



Sewage treatment

Wannon Water operates 19 sewage treatment plants across the region, treating household, commercial and industrial sewage and wastewater.

Every day of the year, we treat 30 million litres of sewage and trade waste.

What is sewage?



Sewage is the wastewater that enters the sewerage system from household bathrooms, toilets, kitchens, laundries and drains, or from businesses and industries.

It is approximately 99.6 per cent water, with the remainder mostly consisting of biodegradable pollutants and small solid particles.

Larger commercial and industrial customers are required to treat their sewage (known as trade waste) to agreed quality standards. They may be required to install pre-treatment equipment (e.g. grease traps) before discharging to the sewer.

The sewerage system

Sewage is collected in underground pipes below your house or business before flowing to larger pipes called sewers. These are generally located along the back boundaries of properties.

Sewers generally slope downwards to allow the sewage to flow by gravity. In low-level areas, sewage pumping stations and rising mains may be needed to transfer the sewage to the treatment facility.

Wannon Water's system includes 19 sewage treatment plants, 101 sewage pumping stations and 937 kilometres sewer mains.

Our sewage treatment plants reclaim the water from sewage so it can be recycled or discharged safely to the environment.

Aerobic, lagoon-based treatment plants produce treated

water for reuse in irrigation or environmental discharge. They are located at Camperdown, Casterton, Cobden, Coleraine, Dunkeld, Hamilton, Heywood, Koroit, Mortlake, Peterborough, Port Campbell, Simpson, Terang and Timboon.

Our plants at Port Fairy, Portland and Warrnambool process sewage through Intermittently Decanted Extended Aeration (IDEA), producing treated water that is sent to an ocean mixing zone.

All plants operate under strict licence conditions set down by the Environment Protection Authority (EPA Victoria).

Sewerage treatment

Sewage treatment plants use a combination of mechanical and biological processes.

Larger items and rubbish is screened out, and sand and grit is removed.

Naturally-occurring bacteria and micro-organisms in our treatment tanks use sewage as a food source, breaking down suspended solids and organic material.

In **IDEA plants**, the treated water is then aerated, settled and decanted before discharged to the ocean.

The **maturation pond system** treats sewage with a clarifier, allowing sludge to settle to the bottom. Sewage is treated via trickling filters which help purify the water stream by using a rock bed. Lagoons are then used to aerate and settle the sludge, with the use of UV rays and a maturation lagoon completing the process.



Winter storages

After the wastewater is treated in a variety of lagoons, the recyclable water is often stored in a winter storage lagoon until it can be reused in the warmer months to irrigate.

Biosolids

The sewage treatment process utilises billions of microscopic bacteria and other organisms to break down and digest sewage to produce recycled water.

In these nutrient-rich conditions, the microbes eat, multiply and die. This organic matter accumulates at the bottom of the treatment tanks, which are regularly drained.

The material is then transported to purpose-built sites at Camperdown and Hamilton where it is dried for several years. The resulting product is known as biosolids.

Biosolids have a range of uses, most notably as a nutrient-rich fertiliser.

