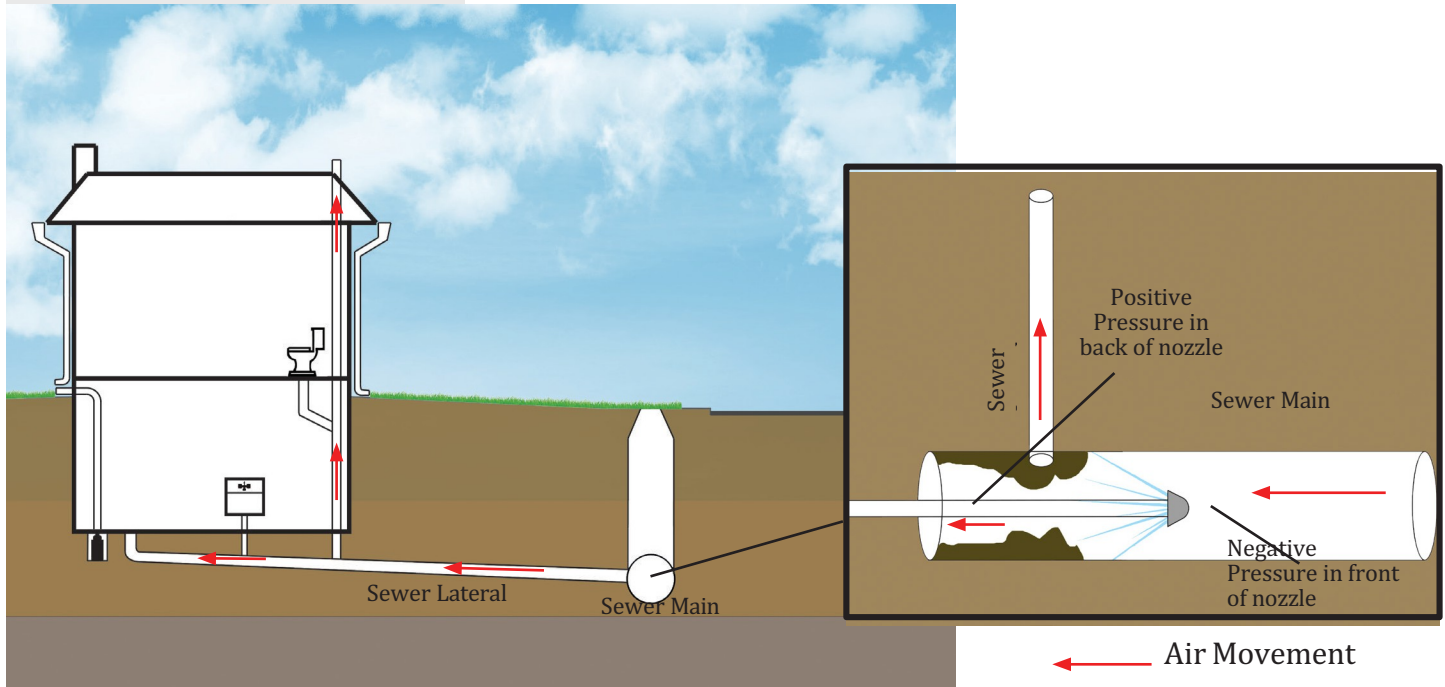


Reasons for Blowback During Sewer Maintenance Cleaning



During the sewer maintenance cleaning process, a jet nozzle and hose are inserted into a manhole, water pressure is then used to propel the nozzle and hose up the main to the next manhole. Then the jet nozzle is slowly pulled back to clean the inside of the main and collect the debris at the downstream manhole for removal. This process is used to remove accumulations of roots, grease, sludge, and grit that have built up over time. Through this maintenance effort, the chance of sewer backups is decreased and capacity of flow is restored to the main.

Water is pumped through the jet nozzle at a rate of 50-65 gallons per minute and at 1000-2000 pounds per square inch (psi). During this cleaning process, while the nozzle is propelling itself up the line, a negative pressure is created ahead of the nozzle while a positive pressure is created on the back side of the nozzle. The amount of positive

or negative pressure created by the nozzle varies with the pump pressure and water volume used to propel the hose up the line. As the nozzle moves through the line, it passes house laterals in a fraction of a second, causing a rapid change from negative to positive pressure. This positive pressure pushes back into the service lateral line. If there is nowhere for the positive pressure to go (through a properly vented stack) then it will force its way out through the plumbing fixtures or floor drain, thereby creating blowback. Blowback is an eruption of air and water discharging incorrectly from a plumbing fixture drain.

Blowback can be caused by a plugged vent stack, or inadequately designed plumbing. If you have had issues with a blowback problem in the past please notify our Public Works Department. We will record your name and address and will notify you in the future during maintenance activities. Rio Wastewater System's

Collection Section has found that incidences are rare.

Please contact Robert Lang, the Public Works Director, at 920-992-5454, with questions.

The Public Works Department will start sewer maintenance in September and October. If you have experienced issues in the past please email our Public Works Department at riopublicworks@riowi.us.