

# Recycled Water FACT SHEET

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## What is Recycled Water?

Recycled water is water that has previously been used and collected in the sewerage system. Sewage is treated to a safe standard (set by legislation) at sewage treatment plants and made ready for reuse for beneficial applications such as irrigation. Also known as effluent, it is then sent to storage lagoons where it is stored for 30-40 days before it is used for irrigation. The stored water is exposed to sunlight for the duration which acts as a disinfectant killing off any pathogens or viruses that maybe present.



*Pulgul Sewage Treatment Plant*

The current quality of recycled water produced on the Fraser Coast is Class B – as specified in the Queensland Public Health Regulation 2018.

## What do we do with recycled water?

Fraser Coast Regional Council is one of Australia’s leading Water Service Providers in maximising their recycled water use and as a result, minimising the outflow of nutrients into the Great Sandy Straits. The Fraser Coast Recycled Water Scheme (Scheme) routinely reuses 90-100% of the Fraser Coast’s treated wastewater.

The scheme incorporates the towns of Hervey Bay (including Nikenbah, Pulgul and Eli Creek), Maryborough, Tooom, Howard, Torbanlea and Burrum Heads.

The recycled water network enables recycled water to be transferred around the scheme to the many storage lagoons on Wide Bay Water plantation sites and on to irrigate privately owned sugar farms, pastures, golf courses, turf farms and Council owned hardwood plantations.



*Hebblewhite Farm – Storage Dam and Hardwood Tree Plantation*





Fraser Coast Sport and Recreation Precinct



Hebblewhite Farm/ Plantation

Currently there are a number of recycled water management components located across the Fraser Coast:

- several recycled water storage dams;
- recycled water distribution pipe network and pump stations; and
- six hardwood tree plantations (and pasture) managed by WBW.
- reuse by private entities includes irrigation for agricultural and other uses:

- ✓ Sugar cane;
- ✓ Crops;
- ✓ Golf courses;
- ✓ Turf farms;
- ✓ Sports fields;
- ✓ Open space irrigation; and
- ✓ Supply fill points for dust suppression.

The scheme is the largest local government owned plantation scheme for recycled water reuse in Australia with approximately 526 hectares under drip irrigation.

Wide Bay Water also works with councils and water authorities across Australia delivering expertise in all areas of water management.

### What are the benefits of the Recycled Water Reuse Scheme?

The Scheme enables up to 100 per cent of the Fraser Coast’s treated sewage effluent, also known as recycled water, to be re-used. It is estimated that in the 2017/18 financial year alone the reuse scheme protected the surrounding ocean from approximately 50 tonnes of nutrients and 15 tonnes of suspended solids being released.

Many of Queensland’s Water Service Providers (WSPs) of a size similar to Fraser Coast Regional Council recycle less than 50 per cent of their effluent treated, with the larger WSPs in the south east corner of Queensland having reuse rates under 15 per cent of the total effluent treated.

*\*Based on 2018 SWIM Data and a mix of Queensland Government and other indicators; assumptions in calculations mean comparisons between WSPs are indicative of reuse rates only.*

As well as preventing nutrients from being discharged into the Great Sandy Straits and the Mary River, the plantations (over 500,000 trees planted since 2005) remove greenhouse gas (carbon dioxide) from the atmosphere. It is difficult to calculate how much carbon dioxide is removed from the atmosphere, however preliminary estimates indicate that up to 500 tonnes of carbon dioxide per hectare is removed by the time the plantation is harvested after 26 years.

Trees from Council’s plantations irrigated with recycled water from the reuse scheme are growing at an accelerated rate and at least 10,000 of the plantations eucalyptus trees will be used by Ergon Energy for power poles.

#### Contact Information

**Community Development & Engagement Team**

**Email:** [community@frasercoast.qld.gov.au](mailto:community@frasercoast.qld.gov.au)

**(Subject line: Recycled Water Strategy)**

**Phone:** 1300 79 49 29

*Information obtained from multiple sources including: Council incl. ‘What Happens When I Flush – Know your Hervey Bay Sewage Network Engagement Booklet’.*