will continue to support the water quality education program at the Wood Lake Nature Center.

5. The City will collaborate with the RBWMO, MCWD, and NMCWD in stormwater and water resource management education efforts, as opportunities allow.
6. The City will provide training opportunities to City Staff (and possible private entities) regarding good housekeeping, construction best management practices, and the requirements of the City's NPDES MS4 permit.

4.3.2 Flood Risk Reduction and Rate Control

7. The City requires development and redevelopment activities to meet the requirements for rate control specified in the City's *Engineering Design Standards for Stormwater Management* (2017, as amended, see Appendix B). Activities located within the jurisdictions of the MCWD, NMCWD, and RBWMO must satisfy the applicable rate control requirements of the respective WMO; see the most recent rules and requirements of each WMO at:
 - www.ninemilecreek.org
 - www.minnehahacreek.org
 - www.rbwmo.org
8. The City prohibits the increase of storm water runoff volumes to landlocked areas resulting from development or redevelopment activity, unless the increase is determined to be acceptable by the City engineer.
9. Major storm water storage facilities, storm sewer pipes, and conveyances shall be designed to accommodate a critical duration storm event(s) specified in the City's *Engineering Design Standards for Stormwater Management* (2017, as amended, see Appendix B).
10. For new and redeveloped structures, the City requires that the low floor elevation (including basements) and low opening elevation meet the minimum freeboard requirements specified in the City's *Engineering Design Standards for Stormwater Management* (2017, as amended, see Appendix B). The City will coordinate with the MCWD, NMCWD, and RBWMO, as needed, in establishing consistent floodplain information and flood elevations.
11. The City prohibits land-disturbing activities within the 100-year floodplain that will cause an increase in the stage of the 100-year or regional flood or cause an increase in the flood damages in the reach affected. Additional detail is provided in the City's *Engineering Design Standards for Stormwater Management* (2017, as amended, see Appendix B).
12. Land-disturbing activities located within the floodplain must be consistent with applicable MCWD, NMCWD, and RBWMO floodplain rules and requirements; see the most recent rules and requirements of each WMO at:
 - www.ninemilecreek.org
 - www.minnehahacreek.org
 - www.rbwmo.org

4.3.3 Water Quality

13. For stormwater runoff not draining to a regional treatment system, the City requires water quality treatment of stormwater prior to discharge to a lake, stream or wetland to remove, on an average annual basis, a minimum of:
 - 50 percent of the total phosphorus relative to untreated conditions, and
 - 80 percent of the total suspended solids relative to untreated conditions.Additional detail is provided in the City's *Engineering Design Standards for Stormwater Management* (2017, as amended, see Appendix B). See ordinance for when a permit is required at <http://www.richfieldmn.gov/>.
14. The City requires stormwater ponds to be designed consistent with the guidance provided in the City's *Engineering Design Standards for Stormwater Management* (2017, as amended, see Appendix B) and the Minnesota Stormwater Manual, as amended (http://stormwater.pca.state.mn.us/index.php/Main_Page).
15. Activities located within the jurisdictions of the MCWD, NMCWD, and RBWMO must satisfy the applicable water quality treatment requirements of the respective WMO; see the most recent rules and requirements of each WMO at:
 - www.ninemilecreek.org
 - www.minnehahacreek.org
 - www.rbwmo.org
16. New storm water management ponds that are constructed as part of private development shall be located within drainage and utility easements dedicated to the City. Any 100-year floodplain area on private property shall be located within a drainage and utility easement dedicated to the City upon development or redevelopment. No structures or fences shall be constructed within the easement unless approved by the City Engineer.
17. The City will cooperate with the MPCA, WMOs, and other stakeholders to develop Total Maximum Daily Load (TMDL) studies and implementation plans for impaired waters that receive storm water from the City.
18. The City will work with the MCWD, NMCWD, and/or RBWMO to implement projects resulting from Watershed Restoration and Protection Strategy (WRAPS) and TMDL implementation plans.
19. The City encourages the use of on-site stormwater abstraction (e.g., infiltration, reuse) where feasible and requires developers to consider the use of stormwater abstraction methods in project design.
20. Within the jurisdictions of the MCWD and NMCWD, projects triggering applicable WMO volume control rules must provide stormwater abstraction sufficient to satisfy WMO rules via infiltration, evapotranspiration, capture, and/or reuse of storm water runoff unless a regional system has been

constructed to meet those rules and requirements. See the most recent rules and requirements of each WMO at:

