

Section 5

Issues and Goals

INTRODUCTION

The Second Generation goals are structured around statutory requirements and relevant watershed management issues. These issues were identified through the resource inventory described in Sections 2 and 3 and through active solicitation of input from the public, the member cities, and regulatory and advisory agencies.

Once the watershed issues were identified the SCWM WMC developed goals to guide its efforts to address the various watershed issues. The SCWM WMC then developed a management framework consisting of management strategies and policies to help the Commissions accomplish their goals.

This section presents the identified issues and the proposed actions, which were then consolidated into eight goals. The management strategies and the policies of the SCWM WMC are presented in Section 6.

WATERSHED ISSUES

Significant watershed issues identified by the public, city staffs, and Commissioners are listed in Table 5-1, along with a brief description of the proposed actions in the Plan that address the concern.

Table 5-1
Shingle Creek and West Mississippi Watershed Issues & Proposed Actions

Issue	Proposed Action
Increased impervious surface as watershed becomes fully developed will increase the duration and frequency of bank full conditions and should be addressed and monitored	<ul style="list-style-type: none"> • Promote infiltration • Encourage the reduction of impervious surface by promoting low impact development principles and strategies often included in "smart growth" approaches to development, such as balancing increased density with increased stormwater detention and treatment.
Standards that have prevented flooding potential as watershed developed should be continued or enhanced as development is completed	<ul style="list-style-type: none"> • Establish peak runoff rates for management sectors, and require each city to demonstrate that it does not exceed that rate • Require local plans to demonstrate that key flood storage areas, wetlands, ditches, and drainageways are protected and channel capacity will be maintained • Maintain calibrated watershed model • Require rate control on development and redevelopment projects of certain sizes • Update the HEC-2 model and evaluate the creek’s 100 year elevation
Water quality in Twin Lake, especially Upper Twin, should be improved	<ul style="list-style-type: none"> • Complete diagnostic studies recommended in previous studies • Work with city staffs, residents, and agencies to develop Twin Lake Management Plan • Promote good housekeeping practices by property owners in Twin Lakes subwatershed • Construct improvements as identified in diagnostic study and management plan
Phosphorus loading is degrading lake water quality. Nutrient loading has resulted in Impaired Waters listings for ten lakes	<ul style="list-style-type: none"> • Evaluate baseline data and monitoring strategies • Establish goals for each water resource based on practical use • Work with city staffs, residents, and agencies to develop management plans for water resources • Complete TMDLs as required • Educate property owners on practices to reduce phosphorus loads
Excessive chloride in Shingle Creek has resulted in Impaired Waters listing	<ul style="list-style-type: none"> • Complete the TMDL and develop workable strategies for reducing loads
Water quality should be maintained or improved to assure safe swimming	<ul style="list-style-type: none"> • Evaluate water quality baseline data and increase monitoring • Establish goals for each water resource based on practical use • Work with city staffs, residents, and agencies to develop management plans for water resources

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Issue	Proposed Action
Redevelopment should have an environmental focus	<ul style="list-style-type: none"> • Encourage the use of low impact development design principles and strategies often included in "smart growth" approaches to development, such as balancing increased density with increased stormwater detention and treatment.
Polluted water should be cleaned up and further pollution should be prevented	<ul style="list-style-type: none"> • Evaluate water quality baseline data increase monitoring • Establish goals for each water resource based on practical use • Work with city staffs, residents, and agencies to develop management plans for water resources
Recent water quality testing indicates some bacterial levels of concern that should be monitored	<ul style="list-style-type: none"> • Continue and enhance monitoring
Water quality in Shingle Creek should be improved	<ul style="list-style-type: none"> • Evaluate water quality baseline data and monitoring strategies • Establish goals for the creek based on practical use of each reach • Work with city staffs, residents, and agencies to develop a comprehensive creek management plan • Continue and expand sponsorship of volunteer monitoring programs such as macroinvertebrate monitoring • Extend Minneapolis land cover assessment of Shingle Creek to upstream reaches and evaluate potential for native plant restoration • Construct or encourage the construction of streambank stabilization and habitat restoration projects
The natural beauty and recreational opportunities of the creek and river should be capitalized upon with expanded trails, parks, and access	<ul style="list-style-type: none"> • Extend Minneapolis land cover assessment of Shingle Creek to upstream reaches and evaluate potential for native plant restoration • Promote Shingle Creek and other rivers and streams as greenways • Encourage members cities abutting the Mississippi to achieve the MNRAA Tier II voluntary management standards
An active program to increase buffers, native plants, rain gardens, native landscaping should be implemented	<ul style="list-style-type: none"> • Establish buffer strip requirements adjacent to wetlands and watercourses for projects requiring project reviews • Extend Minneapolis land cover assessment of Shingle Creek to upstream reaches and evaluate potential for native plant restoration • Provide educational materials to property owners to encourage these practices • Provide grants to educators and property owners to develop demonstration projects
Native habitat should be evaluated and protected	<ul style="list-style-type: none"> • Extend Minneapolis land cover assessment of Shingle Creek to upstream reaches and evaluate potential for native plant restoration • Evaluate wetland restoration possibilities
The Commission should become more accessible to citizens	<ul style="list-style-type: none"> • Host annual Open House and Great Shingle Creek Watershed Cleanup events, and increase participation in city events • Use web site to provide information on management standards, project reviews, policies, and useful information and links, and to take public input

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Citizens should be educated more on what they can do to improve water quality and protect water resources, and to be more involved	<ul style="list-style-type: none"> • Host annual Open House, and increase visibility at city events • Use web site to provide information on management standards, project reviews, policies, and useful information and links, and to take public input • Work with city staffs, residents, and agencies to develop management plans for water resources • Encourage and support property owners to become demonstration sites for BMPs • Work with Hennepin County and local recycling coordinators to provide items such as compost bins and rain barrels at a reduced cost • Continue and expand sponsorship of volunteer monitoring programs such as macroinvertebrate monitoring, wetland monitoring, and CAMP
Existing wetlands should be protected from encroachment by development	<ul style="list-style-type: none"> • Encourage wetland mitigation under WCA to be accomplished in the same subwatershed as those impacted • Prioritize wetlands and require functions and values assessments to be completed in priority order • Establish buffer strip requirements adjacent to wetlands and watercourses for projects requiring project reviews
Wetlands should be restored and cleaned up	<ul style="list-style-type: none"> • Identify wetland restoration possibilities and construct or encourage the construction of restoration projects
Runoff volumes and lack of vegetative border has led to stream degradation and erosion that should be evaluated and improved	<ul style="list-style-type: none"> • Establish buffer strip requirements adjacent to wetlands and watercourses for projects requiring project reviews • Extend Minneapolis land cover assessment of Shingle Creek to upstream reaches and evaluate potential for native plant restoration

GOALS

A goal is a desired end toward which the SCWM WMC’s management strategies are directed. Through the identification of issues in the watersheds, the SCWM WMC developed eight goals to guide its water resources planning and management functions:

1. Maintain the existing 100-year flood profile throughout the watersheds.
2. Protect and improve water quality based on practical use.
3. Strive to provide water quality that supports recreation, fish and wildlife based on practical use.
4. Establish an education and public outreach program.
5. Develop an appropriate management strategy for Hennepin County Ditch #13.
6. Protect and improve groundwater quality and promote groundwater recharge.
7. Protect and improve wetlands.
8. Reduce erosion and sedimentation.

The management strategies proposed to implement these goals are discussed in Section 6.