

Figure 3: Examples of a stormwater pipe illegally connected to the sewerage system.

IMAGE 1

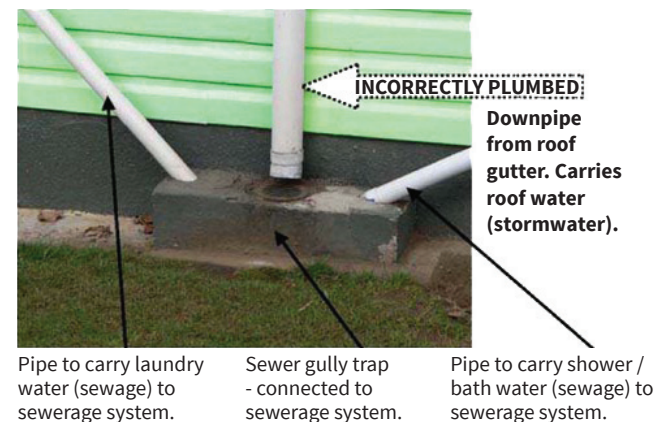


IMAGE 2

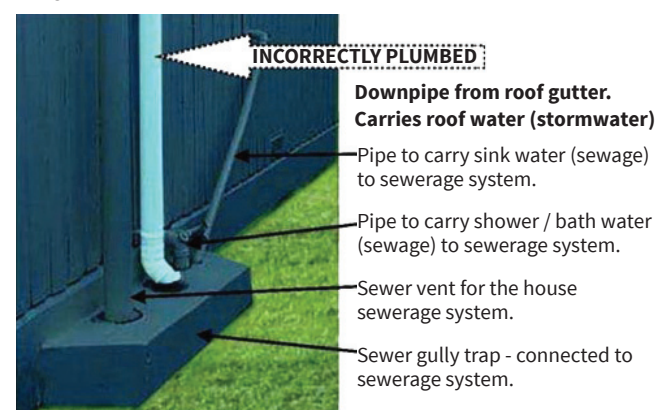
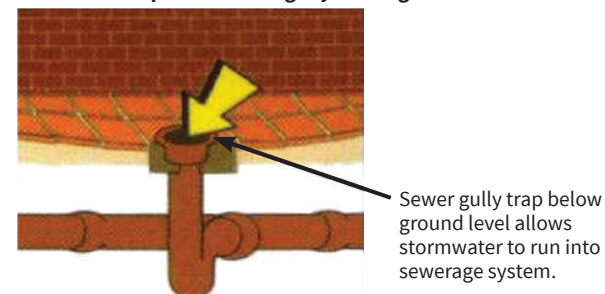


IMAGE 3: Example of a sewer gully below ground level.



Sewer and the CWMS

What is sewage?

Sewage includes faecal matter, urine, household and commercial wastewater which ends up in the septic tank. It does not include stormwater.

What is septage?

Septage is mostly the solids that go into septic tanks located on each private property. These tanks are pumped out and discharged on a 5 yearly rotation basis by Council's contractors. It does not include stormwater.

What is the sewerage system?

This is the network of pipes and structures that collect and transfer the water component from each private property via the septic tank to the CWMS lines, pump stations and eventually the treatment plant located on Springs Road, Mount Barker or lagoon systems in other townships.

Why is the sewerage system important?

It is important to have a sewerage system to treat and dispose of sewage correctly because, besides having a bad smell, sewage contains bacteria and other substances that can be harmful to our health.

When sewage goes into the sewerage system where does it end up?

After going through a number of screening and filtration processes, the treated water is discharged into either the Laratinga Wetland or for further treatment (UV and chlorine disinfection) at the Bald Hills Road water treatment facility. From here it is used for irrigated horticulture, viticulture, dust suppression for road works, irrigation of public spaces or mineral processing. Council's target is 100% re-use within the Community.

Stormwater

What is stormwater?

Stormwater is water collected or discharged as a result of rain and its run-off. Collection areas are:

- roof water
- surface water (run-off from paved and unpaved areas)
- sub-soil water (water accumulated within the ground).

What is the stormwater system?

This is the network of pipes and structures that collect and remove stormwater from areas such as street and property drainage.

Why is the stormwater system important?

The stormwater system is necessary to take water away from urban areas as fast as possible to prevent flooding.

When water goes into the stormwater system where does it end up?

