

Increase Permeable Surfaces in Minneapolis

Taking a lesson from nature, the City is working to manage rainwater where it falls. By cleaning and holding rain and melting snow close to its source, allowing it to soak into the ground, the City reduces the rate and amount of water running off, improves the quality of the runoff, replenishes groundwater and reduces erosion at stream banks.

Target

- If feasible, measure the baseline amount of rainwater and melting snow runoff that leaves the City or within a pilot area, then set targets for reducing it.
- By 2015, increase the number of large stormwater management amenities (such as ponds and wetlands) that treat multiple properties and large areas to 30, and amenities (such as rain gardens) that treat single properties to 500.

- By 2015, increase the number of large underground stormwater treatment chambers treating multiple properties to 150 and the number of small underground stormwater treatment chambers treating single properties to 100. These include grit chambers and swirl separators.
- By 2015, increase the number of green roofs in the city to 100. Green roofs are effective when these planted areas are designed to capture and treat rainwater.

Trend Analysis

The City has surpassed two of its targets and made rapid progress toward others. This success is due to community and neighborhood outreach programs such as the Minneapolis Blooms Rain Garden Workshops, the City’s stormwater management ordinance and stormwater utility credit program.

Stormwater management facilities

in cumulative totals, include private residential, commercial and public projects

	2005	2006	2015 Target
Large area amenities (e.g., ponds and wetlands)	20	28	30
★ Small area amenities ^{1,3} (e.g., rain gardens)	327	753	500
Large area underground treatment chambers	128	142	150
★ Small area underground treatment chambers ^{1,3}	93	127	100
Green roofs ²	8	10	100

Minneapolis Department of Public Works

¹ 2005 figures were corrected and increased from last year’s report

² City of Minneapolis Development Review – number of permits issued for green roofs

★ Target exceeded

Recent City and Community Activities

- Completed the Mill Quarter regional facility that treats stormwater runoff in the area of the new Guthrie Theater. This underground treatment facility is expected to remove more than 20,000 pounds of suspended solids and 33 pounds of phosphorus annually. www.ci.minneapolis.mn.us/cip/storm-drains
- Created rain gardens at six schools in partnership with the Minneapolis Public Schools. These gardens allow water to soak into the ground instead of running off of hard surfaces into the sewers, reducing localized flooding and improving water quality. The projects will also give schools a beautiful landscape where students can learn about the environment.
- Installed porous pavement in two road projects to reduce surface water runoff. This innovative concrete allows water to pass through it into an underground rock filter and be stored until it soaks into the ground and recharges groundwater, reducing the need for large storm drain pipes to the Mississippi River. www.ci.minneapolis.mn.us/public-works/cip/elliott_culdesac
- Minneapolis Blooms, with support from the City, taught 800 residents how to design and install rain gardens in their yards. www.ci.minneapolis.mn.us/cue/Mpls_Blooms.asp
- See related activities in Combined Sewer Overflow and Water Quality.



Folwell School Interpretive Rain Gardens (under construction)
This project removed nearly two acres of asphalt and boosted the school’s environmental curriculum. Students will use the rain garden walkway to learn about managing stormwater.

Web Links & Resources

- Minneapolis Surface Water Management
www.ci.minneapolis.mn.us/stormwater
- Minnesota Pollution Control Agency
Stormwater Manual
www.pca.state.mn.us/water/stormwater/stormwater-manual.html