



# Onsite Domestic Wastewater Update - May 2019

Welcome to the second edition of this newsletter. Here you can stay in the loop with what we're focusing on in domestic wastewater and septic tank management.

## Core values

### Public health

Poorly managed wastewater can cause negative health impacts both at the local scale (for example, a few people that come into contact with wastewater) to large numbers of people from untreated wastewater polluting drinking water supply.

### Environment

Wastewater can increase the nitrogen and phosphorus present in local waterways. Increased nitrogen and phosphorus increases the growth of algae and weeds, negatively impacting the health of our aquatic ecosystems.

## Water Supply Catchment Septic System Inspections - Tanjil River

There are 93 septic tank systems located between the Blue Rock Reservoir and the Gippsland Water pump station on the Tanjil River (near the Moe-Walhalla Rd bridge). Water is pumped from the river, treated and supplied to approximately 24,000 people by Gippsland Water.

Poor performing septic tanks are a source of waterborne pathogens like Cryptosporidium, Giardia and Norovirus. Infection from these pathogens can cause Gastroenteritis symptoms and can have long-lasting symptoms particularly in children ([healthdirect.gov.au](http://healthdirect.gov.au)).

Our primary objective of this project was to identify which septic systems are discharging effluent to ground surface. These systems are the most likely to contribute pathogens to the water supply, particularly during wet periods.

93 properties were inspected from January to May 2019. 15 systems were identified to be discharging effluent to ground of these; 9 are of the old septic systems where greywater is discharged to ground surface and 6 systems were found to be failing and discharging effluent to ground surface.

To reduce the risk of contaminating water supply and to protect Public Health, Council is working with the 8 owners of systems requiring repair to ensure these systems are returned to proper function.

A number of systems had not been pumped out for a long time (or never pumped out). Without maintenance it is only a matter of time until these systems will fail. Costing the owner significant repair/replacement costs.

Greywater is now understood to contain many of the same pathogens as blackwater and therefore poses the same risk to public health. Split systems where greywater discharges to groundwater are no longer considered good practice.

***Thank you to everyone that participated and is helping to protect public health and the environment.***



## Water quality sampling

The growing populations of Drouin and Warragul and the creation of acre lots has the potential to negatively impact public health and the environment.

The large majority of these lots have their own septic tank system.

One area of Drouin has over 200 separate blocks averaging 4,000m<sup>2</sup> (one acre) in close proximity that surround a waterway, eventually flowing to the Tarago River.

You don't have to have a science degree to work out what might happen to this waterway if these 200 septic systems are not maintained and begin to fail.

In addition to enforcing required maintenance, Baw Baw Shire Council are sampling the waterway quarterly to establish a 'baseline' for the waterway's health.

Over time the sample data will show how the health of the waterway is tracking and highlight if septic tanks are having a significant impact.



## What's next for 2019/20

### Three-year review of the Domestic Wastewater Management Plan 2016 (DWMP)

- Assess progress against actions.
- Feedback from key stakeholders.
- Update (if required) actions and priorities in the DWMP.

### New owner notifications

- Changing property ownership can result in the new owners being unaware of their septic system and specific obligations.
- We're planning to work on an automated process where we can get in touch with new property owners to ensure they know how to keep their septic systems performing well.

## Monitoring Treatment Plant Maintenance

Treatment Plants are a more sophisticated septic tank system, designed to treat effluent to a higher standard and lessen the impact on the environment.

The downside of these systems is that they have an aeration component that requires a power source and fine calibration to ensure they work as designed. The increased number of moving parts in these systems can result in a higher failure rate that conventional septic tank systems if they're not maintained appropriately.

The Australian/New Zealand standard for these systems stipulate that treatment plants must be serviced quarterly.

There are 130 treatment plants in Baw Baw, approximately 100 of these are being maintained in accordance with manufacturer's specifications. We have contacted the remaining 30 property owners to notify them of their legal obligation to have their system serviced.

Treatment plants will cost owners significantly in repair and replacement costs if they're not maintained and monitored by a service agent.

## Septics at commercial premises

- Commercial operations generate a different wastewater load to the normal household situation. Often including higher volumes of inorganic materials i.e. fats, oils, detergents etc.
- We would like to audit these facilities based on risk assessment with the aim of protecting public health and the environment.



## Want to know more?

For more information about septic tank health or wastewater management, contact Council's Public Health team on 5624 2411, by email at [health@bawbawshire.vic.gov.au](mailto:health@bawbawshire.vic.gov.au) or visit our website [www.bawbawshire.vic.gov.au/Wastewater](http://www.bawbawshire.vic.gov.au/Wastewater)