

Section 2

Goals and Policies

City Goals

In 2006, the City Council and Mayor worked together to establish new goals for the City of Minneapolis. Their work resulted in the six following City Goals:

A Safe Place to Call Home

One Minneapolis

Lifelong Learning Second to None

Connected Communities

Enriched Environment

A Premier Destination

Each of these goals influences surface water management. Elimination of sewage overflows and flood prevention will improve the health and **safety** of the City. Runoff from even the most remote neighborhoods is connected to our surface waters; all citizens must **unite** to protect these waters. All citizens impact the surface waters; through **lifelong learning** and education we can change our behaviors in a way that will benefit our water resources. We are **connected** from Shingle Creek to Minnehaha Falls by the Minneapolis parks and parkways that surround our surface waters. Proper management of our stormwater runoff drainage system will protect, **enrich** and sustain Minneapolis waters. With the achievement of these goals, Minneapolis will continue to be a **premier destination**.



*Minnehaha Creek downstream of Lake Nokomis.
(Source: MPRB)*

Each of the City Goals has a role in water resources management, but the most applicable City Goal is: We have an **Enriched Environment**.

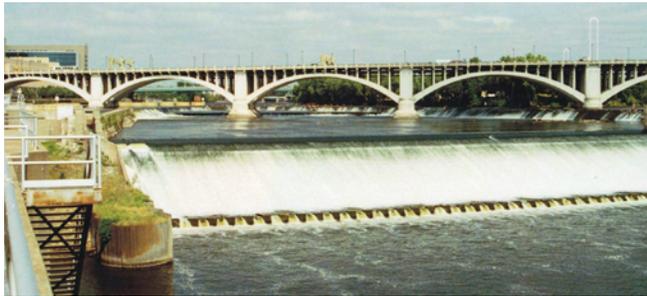
Water Resources Management Policies

Other City initiatives have also produced city-wide goals that tie to water resources management. These targets and goals are an extension of the City's vision for the future and tie to Minneapolis' long-term objective to be a livable city with an exceptional quality of life.

Water resources management goals are also defined in the City's comprehensive plan, [The Minneapolis Plan](#), adopted by the City Council and Mayor on March 24, 2000. This plan serves the needs of the City and meets the conditions of the Metropolitan Land Planning Act. Chapter 7: Natural Ecology lists actions the City will take to protect the natural environment, including water resources. Seven of the 12 policies relate to water resources management, including:

7.2 Manage the use of the City's environmental resources to meet present needs while considering future concerns.

Lakes, creeks, and the Mississippi River are among the most valuable environmental resources that exist within the boundaries of Minneapolis. These must be managed to restore, preserve and protect the water quality and ecosystems for both present use and future value.



The Mississippi River is one of the many valuable environmental resources within Minneapolis' boundaries. Mississippi River in Minneapolis. (Source: John Kuhne)

7.4 Encourage the planting and preservation of trees and other vegetation.

Increased area of total tree canopy in the City will increase transpiration and decrease the rate and volume of stormwater runoff.

7.5 Protect and sustain water resources.

All surface water management activities are based on this goal.

7.6 Take measures to reduce water consumption and encourage water conservation.

Reduction of water consumption for the purpose of limiting demand on water treatment facilities will also reduce the amount of sewage that is conveyed by the sanitary sewers. This will help reduce the frequency and duration of wet weather CSOs. It has a secondary benefit of reduced fees paid to Metropolitan Council Environmental Services for wastewater treatment and increasing the service life of the Metro Wastewater Treatment Plant.

7.8 Support pollution prevention programs as an important first step in maintaining a healthy physical environment.

The most effective means of preventing degradation of water bodies is to manage the pollutants at the source. Non-structural BMPs, such as street sweeping, construction erosion control, and emergency spill response procedures contain pollutants at the source and prevent the need to mitigate the pollutants from the surface waters down



*Erosion control on construction sites will help keep pollution from entering surface waters.
(Source: Jennifer Hildebrand)*

stream of Minneapolis. Each ounce of pollutant that is prevented from contacting stormwater runoff is an ounce of pollutant that does not need to be removed from the Gulf of Mexico.

