

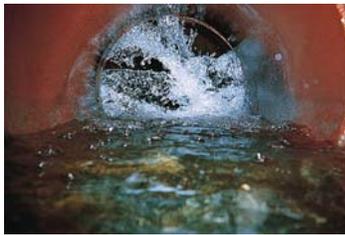


SEWER SYSTEM INSPECTION INFORMATION

The King County Wastewater Treatment Division, in partnership with local sewer agencies, is preparing to inspect sewer pipes to detect excessive clean water, known as infiltration and inflow (I/I). I/I is clean groundwater or storm water that enters sewers through cracked pipes, leaky manholes, or improperly connected building downspouts or foundation drains. Your neighborhood is being inspected to locate sources of clean water entering the sewer and to evaluate the feasibility of a project to reduce clean water flows. Reducing clean water flows in the sewer lowers the risk of overflows and decreases the cost of wastewater conveyance and treatment.

Several sewer system tests can be used to examine the condition of individual sewers and identify sources of I/I. These proactive detection tests, called sewer system evaluation surveys (SSES), are described below.

TV Inspection



Closed Circuit TV (CCTV) cameras have been developed that can be pushed down sanitary sewer lines and record a "movie picture" of the conditions that are found in that section of sewer. This can identify breaks, root intrusion, leaking water (especially infiltration from groundwater), and general deteriorating conditions. Camera equipment usually operated from manholes located in streets or within public rights of way. Occasionally access to easements in back yards or alleys is required to inspect the public sewer in these areas.

Smoke Testing



Smoke testing involves pumping smoke through sanitary sewer pipes from manholes in streets or within public rights of way and observing and documenting where smoke exits. Depending on the specific circumstances, the exiting smoke can indicate the location of a broken pipe, manhole, catch basin, or where roof or foundation drains might be connected to the sewer system, indicating where infiltration or inflow might enter the sanitary sewer system.

During the testing, smoke will typically appear from roof drains, catch basins or yard drains connected to the sewer system. The smoke may also appear from cracks in the pavement above the sewer, from landscaping above private connecting sewers, and around homes with foundation drains connected to the sewer.

The smoke, manufactured for this purpose, may be colored for better detection/visibility, leaves no residuals or stains, and has no effects on plant and animal life. The smoke has a distinctive but not unpleasant odor. Visibility and odor last only a few minutes. This smoke is nontoxic, harmless to people and pets, and creates no fire hazard. The local fire and police authorities are notified and the inspection team is available at test sites to answer questions during the smoke testing.

Dye Testing



By using fluorescent colored dye, inappropriate connections can be determined. For instance, if a dye is introduced to a catch basin (an inlet to the storm drain system that typically includes a grate or curb inlet and a sump to capture sediment, debris and associated pollutants) and the dye is then observed in the sanitary sewer downstream from that point, the evidence would indicate that the catch basin is directly connected to the sanitary sewer system. The dyes that are used are fluorescent and easily detectable. They also are biodegradable and safe for the environment and the sewer lines.

For more information about the Regional I/I Control Program visit King County's web site <http://dnr.metrokc.gov/wtd/i-i> or please contact:

Maryann Petrocelli
Community Relations
King County Wastewater Treatment Division
(206) 263-7321
maryann.petrocelli@metrokc.gov

This information is available in alternative formats upon request
by calling 206-263-7321 or 711 TTY