





Sustainable Municipal Water Management in the Great Lakes and St. Lawrence Basin



The Great Lakes and St. Lawrence Cities Initiative's Green CITTs (Cities Transforming Towards Sustainability) program is a comprehensive effort to protect our shared water resources, involving a broad range of municipal operations and responsibilities (www.glsccities.org/initiatives/greencities.cfm). The Green CITTs program showcases municipal leadership and provides support to help municipalities further expand these activities. It is through the promotion and expansion of best practices that our member cities are setting the course for a sustainable future in the Great Lakes and St. Lawrence region. The focus of this year's effort is on 'Sustainable Municipal Water Management' (SMWM) and includes a comprehensive look at the full spectrum of water management in our cities.



As we become more aware of the impact of increased urbanization, the anticipated impacts of climate change, and the global scarcity of water resources, cities are adopting broad ranging practices to minimize the negative impacts of municipal water use and management, to make their communities more resilient in the face of changing weather patterns, and to protect and restore the waters, ecological services, and habitats around them.



To capture the full range of these important activities, mayors of the Cities Initiative have adopted a *Declaration for Sustainable Municipal Water Management*. To put this declaration into practice, the Cities Initiative has gathered best practices to share amongst its membership, and has developed an evaluation tool that allows each of its member municipalities to track and report publicly on its progress in managing water sustainably.



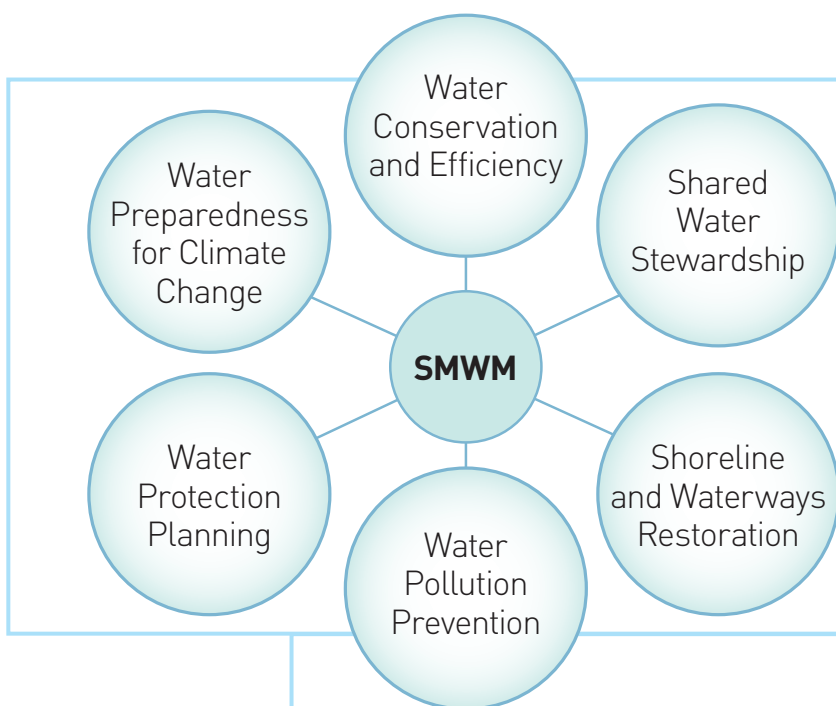
Building the Cities of Tomorrow, Starting Today

Municipalities are increasingly embracing an integrated approach to water management that captures the full spectrum of a community's impact on water. This approach cuts across traditional municipal delivery areas, from water and wastewater services, to land use planning, to parks and recreation, to finance. This broader notion of 'sustainable water management' marks an important evolutionary step for municipalities, one that involves continuous innovation, improvement and evaluation.

That is why public reporting on progress to track this shift is so important. The Cities Initiative's SMWM Reporting Tool evaluates a municipality's performance over twenty-five activities (see next page). In an at-a-glance format, using colour coded symbols, a municipality will be able to demonstrate its progress in sustainable municipal water management from year to year.





Sustainable Municipal Water Management (SMWM)

The Cities Initiative's *Declaration of Sustainable Municipal Water Management* adopts an integrated approach to all aspects of water management at the local level. Its six principles and twenty-five milestones cross areas of activity such as water conservation, land use planning and approvals, public education and participation, emergency response planning, pollution prevention, and habitat and shoreline restoration.