7.10 Enhance the safety and appearance of our built environment through education, inspection and enforcement.

Stormwater picks up pollutants on both private properties and from public areas. Therefore, BMPs practiced by the City will prevent a portion of the pollutants from coming into contact with the

stormwater runoff. Private property owners must also practice source control of pollutants. For example, rooftop connections to the sanitary sewer are a major contributor of CSOs. Education, inspection and enforcement of City ordinances are a necessary component of total stormwater management and water resources protection.

7.12 Play a leadership role in setting up examples and pilot projects.

Water resources improvements can be included in neighborhood projects that incorporate economic development, transportation enhancement, quality of life, and environmental stewardship.

Sustainability Initiatives

The philosophy of sustainability was further defined in April 2005 when the City Council created [Sustainability Initiatives](#), directing staff to develop targets for each indicator. Five of the 24 indicators relate to the City's water resources management.

These indicators, along with their respective targets, are presented on the following pages:

The Local Surface Water Management Plan carefully considers the City goals and regulatory requirements that influence water resources management.

Urban Tree Canopy

Increasing the total area of tree canopy will increase transpiration and decrease the rate and volume of stormwater runoff.

1. No net loss of tree canopy cover (26.4 percent) thru 2015.
2. Plant at least 2,500 trees on public land every year through 2015.

Permeable Surface

Increasing the total area of permeable surfaces through reduction of impervious surfaces, construction of green rooftops, and installation of stormwater infiltration systems will decrease the rate and volume of stormwater runoff.

1. If and when it becomes feasible to measure the City's actual stormwater outflow, either across the City or within a pilot area, baseline data will be collected and targets will be set for reduced outflow.
2. By 2015, increase the number of Large Area Stormwater Amenities to 30. These are ponds, wetlands and rain gardens that treat large areas/many sources ("regional" facilities, generally public).
3. By 2015, increase the number of Small Area Stormwater Amenities to 500. These are ponds, wetlands and rain gardens that treat small areas/single sources (generally private).
4. By 2015, increase the number of Large Area Underground Stormwater Treatment Chambers to 150. Also known as grit chambers, these devices treat large areas/many sources, generally public.
5. By 2015, increase the number of Small Area Underground Stormwater Treatment Chambers to 100. Also known as grit chambers, these devices treat small areas/single sources, generally private.
6. By 2015, increase the number of Green Roofs in the City to 100.

Combined Sewer Overflow

Elimination of CSOs will improve the quality of the Mississippi River. Reduction in the volume of groundwater that infiltrates into sanitary sewer pipes and stormwater runoff that inflows into the sanitary sewers will reduce the frequency of CSOs, and will reduce the total volume of sewage being treated at the Metro Wastewater Treatment Plant.

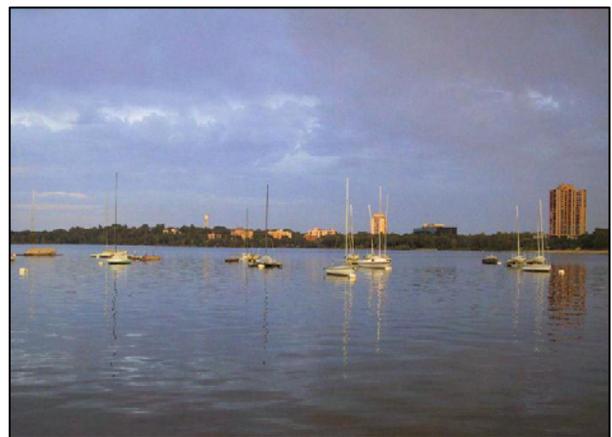
1. By 2014, eliminate CSOs

Water Quality of Lakes, Streams, and the Mississippi River

Numerous studies have connected the continued degradation of surface water quality to the increased pollutants being transported by stormwater runoff. Improving the quality and reducing the quantity of stormwater runoff will sustain the quality of Minneapolis' unique surface waters.

