



What are sewer drains?

There are two types of drains in the urban water cycle; sewage drains and stormwater drains.

Sewer drains



Are pipes inside your homes, schools and businesses that take away the sewage, the wastewater used from your taps, sinks, baths and toilets. These drains join the 3,300km of sewerage network pipes and infrastructure that run underground through Canberra to the sewage treatment plant, Lower Molonglo Water Quality Control Centre (LMWQCC).

At LMWQCC wastewater from across Canberra is received, screened, and treated using physical, chemical and biological processes to remove the dirt and sludge, as well as the nutrients, detergents and other additives we put down the drain.

Water leaving this treatment plant is so thoroughly treated that it can return to the natural water cycle, free of pollution, and be released into the Molonglo River. It then flows into the Murrumbidgee River where it will be reused by other towns further downstream, eventually joining the Murray River system and flowing all the way to the ocean near Adelaide in South Australia.

Stormwater drains



There are also drain pipes outside your house that collect rainfall runoff from roofs, driveways, footpaths, carparks, and roads that connect to the storm water drainage network. These drains are separate to the sewage system, taking rainfall from gutters on our roads, flowing into local waterways, lakes and rivers.

As the two drain systems are separate, it is important that sewage and stormwater systems do not connect. All stormwater in our drains will eventually flow back to the Murrumbidgee River system.



Download the healthy waterways and drains poster for your classroom. NEED LINK







Discuss

Icon Water's Drain Sherriff reminds us we can only flush the 3 P's. This means that only poo, pee and toilet paper should be flushed down the drain to the sewer, along with all the soapy water that we use for health and hygiene.

Did you notice how in the experiment the tissue, wet wipes and paper towel held its shape? These items might look similar to toilet paper, but they're designed to hold moisture, are more robust and do not easily break down. Many blockages in the sewer network are caused by such items being flushed or put down the drain.

Fats and oils might be in liquid form after cooking because they're still hot, but when they get in the drain pipes and cool down they solidify and clog up the pipes. When fats and oils meet up with materials like wet wipes, they can lead to a blockage or 'fatberg' forming in the sewerage pipes, creating issues for your home and neighbourhood.

You never want bad toilet flushing habit to come back and visit you or your neighbours. It can create such a mess. It's important that we remember that only the three P's should be flushed.

Recall your survey you asked your family about what they flush down the drain around the house. Are there any changes your family can put in place to make a positive difference?

Which items on your survey do you now know should not be flushed?

From the experiment, what changes or actions will you and your family make to care for your drains and the ACT's sewerage network?





Just because it fits down the 'S' bend doesn't mean it should



Icon Water 6