- www.ninemilecreek.org
- www.minnehahacreek.org
- www.rbwmo.org

21. The City requires that stormwater infiltration and filtration practices be designed consistent with the City's *Engineering Design Standards for Stormwater Management* (2017, as amended, see Appendix B) and with consideration for the following guidance for determining the feasibility of infiltration:
 - NPDES Construction Stormwater General Permit (2013, as amended)
 - Minnesota Department of Health's Evaluating Proposed Stormwater Infiltration Projects in Vulnerable Wellhead Protection Areas (MDH, 2007)
 - Minnesota Pollution Control Agency's Minnesota Stormwater Manual:
http://stormwater.pca.state.mn.us/index.php/Main_Page
22. The City requires that new development and redevelopment consider and incorporate to the maximum extent practical and feasible Low Impact Development (LID) techniques that have been reviewed and approved by the City. A maintenance plan for these features shall be submitted to the City for review and approval. The City promotes the use of the following reference documents to guide application and design of LID practices:
 - Minnesota Urban Small Sites Best Management Practices Manual (Metropolitan Council, 2001)
 - Minnesota Department of Health's Evaluating Proposed Stormwater Infiltration Projects in Vulnerable Wellhead Protection Areas (MDH, 2007)
 - Minnesota Pollution Control Agency's Minnesota Stormwater Manual:
http://stormwater.pca.state.mn.us/index.php/Main_Page
23. The City encourages project proposers to consult with City staff during the project planning process for additional guidance and information on stormwater BMPs and LID techniques.

4.3.4 Wetland Management

1. The City will continue to serve as the Local Government Unity (LGU) responsible for administering the Wetland Conservation Act (WCA) within the RBWMO and MCWD boundaries. For areas of the city within the NMCWD, the City defers LGU authority to the NMCWD.
2. The City requires all projects that impact wetlands to conform to the requirements of the WCA as well as all applicable WMO rules and requirements; see the most recent rules and requirements of each WMO at:
 - www.ninemilecreek.org
 - www.minnehahacreek.org

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- www.rbwmo.org
3. Within the jurisdictions of the MCWD and NMCWD, projects must satisfy buffer width and other WMO wetland projection standards, as applicable. These rules are adopted by the City for those areas within each WMO, as described in the WMO rules and requirements available at:
 - www.ninemilecreek.org
 - www.minnehahacreek.org
 - www.rbwmo.org
 4. The City will continue to preserve and maintain existing vegetated buffers around wetlands and ponds on City property. The City will seek opportunities to establish vegetated buffers adjacent to City owned wetlands and ponds where no buffer currently exists, allowing for existing recreational uses (e.g., trails), and exempting Richfield Lake.

4.3.5 Groundwater Management

1. The City will cooperate with the Department of Health to work towards insuring that all no longer used unsealed or improperly abandoned wells within the City are properly sealed.
2. The City will collaborate with Minnesota DNR, WMOs, and other stakeholders in the development of groundwater management guidance and resources, as opportunities allow.
3. The City will consider potential impacts to groundwater quality and quantity in evaluating and implementing City projects.
4. The City will promote the use of conservation and water reuse to protect groundwater supply through its education program or other opportunities.
5. The City will require developers to consider groundwater conservation opportunities in the design and implementation of proposed projects.
6. The City will maintain and update its Wellhead Protection Plan consistent with Minnesota Rules 4720 and will provide updates to WMOs.

