

**Eliminate Combined Sewer Overflows**

Heavy rains can fill sewer pipes beyond capacity and make them overflow into adjoining stormwater pipes, which then dump raw sewage into the Mississippi River. This is called a combined sewer overflow (CSO), and it can cause serious health and environmental problems.

**Target**

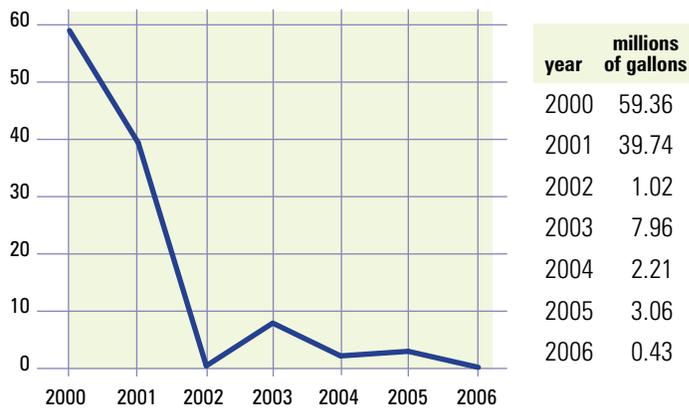
Eliminate combined sewer overflows by 2014.

**Trend Analysis**

The City’s earliest sewers were designed for both sewage and rain water. The City began building new systems separately in the 1930s and began separating the combined sewers in the 1960s. A decade-long accelerated sewer separation program began in the 1980s and was highly successful. Upgrades to Minneapolis’ sewer system have resulted in a dramatic reduction in CSOs.

However, some overflows still occur during severe rain. The City continues to make improvements, inspecting the entire city parcel by parcel to find any roof and area water drains still connected to the sanitary sewer.

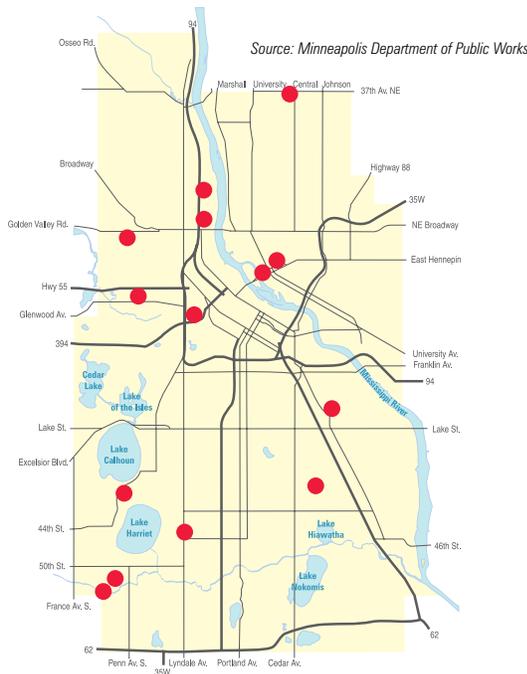
**Combined sewer overflows into the Mississippi River**  
in millions of gallons



Source: Metropolitan Council

During intense rainstorms, untreated sewage may overflow into the stormwater sewers and discharge into the Mississippi River. The City of Minneapolis has dramatically reduced this, both how often it happens and how much overflow ends up in the river.

**2006 projects separating sanitary and storm sewers**



**Recent City Activities**

- Inspected more than 21,000 properties in 20 neighborhoods and found nearly 1,000 roof and storm drains still connected to the sanitary sewer. City ordinance requires owners to separate any combined drains on their property.
- Inspected six street construction projects to find any combined connections so they could be removed during construction.
- Investigated and resolved two instances of raw sewage flowing into the storm sewer system and removed three storm drains from the sanitary sewer.
- Diverted stormwater flow at six schools into new rain gardens instead of the sanitary sewer system through a partnership with Minneapolis Public Schools.
- Completed six capital improvement projects that stopped stormwater from nearly 20 acres flowing into the sanitary sewer system.
- Established a new community outreach program that educated residents and business owners on how they could help prevent CSOs.
- See related activities in Permeable Surfaces and Water Quality.

**Web Links and Resources**

City of Minneapolis CSO information  
[www.ci.minneapolis.mn.us/cso](http://www.ci.minneapolis.mn.us/cso)

City of Minneapolis rain leader ordinance  
[www.ci.minneapolis.mn.us/cso/ordinance.asp](http://www.ci.minneapolis.mn.us/cso/ordinance.asp)