

## Don't Flood Yourself! How to help prevent I&I

- ✓ Repair or replace broken or missing cleanout caps.
- ✓ Disconnect downspouts discharging to the sanitary sewer. Redirect their flow to a pervious area, storm sewer, or rain barrel. Rain Barrels are available at [www.mwrld.org](http://www.mwrld.org).
- ✓ Cover window wells to prevent rain and snow from entering window well drains.
- ✓ If your home has a stormwater sump pump, make sure it does not discharge to the sanitary sewer. A licensed plumber can check it and make any necessary modifications.
- ✓ Disconnect driveway drains from the sanitary sewer and direct their flow into a pervious area, to the storm sewer, or to your foundation drain as long as your foundation drain is not connected to the sanitary sewer system.
- ✓ Have your home's service lateral inspected and repair, rehabilitate, or have it replaced.
- ✓ Plan your landscaping to avoid root intrusion into sanitary sewer pipes.
- ✓ Check with your municipality about cost-sharing programs to help fund I&I reduction.

## For More Information

please visit [mwrld.org](http://mwrld.org) or contact the MWRD at 312.751.3260

## I&I: A Quick Guide for Homeowners

This pamphlet is an introduction to infiltration and inflow (I&I) which can cause flooding, sewer backups and overflows in sanitary sewer systems. Homeowners can use this guide to learn about ways to reduce I&I.

For more detailed information and other helpful resources, please visit [mwrld.org](http://mwrld.org) or contact the MWRD at 312.751.3260.



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Metropolitan Water  
Reclamation District  
of Greater Chicago

*A Quick Guide for Homeowners*

# Infiltration and Inflow

## What is Infiltration and Inflow?

Infiltration and inflow (I&I) is clear water that enters into the sanitary sewer system that is not meant to be there. Separate sanitary sewer and stormwater drainage systems are designed to have sanitary sewage directed into one system and stormwater into the other.

## Negative Impacts of I&I

I&I reduces capacity in sewers intended for sanitary sewage. When I&I enters the sanitary sewer, basement backups may occur which can cause extensive property damage. I&I can also cause sewage to flow out of manholes onto the ground, referred to as sanitary sewer overflows (SSOs).

Since basement backups and SSOs contain untreated sewage, they introduce risks to human health and can cause environmental pollution. Under state law, SSOs are illegal. I&I can overburden the Metropolitan Water Reclamation District of Greater Chicago's (MWRD's) wastewater reclamation plants which may result in untreated wastewater being discharged into the environment.

## MWRD's I&I Control Program

All agencies that own separate sanitary sewer systems within the MWRD must comply with the MWRD's I&I Control Program. These agencies must complete short term requirements and develop a long term operation and maintenance program.

As part of the short term requirements, agencies must assess the condition of the public sanitary sewer system and begin repairing major I&I sources. Under the long term operation and maintenance program,

agencies must establish a systematic inspection, rehabilitation and replacement program for public sewers and continuously make efforts to reduce I&I flows that originate from private property.

## What Homeowners Can Expect

A large amount of I&I comes from privately owned portions of a sanitary sewer system. As such, agency representatives may need to

access private property to check for sources of I&I and to verify that identified sources have been properly corrected.

For example, as part of the short term requirements, agencies must inspect for major I&I sources from private property such as downspouts discharging to the sanitary sewer, broken or missing cleanout caps and uncovered window wells.

Under the long term operation and maintenance program, agencies must have a program to conduct internal and external private property inspections for I&I sources.

## TYPICAL SOURCES OF INFILTRATION AND INFLOW