1. Consistently maintain low Trophic State Index (TSI) levels by 2014:

Brownie	55 TSI
Calhoun	47 TSI



Reducing stormwater runoff will help improve the quality of Minneapolis' surface waters, including Lake Calhoun. (Source: MPRB, Maurice Schultz)

Cedar 47 TSI

Harriet 47 TSI

Lake of the Isles 57 TSI

Other water bodies pending further studies.

Air Quality

The air always smells fresh and clean immediately after a rainstorm. This is partially due to the washing of the air by the rain. Particulates that are suspended in the air are washed into the runoff and transported to the City's surface waters. Improving air quality is a pollution prevention technique that will also improve the quality of the City's stormwater runoff.

1. Fewer than 35 moderately unhealthy days per year in the Minneapolis area by 2015 with further reductions thereafter.
2. Reduce levels of all monitored air toxics to levels lower than applicable health benchmarks by 2015.

Water Resources Management Guiding Principles

Minneapolis intends to accomplish its City goals and policies while carefully considering budget limitations, changes to regulations, and the needs of aging infrastructure. Therefore, the City developed six water resources guiding principles that provide the direction needed to accomplish these multiple goals. The guiding principles are:

The CSO program has dramatically reduced the discharge of sewage into the Mississippi River.

1. Protect People, Property and the Environment

Two significant programs that Minneapolis has implemented have a common goal of protecting the health and safety of the people of Minneapolis. The CSO program has dramatically reduced the discharge of sewage into the Mississippi River. The Flood Mitigation Program aims to protect property from the damages incurred by severe and/or regular flooding. Protecting people, property and the environment means that:

- Overflows from sanitary sewers are eliminated (except during extreme events as defined in NPDES CSO permit)
- Structures are protected from flooding from both sewers and surface waters during the 100-year storm
- Roadway flooding that impacts public safety and/or commerce is prevented
- Structures and infrastructure are protected from the detrimental effects of soil erosion and sedimentation

- Public health threats related to water resources are prevented
- Aquatic and riparian habitat is enhanced to manage water quality
- Damage due to water main breaks is minimized
- Water resources, including groundwater, are managed to accomplish pertinent public safety objectives

2. Maintain and Enhance Infrastructure

The most effective stormwater BMPs are based on pollution prevention activities, including maintenance of public infrastructure. Critical maintenance practices undertaken by the City of Minneapolis include street and public parking lot sweeping, sediment/debris removal from stormwater treatment chambers, construction site erosion control and vegetation management. Maintaining and enhancing infrastructure requires the City to:

The most effective stormwater Best Management Practices (BMPs) are based on pollution prevention activities, including maintenance of public infrastructure.

- Routinely assess the condition of the sanitary sewer and storm drains
- Identify sanitary sewer and storm drain capacities throughout the systems
- Plan service needs to minimize life-cycle costs
- Plan, schedule and conduct maintenance activities to optimize pollution control
- Apply efficient and effective work methods
- Accurately match staffing levels and equipment/materials availability with work requirements

3. Provide Cost-Effective Services in a Sustainable Manner

Whenever the City must select between two alternatives that meet the same goal, the City will opt for the most cost-effective solution. Minneapolis will consider all life cycle costs in a cost effective analysis, including planning/design, construction, operation, and maintenance. Providing cost-effective services in a sustainable manner requires that:

- Both short- and long-term lifecycle analyses will be conducted to adequately assess all project/program costs
- Lifecycle analyses will include all costs (city and non-city)
- Multi-objective strategies for water resources management are incorporated in all projects and programs

- The capabilities and capacities of existing water resources systems are optimized
- Source water is protected to improve water treatment efficiency
- Multi-functional capital and development-related projects are collaborative

4. Meet or Surpass Regulatory Requirements

At a minimum, all water resources management activities must meet regulatory requirements. However, Minneapolis residents have voiced the expectation that surface water quality should surpass minimum requirements. Therefore, Minneapolis activities often are aimed at surpassing regulatory requirements. Meeting or surpassing regulatory requirements requires that the City:

- Anticipate regulatory trends and implement projects/programs before a regulation is finalized
- Achieve regulatory compliance effectively and efficiently
- Apply standard Maximum Extent Practicable (MEP) to control of pollutants in stormwater
- Employ resources without regard to jurisdiction and organization

5. Educate and Engage the Public and Stakeholders

Minneapolis has long involved the public in the development of public improvements and programs. A portion of the budget for all projects includes funds to engage the public and stakeholders during development of a project/program, and educate the public and stakeholders once the project/program is implemented. For example, the City has provided ongoing water quality education efforts related to compliance with requirements in the Minneapolis NPDES Stormwater Permit.