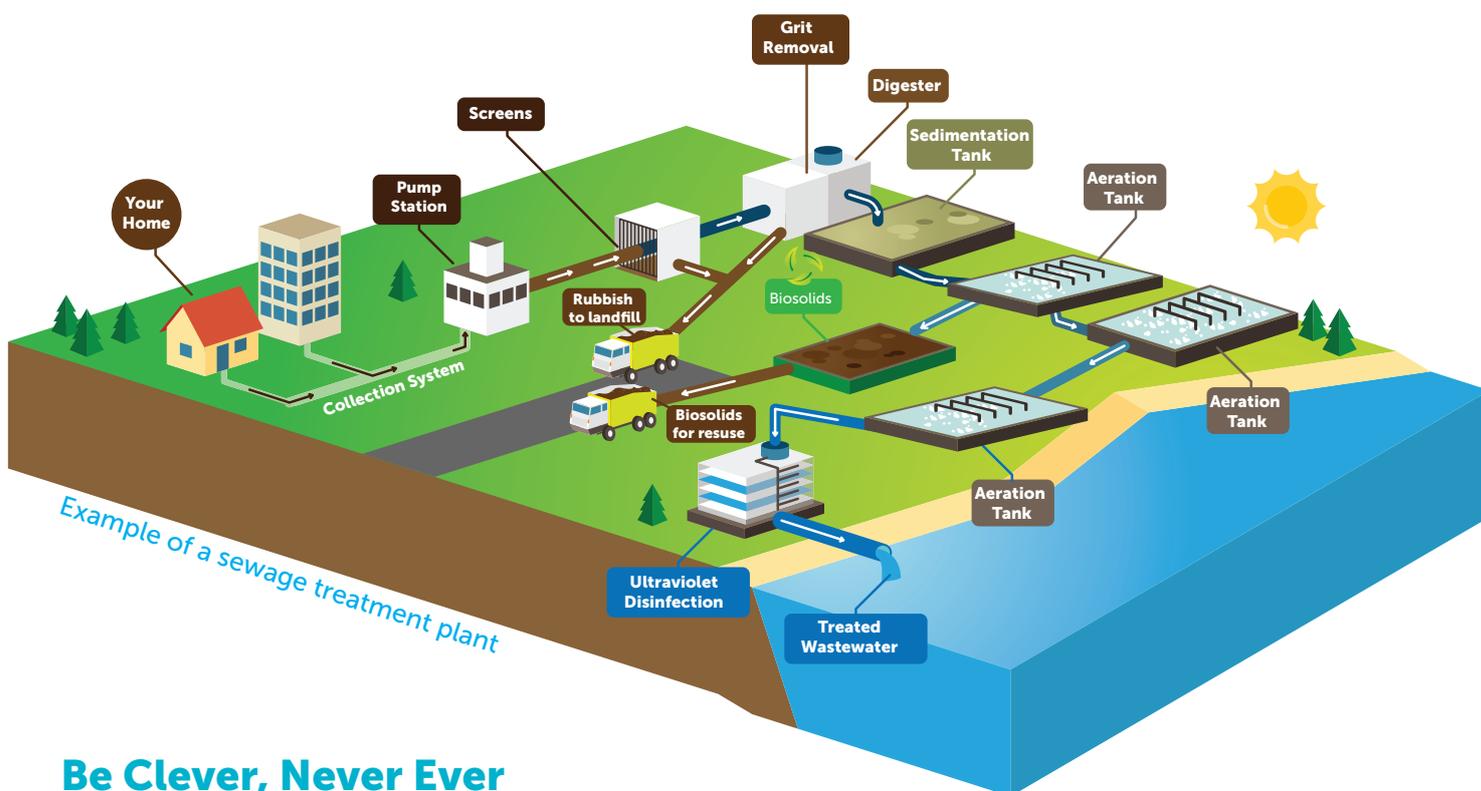
Septic tanks

Wannon Water does not manage or regulate septic tanks - this is the responsibility of your local council. However, we do treat septic waste that is pumped out of septic tanks by accredited contractors.

We may not accept poorly managed or contaminated septic waste so ensure you maintain your septic system and avoid disposing of non-biodegradable objects (nappies, cotton buds, oil etc) or anything that may be harmful to the natural micro-organisms that break down the sewage in your tank (strong cleaners, bleach etc).

Further information is available from your local council.

SEWAGE TREATMENT PLANT



Be Clever, Never Ever

We ask our customers to be mindful when they are disposing of items down the sink or toilet.

Please, Be Clever and Never Ever flush:

- Wet wipes – the packet may say they are ‘flushable’ but they don’t break down.
- Bathroom waste - cotton buds, Band Aids, shaving blades.
- Kitchen waste - oil and fat, tea leaves, vegetable and fruit scraps.
- Workshop waste – pesticides, unused paint, motor oil, fuels etc.

