

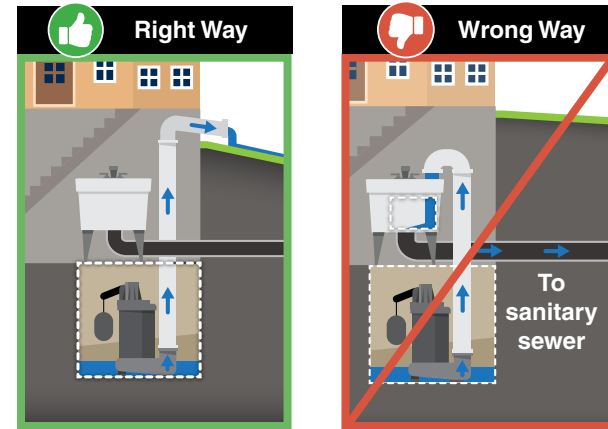
## Here is what you can do

As a property owner, you can reduce I/I and the risk of sewage backups into your property in three key ways.

### Check your sump pump connection

A sump pump can discharge as much water during rainfall events as 40 homes on a typical day. If you have a sump pump that discharges to the wastewater system, that excessive flow can cause sewage backups to your or your neighbor's home. Not only is that a problem for your neighborhood, it is also illegal to discharge clear water to the wastewater system.

Sump pumps should discharge water to the ground outside of your building. You can do a quick inspection of your sump pump piping to ensure that the water is going outside. This will help you and your neighbors avoid sewage backups. Insurance does not always cover sewage backups, so the costs of repairs can fall on property owners.

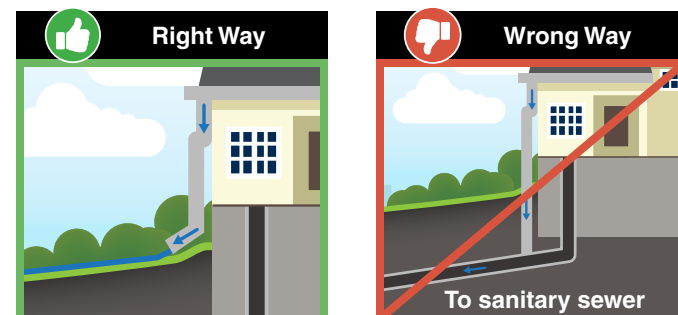


### Inspect your sewer service lateral

Save money and future stress by having your sewer service lateral inspected now. Your sewer service lateral is the pipe that connects your home to the city sewer main under your street. It is likely as old as your home and – like all parts of a home – it needs regular maintenance to work properly. Having your service sewer lateral inspected gives you the information to make an informed decision on what to do next – before it fails. If small repairs are not made, the pipe becomes weaker and can eventually collapse, causing costly repairs without warning.



Many plumbers can inspect your sewer service lateral using a camera and give you the information you need to make repairs. If detected early, small repairs to minor defects can be done from within the pipe, without having to dig in the yard or street. If the minor repairs are not made, the costs to dig out and replace a sewer service lateral are much higher and might include fixing the sidewalk or street if the plumber needs to excavate below ground. Inspecting and repairing defective service laterals can reduce the likelihood of a sewage backup into your building, reduce costs and hassles of backups or collapses, reduce utility fees for your community, and increase the value of your home.



### Disconnect your gutters

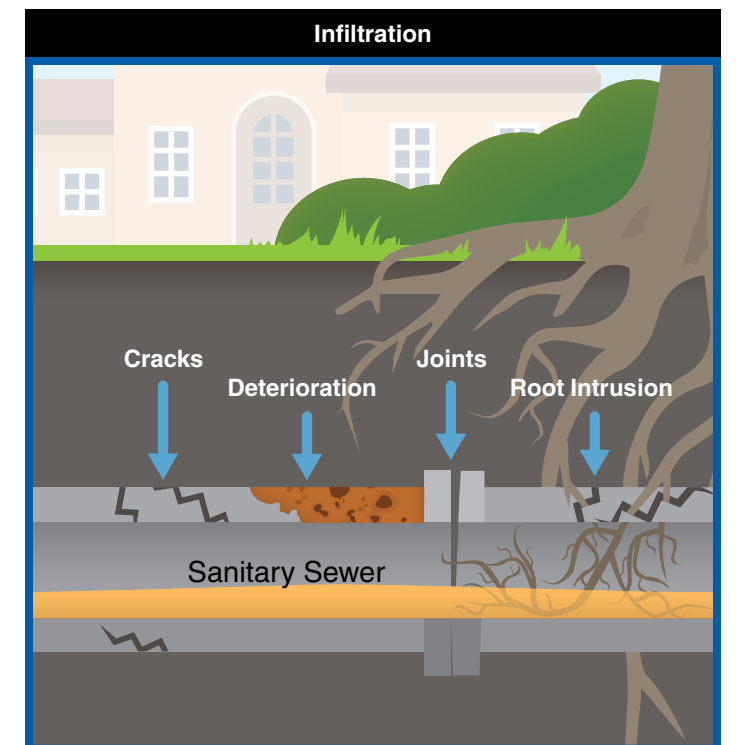
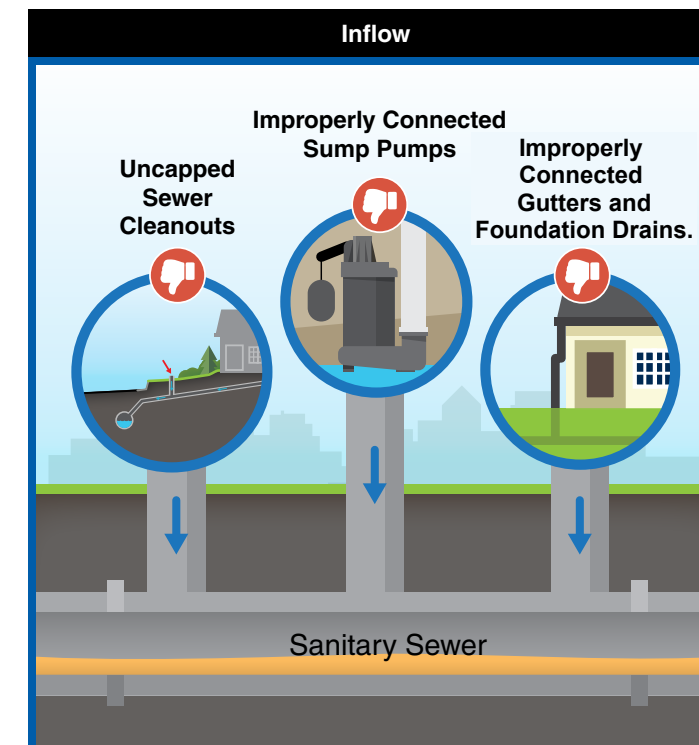
Some older properties have downspouts that discharge stormwater to the sewer service lateral. Discharging this water to the wastewater system is illegal and needs to be addressed. Gutters and downspouts should drain onto your property or into the city stormwater system, not the wastewater system.