Six Principles of Sustainable Municipal Water Management

At-a-glance color coded evaluation and public reporting tool

PROGRESS	
NO CHANGE	
NEEDS IMPROVEMENT	
UNDETERMINED/ NOT APPLICABLE	

Declaration of Sustainable Municipal Water Management: Areas and Actions

1 Water Conservation and Efficiency

- 1.1 Promote Water Conservation
- 1.2 Install water meters
- 1.3 Set the right price
- 1.4 Minimize water loss
- 1.5 Increase water reuse/ recycling

2 Shared Water Stewardship

- 2.1 Raise public awareness
- 2.2 Engage the public

3 Shoreline and Waterways Restoration

- 3.1 Protect and restore shorelines and riparian corridors, and control erosion
- 3.2 Increase public access to shorelines, riverbanks, and waterfront
- 3.3 Protect habitats

4 Water Pollution Prevention

- 4.1 Prevent pollutants from entering the sewage collection system
- 4.2 Remove pollutants from wastewater treatment plant effluent
- 4.3 Reduce stormwater entering waterways
- 4.4 Monitor and respond to sources of pollution
- 4.5 Improve beach quality
- 4.6 Reduce sodium chloride entering waterways

5 Water Protection Planning

- 5.1 Adopt council-endorsed commitment to sustainable water management
- 5.2 Integrate water policies into land use plan
- 5.3 Collaborate on watershed-scale
- 5.4 Adopt green infrastructure
- 5.5 Value ecological functions

6 Water Preparedness for Climate Change

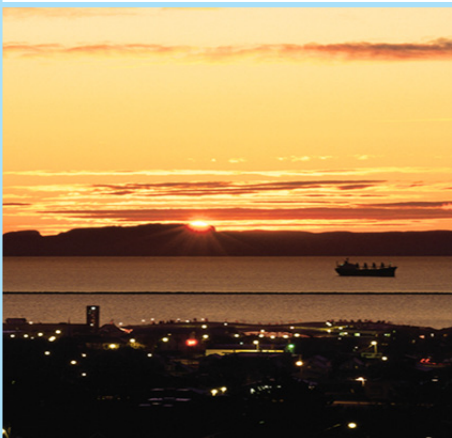
- 6.1 Conduct a vulnerability assessment
- 6.2 Address vulnerability
- 6.3 Adapt emergency response plan
- 6.4 Mitigate contribution to climate change

"We the members of the Great Lakes and St. Lawrence Cities Initiative commit to upholding the principles of Sustainable Municipal Water Management, and endeavor to improve our performance continuously with respect to the SMWM milestones."

Cities in Action

Cities Initiative member cities are leading the way towards sustainable municipal water management.

The **City of Milwaukee, WI**, has embraced **shoreline and waterways restoration** on the Menomonee River, the most industrialized river in the Milwaukee River basin. A tributary of the Milwaukee River, which runs into Lake Michigan, the 33 mile/53 km river has been artificially channelized in several stretches, and is a significant source of pollution. In collaboration with the *Southeastern Wisconsin Watershed Trust*, the *Milwaukee Metropolitan Sewer District* and the *River Revitalization Foundation*, the restoration plan involves naturalizing the river banks, restoring fish habitat, reducing urban runoff and erosion into the Milwaukee River, and improving public access. <http://v3.mmsd.com/%5Cassetsclient%5Cdocuments%5Csustainability%5C2011SeWeRDocsm.pdf>



The **City of Thunder Bay, ON** is demonstrating leadership in **shared water stewardship**. Through the *EarthWise*® Water Working Group, the City interfaces with community stakeholders to implement the goals of the Community Environmental Action Plan. Since 1996 the City has also partnered with *EcoSuperior* Environmental Programs to deliver an award-winning Waterwise program which includes low-flow toilet and washer rebates, in-school presentations, rain garden workshops, a water-bar for community events, subsidized rain barrels and promotional items such as showerheads and timers. They also host a speaker series on protecting shorelines, and the effect of pharmaceuticals on water. www.thunderbay.ca/earthwise

Salaberry-de-Valleyfield, QC is charting the way towards **water protection planning**. Its Sustainable Development Plan, adopted in 2010, puts an emphasis on the environment and water management. It identifies specific actions, with progress and results tracked through measureable indicators. Each year, the mayor holds a public meeting to review progress against the objectives in the plan. In 2012, 87% of actions identified in the plan had been completed or were close to being attained. www.ville.valleyfield.qc.ca/fr/service.prt?svcid=SV_PAGE_GENERIQUE_CATEGORIES130&iddoc=151495

Although many cities are already managing water in a sustainable way, there is always room for improvement. The principles and milestones of this framework, along with the sharing of best practices among our cities, will lead to even greater sustainability in municipal water management in the future.



To view the entire report, more best practices from Cities Initiative member cities, and to see the winners and candidates of the Green CITTs Sustainable Municipal Water Management Awards, please visit the Cities Initiative website at: www.glsclcities.org/initiatives/greencities/smwm.cfm

The Great Lakes and St. Lawrence Cities Initiative is a binational coalition of 90 mayors and other local officials representing over 15 million citizens, that works actively with federal, state, provincial, tribal, and first nation governments and other stakeholders to advance the protection, restoration, and promotion of the Great Lakes and St. Lawrence River basin.