Most of our stormwater travels through gutters, drains, pipes and open channels, eventually washing into nearby waterways, most of which end up in Lake Alexandrina.

Is stormwater treated?

There is no need to treat what should be perfectly clean stormwater. However, Council are now fitting litter traps to stormwater outlets to stop litter ending up in our waterways and on our beaches.

Questions + Answers

Sewer, Community Wastewater Management System (CWMS) and Stormwater

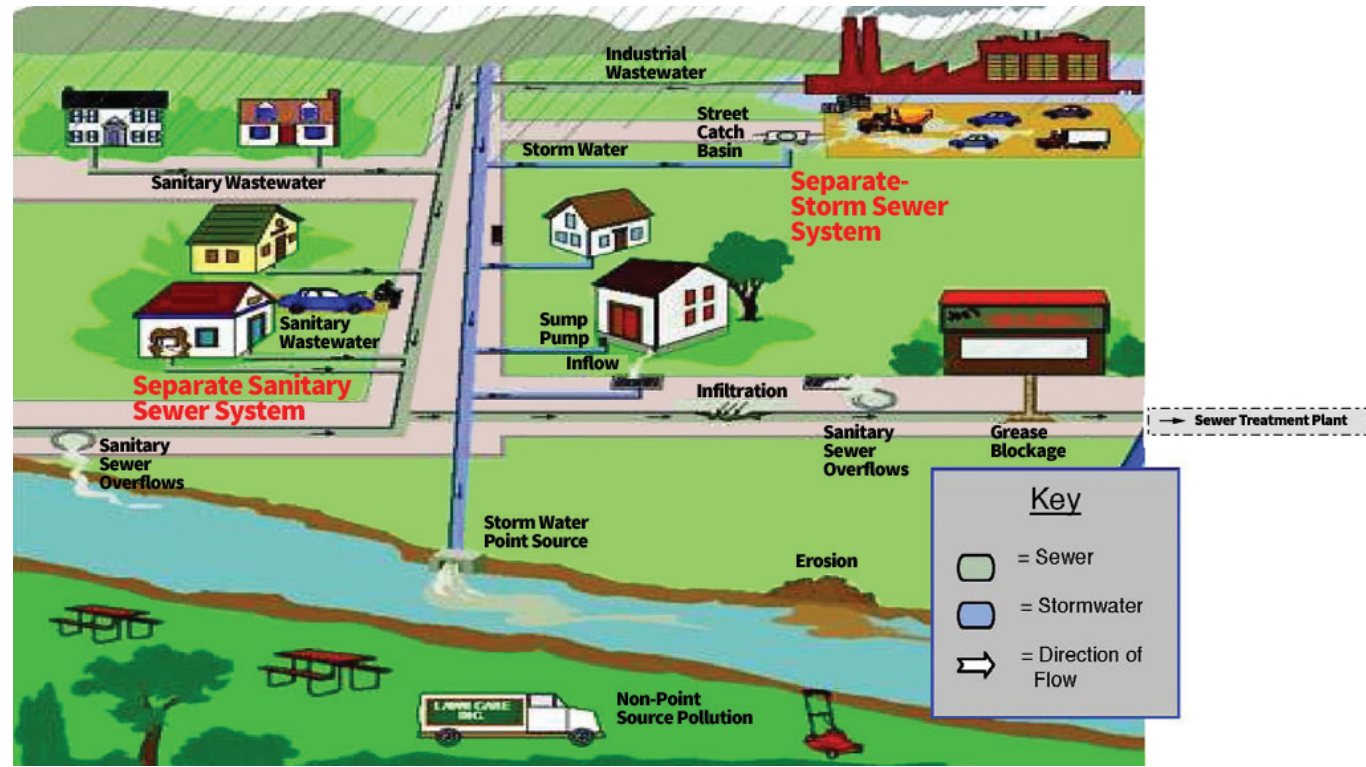


For More Information

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Different pathways of stormwater and sewage

The diagram below shows the different pathways of stormwater and sewage:



What can happen when things get into the wrong system?

Consider the stormwater system...

Everything that goes into the stormwater system (including plastic bottles, cans and other litter) flows through pipes and structures directly to waterways, such as local creeks, leading to Lake Alexandrina and eventually the sea.