## Protecting your health and home: reducing inflow and infiltration

Protecting your health and home, while reducing utility fees, starts with you. This handout provides information on inflow and infiltration, how it costs property owners and their communities, and what you can do to identify and correct problems on your property.

Inflow and infiltration is clear water – such as groundwater and surface water – that enters the wastewater system from sources such as defective sewer service laterals, sump pumps, downspouts, building drains, and aged or broken sewer mains and maintenance holes. Clear water, on its own, does not need to be treated at a wastewater treatment plant. However, once clear water enters the wastewater system, it needs to be treated. During rain events, I/I adds significant amounts of clear water to the wastewater system, which can lead to sewage overflows into basements and waterways.



# What you should know about I/I

There are numerous reasons why property owners should care about I/I. These include impacts to your home and environment, increases in fees or utility rates, and tradeoffs with other investments in your community.

## Property impacts

Property owners can be directly impacted in terms of health and property damage. A sewer system that is over capacity because of I/I can lead to sewer backups into basements. Sewer backups can result in health risks from wet and contaminated basements as well as thousands of dollars of damage that can take weeks or longer to repair. Insurance does not always cover sewer backups, so the costs of repairs can fall onto property owners.

Would your service lateral pass inspection? When it comes time to sell your property, damaged sewer service laterals - the sewer pipe from your building to the city sewer main - can be a big risk that buyers may want fixed before buying. Having the service lateral inspected (and repaired if needed) can be included in the building inspection report and help increase the value of the property. Some communities require an inspection of sewer service laterals to inform buyers and sellers as part of the real estate transaction process. Savvy purchasers will appreciate having a completed inspection, and it can result in higher home values for the seller.



## Increased fees/utility rates

Like our roads, wastewater systems are designed to handle the peak capacity – rush hour for roads is like a heavy rainfall for sewers. To provide enough sewer capacity for now and future generations, the sewer pipes and treatment facilities are designed for those peak flows. The more clear water entering the system, the bigger all those facilities need to be and the more they cost. Reducing the peak flow caused by excessive I/I means communities and the region can spend less on those larger pipes and treatment plants.

Metropolitan Council Environmental Services provides wholesale wastewater service to most communities in the Twin Cities region, and those communities collect fees from users to pay for the service. By keeping costs low at the local and regional levels, ratepayers like you can continue to have some of the lowest wastewater fees in the country.



## Environmental impacts

Wastewater treatment systems that are in place today were built to keep waterways clean for you to use. Preventing sewage overflows keeps Minnesota's waters clean and healthy. Keeping I/I out of your wastewater system can reduce negative impacts to the environment. When the wastewater system becomes over capacity due to I/I, there is not only the potential for sewage to back up into homes and businesses, but also for overflows into wetlands, lakes, rivers, and streams.



## Tradeoffs in community investments

Wastewater is just one service a community provides to residents. A community that discharges excessive amounts of wastewater due to clear water entering the local system may have less money to invest in other programs that are likely a higher priority for residents because they are paying higher utility costs. In smaller communities with high rates of I/I, utility fees can consume a large portion of the budget that could be used for other purposes.



# What your community has done to address sources of I/I

Communities in the Twin Cities region have been working for decades to address sources of I/I in the city sewer infrastructure. For many, this started in the 1970s with inspecting their system using cameras to find sources of I/I and making the necessary repairs. By regularly inspecting the local sewer systems and making needed repairs to the sewer mains and maintenance holes, communities have been able to reduce I/I to some degree. Even with increasing population and rainfall, most communities have been able to reduce the amount of wastewater sent to the regional system and extend the life of those systems.

Up to 80 percent of clear water entering the local sewer systems comes from private infrastructure at homes, businesses, and institutions. Many cities locally and across the country have initiated programs to inspect and repair damaged sewer service laterals, replaced older clay pipes that are beyond their service life, implemented sump pump inspection programs, and have developed programs to clean out public sewer systems of debris, roots and other items that come from homes and businesses feeding into the sewer system. That is a lot of work going on underground to keep your sewers working for you.