

## Sanitary Sewer Infiltration & Inflow

### **What is infiltration and inflow?**

Infiltration and inflow are the technical terms referring to rainwater and/or groundwater that enters the sewer system through such sources as cracked pipes, leaky manholes, or improperly connected storm drains and roof gutter downspouts. Most infiltration comes from groundwater and most inflow comes from rainwater.

### **Why are infiltration and inflow big problems?**

In addition to causing sewage spills, the additional flow from infiltration and inflow results in the need for larger sewers and treatment plants. This raises the sewer fees that residents and businesses must pay the government or private sewer agency to build, operate and maintain the sewers and wastewater treatment plants.

### **Who is responsible for the infiltration and inflow problem?**

Although infiltration of groundwater is a concern, the large jump in flow caused by inflow of rainwater has the greatest impact on a sewer system. Through extensive studies on sewers in the U.S., it has been found that the greatest contribution of inflow comes from private property. Common inflow sources include direct connections from rain gutter downspouts, outdoor drains, and pool/pond overflow pipes connected to the sewer lines. Uncapped cleanouts and broken house sewer laterals also cause excessive rainwater to enter the sewer system.

### **What can you do to prevent and reduce infiltration and inflow?**

- Be sure rain gutters/downspouts or pool/pond drains are not connected to the sewer
- Be sure your sewer cleanout cap is not damaged or missing
- Avoid planting trees/shrubs over or near your lateral lines (roots can damage lines)

## Sanitary Sewer Cleanouts

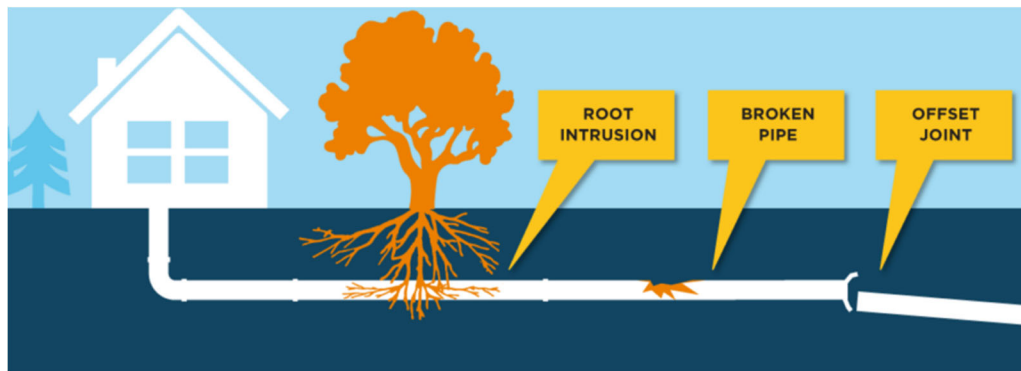


Damaged Cleanout Cap & Assembly



Undamaged Cleanout Cap & Assembly

## Sanitary Sewer Service (Lateral) Lines



Damaged Service Line