Stormwater from your property can enter the stormwater system through the gutter and drain on the edge of the road. If you wash things like pesticides, chemicals, rubbish or pet droppings down the drain these can end up in the creek systems and to downstream towns including Clayton, Milang and Goolwa.

Consider the CWMS sewerage system...

This system has been designed to accommodate flow of septic tank effluent only, not storm water. If large amounts of storm water enter the CWMS network it can overload the system

leading to septic effluent spills which can contaminate the environment.

It would cost many millions of dollars to increase the capacity of Mount Barker's CWMS and sewerage system to deal with all this extra water, which should not be going into the CWMS system in the first place.

How is stormwater entering the sewerage system?

Council has commenced an inspection program of its own infrastructure to identify any areas where stormwater might be entering the system through cracked/broken mains, manholes, pipe crossings over water courses etc.

This has identified two main issues:

- 1. Infiltration:** This is where stormwater, groundwater or stream flow water seeps into CWMS pipes and manholes through cracks or bad joints. Infiltration may keep going long after rain events end.

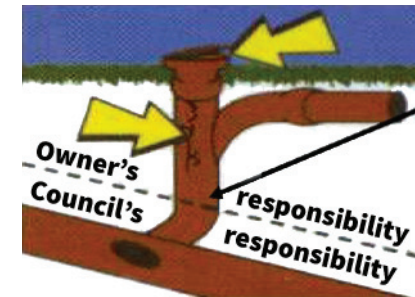
- 2. Inflow:** This is where water enters the CWMS / sewerage system via incorrectly plumbed connections with the stormwater system. Stormwater can also enter the sewerage system via private sewer mains. In this case, it becomes the property owner's responsibility.

How can we reduce the amount of stormwater entering the sewerage system?

Council has organised testing of the sewerage system to identify the location of these problems, repair them and reduce the amount of stormwater entering the sewerage system.

Council will repair leaks that are found in the infrastructure. However where leaks or cross connections are found on private sewer or drainage systems, the property owner/s will be responsible for the repairs. See figure 1 which outlines where Council and owner responsibility lay with regards to sewerage system.

Figure 1



The boundary is the line of responsibility between Council and property owner.

Are there any risks if my property's stormwater is connected to the sewerage system?

Yes. If you discharge stormwater into the sewerage system you may run the risk of sewage backing up and spilling out in your house, your yard – or your next door neighbours house following heavy rains. Spare a thought for those people living closer to the main drainage channels and creeks as they will probably see the system 'backing up' before you do!

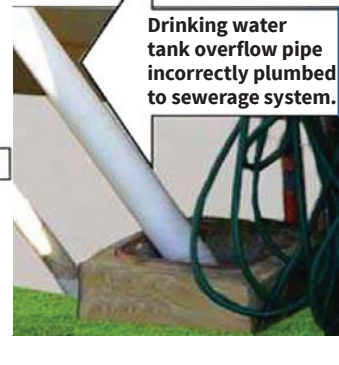
Because of the present high usage of rainwater tanks in the District, cross-connections of stormwater and CWMS/sewer can also be dangerous. Figure 2 is a prime example of cross-connection where drinking water is at risk of being contaminated through an incorrectly plumbed stormwater connection to the sewerage system.

Figure 2: Example of water contamination risk

IMAGE 1: zoomed out view



IMAGE 2: zoomed in view



If my stormwater is not connected properly, do I have to fix it?

Yes. Incorrectly plumbed stormwater connections need to be rectified. If your property's stormwater is incorrectly connected and detected by the smoke testing program, you will receive a letter to advise that remediation works need to be undertaken within a set time period.

Will fines be issued for illegal connections?

While Council has the right to prosecute under the Water Industry Act 2012 and the Local Government Act, it understands that, in many cases, the connection may have been made before the current owner purchased the property. Council will not be issuing any fines at this stage. Property owners are asked to be proactive and review stormwater connections prior to the smoke testing and to rectify any problems as soon as possible after they are identified.

How can I tell if my stormwater is going into the sewerage system?

In many cases you can see downpipes, which carry stormwater from the roof, pointing into sewer gully traps or grates outside. Often there will be sewerage pipes such as those from laundries or bathrooms going into the sewer gully trap as well. Stormwater can also enter the sewerage system when sewer gully traps are below ground level.

See figure 3 overleaf for some examples of incorrectly plumbed stormwater connections into the sewerage system.