

KEEP IT SEPARATED: STORMWATER & SANITARY SEWERS

*How inflow & infiltration affect both your home
and Van Buren Township's community infrastructure.*

Our community operates under a separate sanitary sewer and stormwater system. This means groundwater and stormwater, or precipitation such as rain, snow, or melting ice, is not meant to end up in our sanitary sewer pipes. Depending on how it occurs, it's referred to as inflow or infiltration.

WHAT'S THE BIG DEAL WITH A LITTLE RAINWATER?

It's important to keep stormwater out of our sanitary infrastructure as it will increase the quantity of wastewater that needs to be treated, and affect the rates that Van Buren Township residents and businesses pay to operate and maintain it. Additionally, there is a potential risk that inflow and infiltration (I&I) could cause excess sewage out of sewer pipe and into the environment. I&I takes up valuable capacity in the sewer system and waste water treatment plants resulting in limiting future sewer connections- as only so much capacity exists in the system. If ignored, I&I could cost the Van Buren Township millions of dollars.

INFLOW:

Occurs when rain water is misdirected into sanitary sewer systems instead of storm drains.

INFILTRATION:

Occurs when ground water seeps into the sanitary sewer system through cracks or leaks in sewer pipes.

WHAT CAN HOMEOWNERS DO TO REDUCE I&I?



Gutters should not drain into sewers.



Avoid planting trees over sewers.



Make sure cleanouts have caps on.



Basement drains must not go to sanitary sewers.



Fix broken/leaky sewer pipes on your property.

DON'T BE A CHUMP: PAY ATTENTION TO YOUR SUMP PUMP

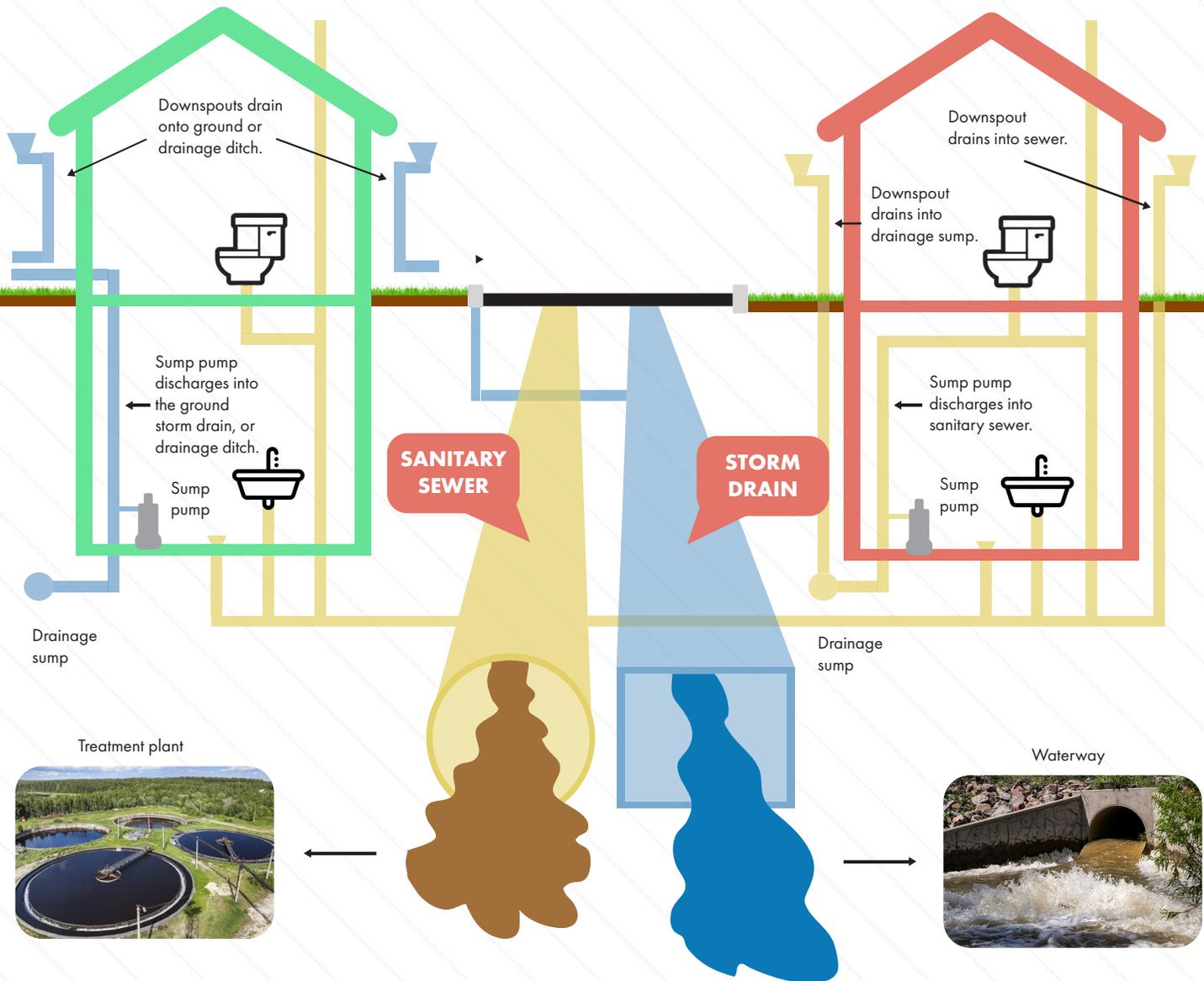
Besides the fact that connecting sump pumps to the sanitary sewer is illegal, it causes big problems! Sump pumps are designed to pump groundwater and rainwater. Sanitary sewer pipes are designed to carry sewage, not groundwater and rain water.

If hooked up to a house's sewer, a half-horsepower sump pump will pump about 60 gallons to the sewer each minute. That means that if 5 pumps are connected to the sewer, it will be full. Normal sewage flows often fill the sewer main more than half-way. So, if two or three neighbors in a block illegally connect their sump pumps to their sewer, the flow trying to get through the sewer main will be more than its capacity of 300 gallons per minute. This will result with sewage in the pipe backing up into basements. It is critical that sump pumps discharge to the yard or storm sewer, not to the sanitary sewer. Here is a diagram highlighting both proper and improper sump pump installations.



PROPER INSTALATION

IMPROPER INSTALATION



WHAT IS VBT DOING TO REDUCE INFLOW & INFILTRATION?

VBT has an on-going program to reduce the quantity of I&I in the sanitary sewer system. Since the sewers are underground, special equipment and techniques are used to locate problems. Specialized robotic video cameras are lowered into manholes and travel down the sewer pipes. Flow meters, smoke testing, conductivity sampling is also used in our program to locate problems in sewers. After problems are located, repair and rehabilitation contracts are bid and awarded. Investigations and repairs of sewers are an ongoing program in all sanitary systems.

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