



Unitywater

# Sewage Treatment

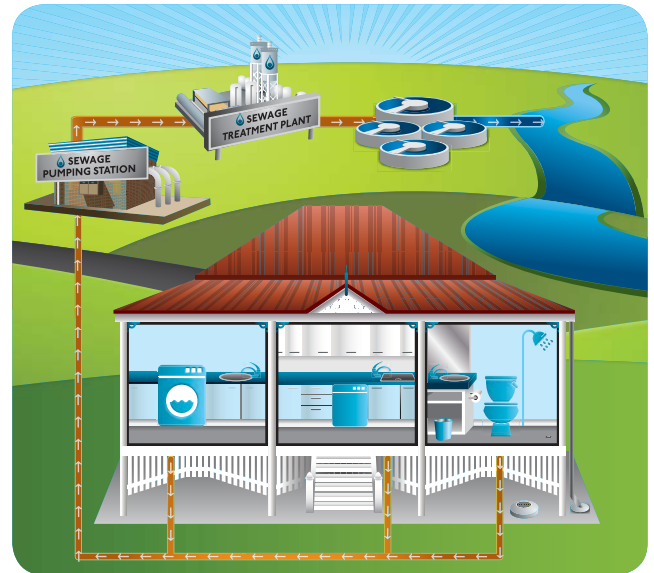
## Flushed away, down the drain... then what?

Every day you go to the toilet and wash yourself. In the home, people wash dishes and clothes. All the water you use flows down the sink and drain, or flushes down the toilet.

This used water is called sewage.

## Where does sewage go?

On the Sunshine Coast, Noosa and Moreton Bay many houses, schools and businesses are connected to Unitywater's sewerage network. Underground pipes and pumps transport your sewage to a sewage treatment plant, where it is cleaned and returned safely to the environment and the natural water cycle.



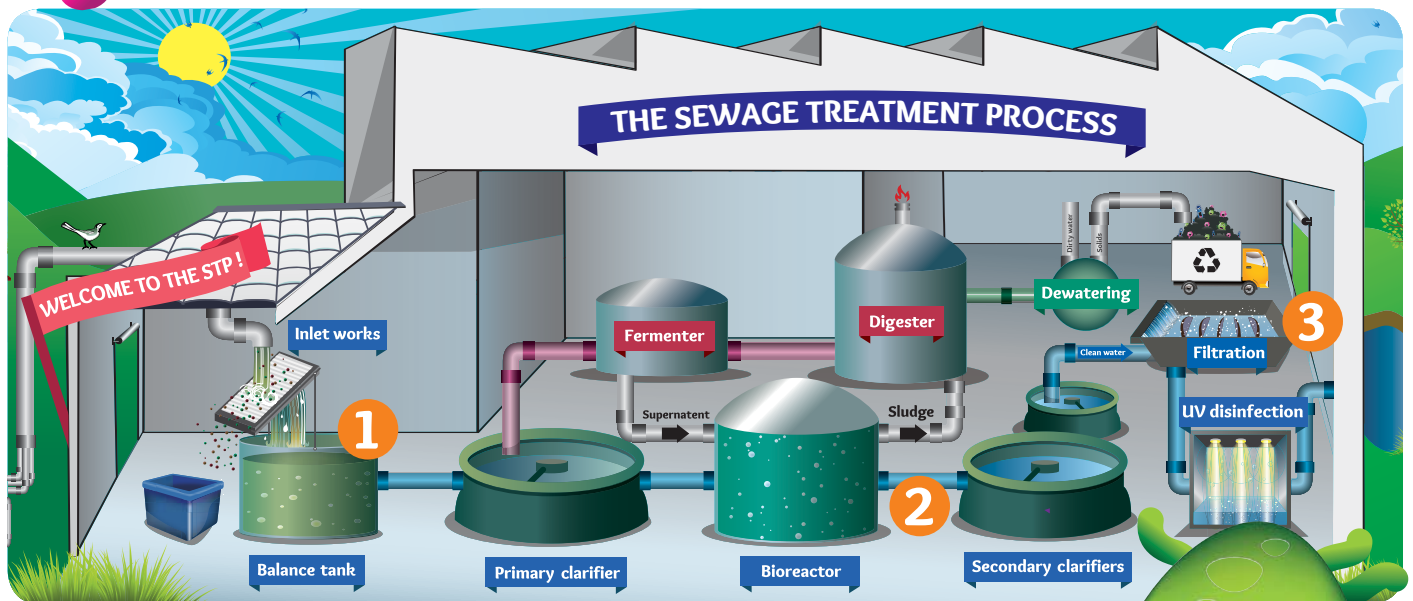
## How does it work?