Engaging stakeholders in project activities will enable the City to obtain more successful project results that consider public expectations.

Educating and engaging the public and stakeholders requires that:

- The public's role in water resources management is established and understood
- The stakeholders in each project/program are identified and engaged early in the project/programs development
- The service needs and expectations of the public are understood and dictate education and engagement
- The public's and stakeholder's responsibility, accountability, creativity, and innovation is promoted

- Employee leadership of citizen engagement activities is the norm and results in effective projects and programs
- Engagement and education processes facilitate incorporation of regional goals and strategies in water resources management programs/projects

6. Enhance Livability and Safety

Residents judge the quality of their neighborhood according to standards of livability and safety. The quality of Minneapolis parks, including the quality of the surface waters within each park, is directly tied to the success of livability in Minneapolis. Enhancing livability and safety require that:

- Water resources are integral to the fabric of the City
- Water is valued as an asset
- Water resources are managed to contribute to the fulfillment of quality of life expectations

As previously noted, the Water Resources Management Guiding Principles provide the direction needed to allow water resources management activities to meet multiple goals – no single principle can be tied to a single goal. Table 2-1 shows which of the City’s goals and policies are supported by each Water Resources Management Guiding Principle. Appendix C inventories the existing activities that are accomplished in support of the Guiding Principles.

Progress Towards Goals

Minneapolis has set up internal monitoring activities that track progress towards certain goals, including water resources management goals, which are reported in the following annual reports:

- [NPDES Annual Report Documents](#) tracks stormwater management activities and goals set by NPDES stormwater permit
- [Minneapolis Park & Recreation Board - 2004 Water Resources Report](#) tracks water quality trends in lakes plus other MPRB water resources management activities
- [CSO Annual Report](#) tracks CSO management activities and goals set by NPDES CSO permit
- [Sustainability Initiatives](#) tracks sustainability targets

Table 2-1. City Goals Supported by Water Resources Guiding Principles	Water Resources Principles					
	Maintain and Enhance Infrastructure	Provide Cost-effective Services	Meet or Surpass Regulatory Requirements	Protect People, Property and the Environment	Educate and Engage the Public and Stakeholders	Enhance Livability and Safety
2006 Goals Established by Mayor and City Council						
1. A Safe Place to Call Home	X	X		X		X
2. One United Minneapolis					X	X
3. Lifelong Learning is Second to None			X		X	
4. Connected Communities						X
5. Enriched Environment	X	X	X	X	X	
6. A Premier Destination					X	X
Minneapolis Plan Policies						
7.2 Manage the use of the City's environmental resources to meet present needs while considering future concerns.	X	X	X	X	X	X
7.4 Encourage the planting and preservation of trees and other vegetation.	X				X	X
7.5 Protect and sustain water resources	X		X	X	X	X
7.6 Take measures to reduce water consumption and encourage water conservation	X	X	X	X	X	
7.8 Support pollution prevention programs as an important first step in maintaining a healthy physical environment.	X	X	X	X	X	X
7.10 Enhance the safety and appearance of our built environment through education, inspection and enforcement.	X		X	X	X	
7.12 Play a leadership role in setting up examples and pilot projects.			X		X	
Sustainability Initiatives						
Number of newly planted trees	X			X		X
Acres/percent of permeable surface	X	X	X	X		X
Combined Sewer Overflows	X		X	X	X	
Water quality of lakes, streams, rivers	X	X	X	X	X	X
Air quality			X	X		