

The Inflow and Infiltration Problem

Infiltration/Inflow (I/I) are terms used to describe the ways that clean storm and/or groundwater enters the sanitary sewer system. When clean I/I water gets into sanitary sewers, it must be moved and treated like sanitary waste. The amount of I/I affects the demands on Deerfield's conveyance and treatment systems and ultimately the rate businesses and residents pay to operate and maintain them.

The Solution

The Board of Selectmen as Sewer Commissioners for the town needs your help to address this problem. A number of homes have been identified as having inflow connections. If you have questions about disconnecting the inflow sewer connections from your home, or would like help with repair options, you should contact a licensed plumber.

How Will You Benefit from this Program?

During periods of rain, excessive amounts of storm water in the sanitary sewer can over-burden the system and causes flooding of streets and homes. Eliminating sources of inflow, we will prevent sewer backups and overflows. Also, the higher the flow to the WWTP, the higher the costs to the community. Eliminating storm water from the sanitary sewer will safeguard your home and reduce your sewer expenses.

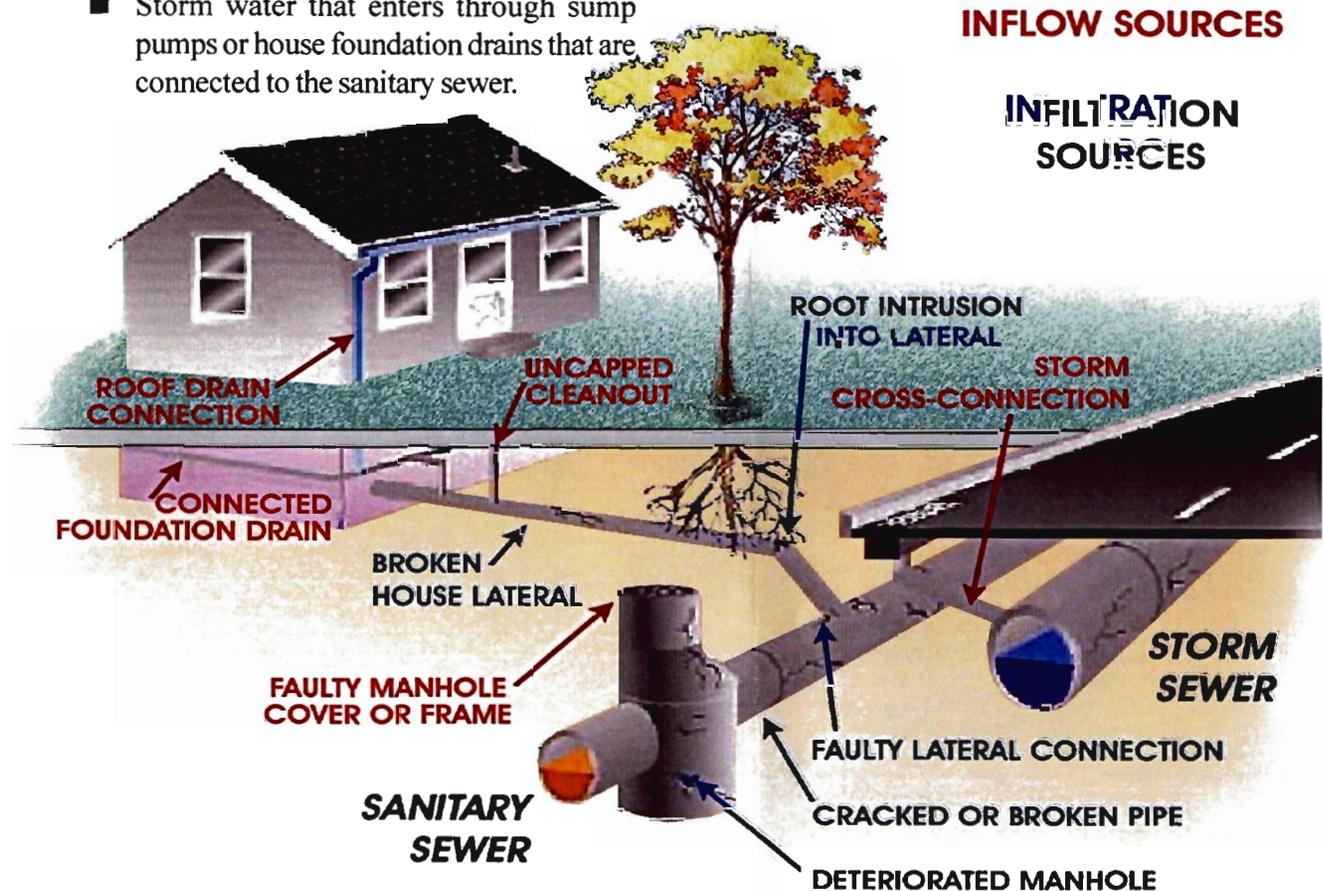
What the Terms Mean:

Inflow (red) is the unwanted storm water that directly enters the sewer system through:

- Roof drains that flow directly into the sewer;
- Catch basins in the street or on private property;
- Low back yards drained through a connection to the sanitary sewer pipe via a cleanout;
- Storm water that enters through sump pumps or house foundation drains that are connected to the sanitary sewer.

Infiltration (blue) is unwanted water that enters the sanitary sewer system through:

- Ground water that seeps into cracks in underground pipes (caused by shifted joints, age or tree roots that have grown into the pipe).



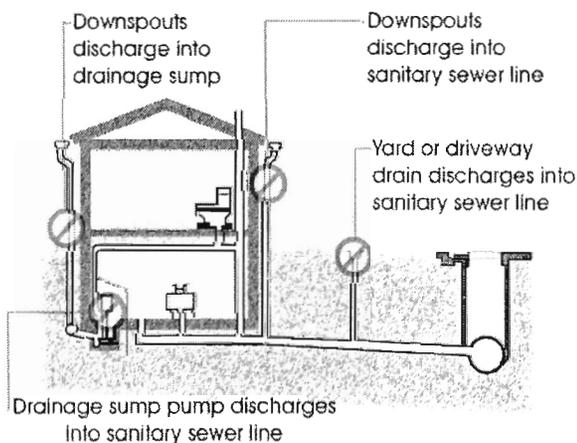
How to get started:

Disconnect roof leaders, floor drains and sump pumps that are connected to the sanitary sewer. Contact a plumber for advice.

A note on landscaping: Willow and poplar trees have the most aggressive roots for finding the water, nutrients and warm environment inside a sewer pipe. Roots in sewer pipes allow ground water to enter the sewer.

Inflow Connections

All water from rainstorms and underground seepage should be discharged onto the ground or into a drainage ditch. Some of the common inflow connections are shown here.



The Problem with our Sewers...

The Town of Deerfield's wastewater treatment plant (WWTP) is coming ever closer to reaching its design capacity. Your home might be contributing as much as 1,400 gallons of clean water during a typical rainstorm through inflow sewer connections. Examples of inflow connections include roof downspouts, groundwater sump pumps, foundation drains, and drains from driveways. Most customers are unaware of their inflow connections to the Town's sewer system. This problem is not very obvious, but the impacts of these connections are expensive to all sewer users.

We are asking residents with sewer connections to review the information in this brochure to help identify improper connections that must be removed