Because sewage contains all kinds of waste from dirt and chemicals to bacteria and viruses, many different treatment processes are needed to turn it into clean treated water, known as effluent, before it can be released back into the water cycle.



### Did you know?

Everything you send down the sink, drain and toilet enters the sewerage network. Sewage treatment plants are only designed to treat pee, poo and paper – anything else can block pipes, reduce treatment efficiency or harm waterways.



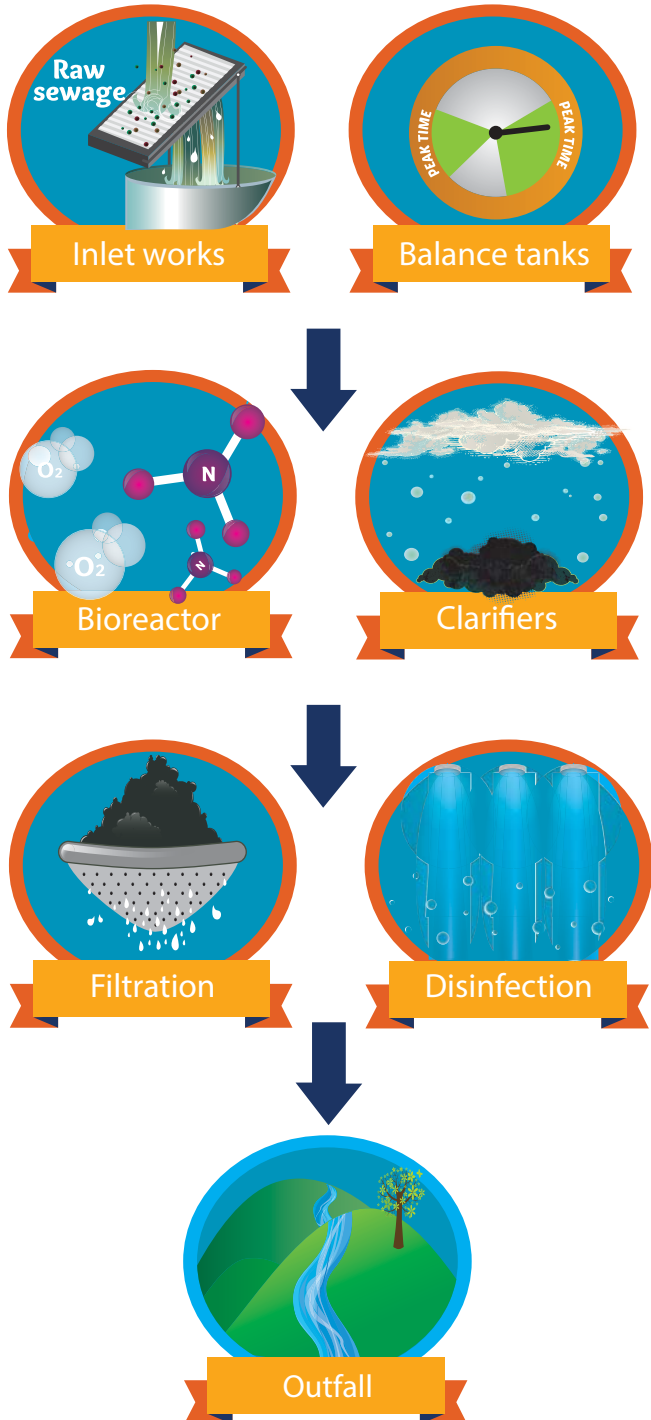
**Did you know?** It takes around 48 hours to safely treat sewage and return clean water, known as effluent, to the natural water cycle.





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## 1 Primary Treatment

**Physically removing large objects, sand and grit**  
On arriving at the sewage treatment plant, sewage is first screened at the inlet works to remove sand, grit and large items. The remaining sewage is then stored in balance tanks until it can be treated.

## 2 Secondary Treatment

**Biologically removing dissolved material**  
Sewage travels from the balance tanks to the bioreactors, where helpful bacteria feed on the unwanted waste and nutrients in the sewage. The water then travels to clarifier ponds, when any remaining solids settle to the bottom and separate from the liquid.

## 3 Tertiary Treatment

**The final cleaning process**  
The final stages of treatment remove the smallest solid particles and micro-organisms. Sand or disc filters capture any remaining solids, while ultra-violet rays or chlorine disinfect the effluent to remove bacteria, viruses and protozoa.

## 4 The final treated effluent

It is now ready to be discharged to waterways or recycled for industrial or agricultural purposes.

### More information

Visit [education.unitywater.com](http://education.unitywater.com) to explore:

➤ The interactive urban water cycle story

Visit [unitywater.com/teachers](http://unitywater.com/teachers) to explore:

➤ The urban water cycle fact sheet

➤ The sewage treatment video