4.3.6 Erosion and Sediment Control

1. The City requires that proposers of projects that disturb 5,000 square feet of land or greater, excavate or fill more than 50 cubic yards, or result in more than 300 linear feet of trenching or earth disturbance, submit an erosion control plan and obtain approval from the City prior to performing land disturbing activity. Information is available in the erosion control regulations at: <http://www.richfieldmn.gov/>
2. For commercial, industrial, institutional, or mixed-use development and redevelopment activities that disturb one half acre or more of land, the City requires project proposers to submit and

implement of a storm water management plan conforming to the requirement of City ordinance 429 and the City's Engineering Design Standards. These plans shall conform to the general criteria outlined in the Minnesota Pollution Control Agency *Protecting Water Quality in Urban Areas*, and NPDES Construction Site permit.

3. For projects triggering a National Pollution Discharge Elimination System (NPDES) Construction Stormwater General Permit or NPDES dewatering permit, the City requires project proposers to submit the NPDES Stormwater Pollution Prevention Plan (SWPPP) to the City as part of the application for City review.
4. For construction or significant redevelopment of single family homes, the City requires project proposers to submit an erosion and water quality control plan that is in conformance with the MPCA Construction Stormwater General Permit and applicable WMO requirement as part of the building permit process.
5. For City projects, the City will conduct pre-construction meetings with contractors to review erosion control methods and inspections for projects that disturb one acre or more. Projects disturbing less area may require pre-construction meetings at the discretion of the City Engineer depending on the potential to impact natural resources.
6. The City will conduct erosion control inspections for projects subject to City erosion control standards and all projects that require an NPDES construction permit as administered by the MPCA until the project is completed and the City has approved that erosion control measures may be removed.
7. The City will maintain a phone line and website link to report construction site erosion control concerns and waste disposal infractions; the phone number is (612) 861-9797 and the City's website is <http://www.richfieldmn.gov/>

4.3.7 Administration and Operations

1. The City will continue to implement permitting programs (e.g., building permit) to ensure compliance with City and other local and state requirements. Note that some activities may require permits in addition to those issued by the City.
2. The City's building inspectors or other City staff will inspect projects for conformance with City permitting requirements, as dictated by the applicable permit(s).
3. The City will cooperate and coordinate, as needed, with the WMOs and other applicable state agencies to perform water quality and water quantity monitoring of its water resources.
4. The City shall maintain its stormwater management system to ensure the continued effectiveness of stormwater treatment, conveyance, and flood risk reduction functions.

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5. The City will continue to implement the stormwater system maintenance best management practices/good housekeeping practices defined in its Municipal Separate Storm Sewer System (MS4) Stormwater Pollution Prevention Program (SWPPP).
 6. The City will continue to prioritize regional stormwater management practices (e.g., regional detention and water quality treatment) over site specific BMPs where feasible. The City recognizes that development of these regional facilities will likely be incorporated into development and redevelopment activity and may not be initiated independently by the City. The City will work with the MCWD and NMWCD to implement regional BMPs as needed based on redevelopment opportunities. If a regional system with available capacity is not in place, the City will require on-site treatment and BMPs pursuant to the respective City, WMO, and MPCA requirements for the development or redevelopment site.
 7. The City requires developers or permit holders to provide as-built drawings of all ponding areas and designated emergency overflows.
 8. The City requires a surveyor's certified drawing showing that the elevations of the low floors, low openings, and below the floor HVAC facilities are in conformance with the City's minimum building elevation requirements for such features. This requirement may be waived at the discretion of the City Engineer.
 9. The City will maintain and submit annual inspection reports, maintenance reports, and other needed documentation in conformance with the NPDES MS4 permit and applicable requirements of the WMOs.
 10. The City Staff will annually review and optimize, as necessary, mowing, fertilizing, and herbicide application practices to minimize negative environmental impacts.
 11. The City will continue to assess its winter road management practices (e.g., de-icing) to reduce negative environmental impacts while maintaining public safety.
 12. The City will periodically review its stormwater program funding mechanisms, expenses, and implementation program to promote efficiency and funding adequate to accomplish City goals. The City will pursue cost-share and grant funding opportunities, when applicable.