

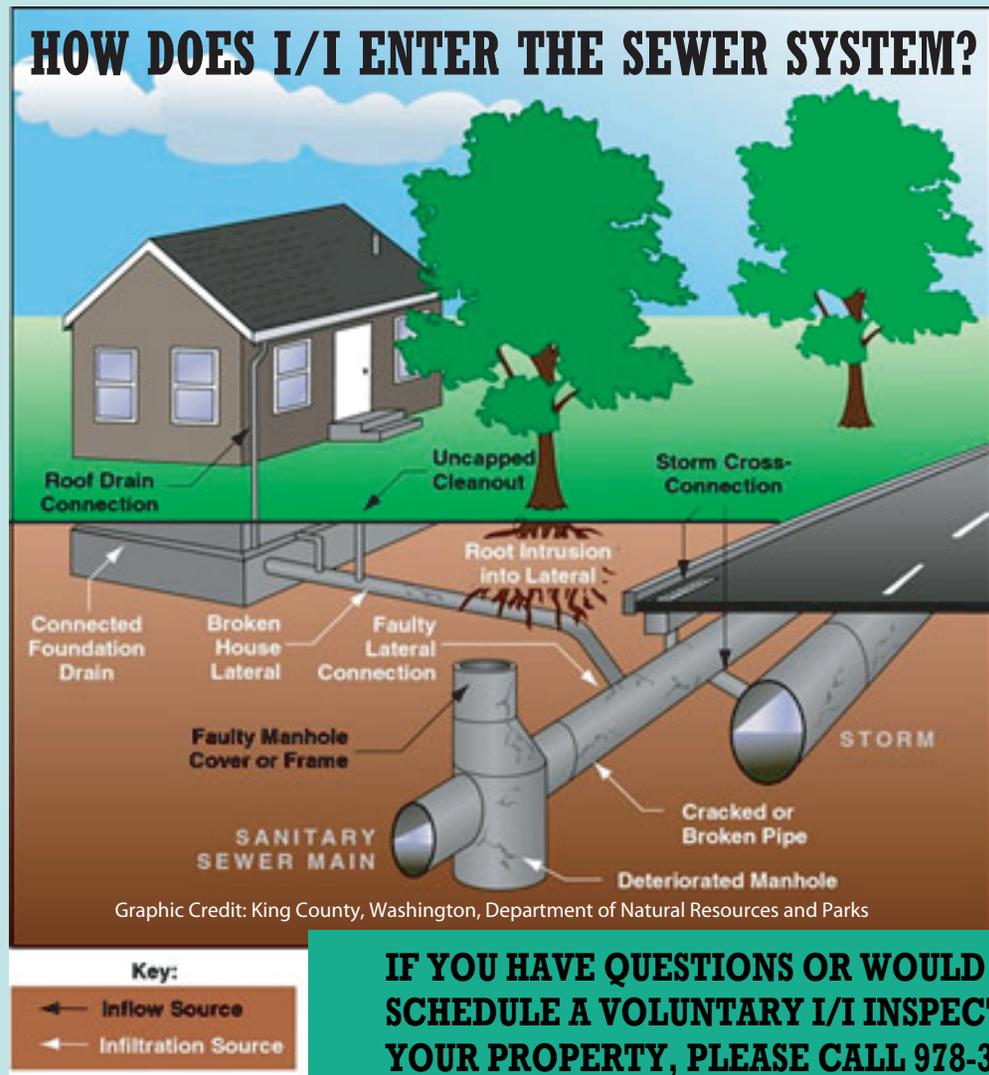
SETTING THE SCENE

The majority of land in Concord is located within the Sudbury, Assabet, and Concord River watersheds (also known as the SuAsCo watershed). Wastewater collected from homes and businesses connected to Concord's municipal sewer system is treated at the Town's wastewater treatment plant (WWTP), located off of Bedford Street. The treated water, referred to as "effluent," is then discharged to the Concord River in the vicinity of the Great Meadows National Wildlife Refuge. Keeping groundwater and rainwater out of the sewer system is important to the environment because:

- 1) This water should be infiltrating back into the ground locally, rather than going to the Concord River, where it eventually flows to the Atlantic Ocean. This "groundwater recharge" is necessary to replenish local brooks and streams, as well as the Town's drinking water supply, which predominately comes from wells in Concord.
- 2) Additional flows take up valuable sewer system capacity, strain the WWTP treatment processes, and make treating the wastewater more challenging and costly.
- 3) Unnecessarily high sewer flows during periods of heavy rainfall and high groundwater can cause raw sewage overflows out of sewer manholes, resulting in both environmental and public health hazards. Concord is fortunate to have a well maintained sewer system with infrequent overflows, but every overflow that is caused by rainwater or groundwater entering the system is one that could be prevented.

WHAT IS I/I?

I/I stands for infiltration and inflow, the process by which clear rainwater and groundwater enter the sanitary sewer system from a variety of sources. Infiltration is groundwater that enters sewer pipes wherever possible, often through cracks and holes in pipes and faulty joint connections between pipe segments. Inflow is rainwater and snowmelt that enter the sewer system at points of direct connection to the system, such as roof drains (downspouts), basement and foundation drains, and sump pumps. None of these sources can be legally connected to a sanitary sewer pipe, based on Massachusetts Plumbing Code and Concord's Sewer Rules and Regulations. Inflow can also come from rainwater entering the sewer system directly through manhole covers or improper connections to drainage collection systems in streets and parking lots. The sketch below illustrates some common I/I sources.



IF YOU HAVE QUESTIONS OR WOULD LIKE TO SCHEDULE A VOLUNTARY I/I INSPECTION OF YOUR PROPERTY, PLEASE CALL 978-318-3250.