

Sewer Inflow and Infiltration

Do you have illegal connections to the sewerage (also called wastewater) reticulation system at your property? Are your downpipes diverted to a connection to the wastewater system? Or is the ground around your house higher than your gully trap (overflow relief gully) or a manhole in your backyard? If so, stormwater could be diverting to the wastewater system and overloading the system during wet weather, resulting in sewerage overflows and health risks further along the network.

Wastewater network

Council's wastewater network is designed to transport sewage and wastewater from homes or businesses to the wastewater treatment plants via house drains, sewers and pumping stations.

The wastewater network is not designed to carry runoff from rainfall and can result in overflowing into other residential households.

In times of heavy rainfall, the wastewater network can become affected by the inflow of stormwater which, in turn, can have the following effects:

- The capacity of the network becomes overloaded; and
- Sewage overflows can occur (from manholes or plumbing fixtures at people's houses, and at businesses).

What is inflow and/or infiltration?

Inflow and/or infiltration is any external source of water, stormwater or groundwater that enters the wastewater network.

The majority of inflow is caused by:

- Illegal rainwater connections into the wastewater network; and/or
- Landscaping that diverts stormwater into manholes or overflow relief gullies (ORGs).

More about Overflow Relief Gullies (ORG)

The gully trap, or what is commonly referred to as the ORG, prevents smells and overflows entering houses and buildings.

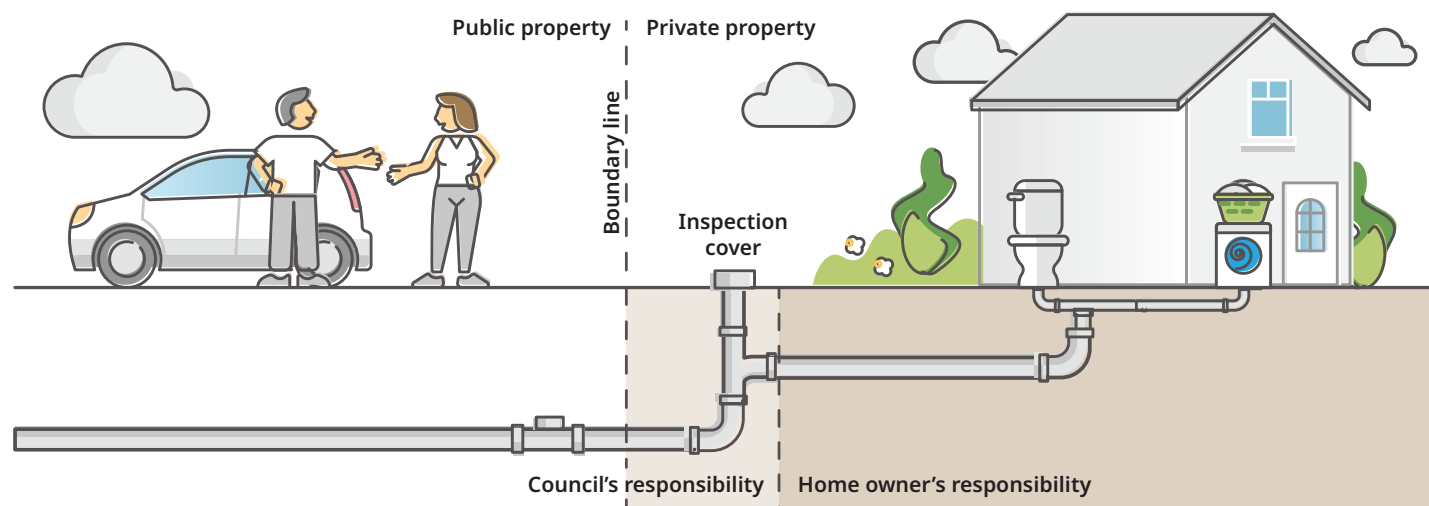
The ORG is located outside your house; generally in the area outside of your kitchen. The ORG should be above ground level to ensure that stormwater does not enter.

Inflow through the ORG can be unintentional when stormwater cannot flow away due to landscaping or other obstructions blocking the flow-path of the stormwater. The stormwater builds up around the ORG and then, when high enough, drains into the ORG and then the wastewater network.

Residents need to be aware that any discharge of stormwater into the wastewater network, whether it be through the ORG or connection of storm water downpipes or drainage pipes, is illegal and if left unattended can result in a Council fine.

Whose responsibility is it?

Council is responsible for the wastewater network outside residential property boundaries. Household drainage within the boundary of properties is the responsibility of property owners. All inspection covers (manholes) are the responsibility of Council, including those located on private property.



Why is it a problem?

Inflow and/or infiltration increases the volume of water in the wastewater network which can result in the capacity of the network being exceeded. This causes the network to fill and overflow, potentially creating risks to human health and environmental harm.

The additional pressure of stormwater inflow on our wastewater network can increase the cost to Council to transport and treat the wastewater. These costs can affect ratepayers.

High stormwater related inflow increases the likelihood of pipe blockages and wastewater overflow during heavy wet weather events.

Check to see if you have a problem

Residents may not be aware that they have an illegal connection, but there are a few simple steps that can help identify if rainwater is entering the wastewater network:

- Checking that all downpipes discharge to the ground or to the street. This can be done by discharging water into your downpipe and observing where the water flows out. If no point of discharge can be found, there might be an illegal connection.
- Inspecting the area around the ORG to ensure that stormwater can flow away. Verify this during a rain event. If water dams up around the ORG, adjust the landscaping or remove the obstacle.

Please contact a licensed plumber if you cannot find your ORG, or if you think you might have an illegal connection.

What next?

Council is committed to reducing the incidence of illegal and inadvertent inflows into the wastewater system.

Council undertakes annual programs that inspect and relines the wastewater network to minimise infiltration in the network. Whilst this ongoing program assists Council in addressing ground and stormwater infiltration into the wastewater network, Council also relies on residents to do the right thing.

Council is currently rolling out a smart wastewater monitoring trial, along with a property connection inspection program. This is to identify areas and properties contributing to inflow and/or infiltration and alert residents to repair and rectify illegal connections when found.

What to look for

Landscaping



Landscaping that incorrectly directs stormwater into the ORG.

Paving



Paving that incorrectly channels water into the wastewater network.

Illegal plumbing



Illegal plumbing. The pipe from the right channels stormwater into the ORG.