

Treating community wastewater and delivering benefits to industry and agriculture in regional Victoria



TRILITY operates the Campaspe Water Reclamation Scheme (CWRS), a sustainable water reuse scheme providing benefits the townships of Echuca and Rochester.



Campaspe Water Reclamation Scheme (CWRS) is one of the first projects in Victoria to treat 100 percent of wastewater generated by a community.

The Victorian river towns of Echuca and Rochester have a population of just 14,000, yet its large industrial sector means the communities produce the equivalent wastewater of a city with a population of 250,000.

The CWRS has enabled the development of a recycled water and soil conditioner market in the region. Local farmers can access five million litres of high-quality Class B water a day. This enables growers to supplement existing irrigation on their farms, resulting in an important environmentally sustainable outcome.

As an added benefit, the recycled water contains levels of phosphorus and nitrogen nutrients that nourish the land and reduce the need for fertilisers, providing further cost savings.

ETE Coliban Pty Ltd (ETEC) is a Special Purpose Vehicle (SPV) controlled by the TRILITY Group which owns and operates the Echuca and Rochester Water Reclamation Plants under a 25-year Build Own Operate Transfer (BOOT) contract.

TRILITY has a team of operators to run the plants and manage the storage dams, and work with recycled water customers. The Echuca plant utilises a primary Up-flow Anaerobic Sequencing Batch (UASB) reactor with a secondary intermittent decant extended aeration treatment process to treat the variable load received at the plant. The plant has a capacity of 8MLD.

The Rochester plant uses MBR X Flow Membranes bioreactor technology to treat up to 0.8MLD inflow to the plant. TRILITY uses Biowin biological modelling software to model and optimise the process. Phase 2 of the BOOT scheme provided effective wastewater treatment, enabling the decommissioning of the original lagoon system. The plant is a modular configuration which is scalable to meet future demands and can be easily configured to produce Class A.



Who

ETC is an SPV controlled by the TRILITY Group.

The Scheme is operated under contract to Coliban Water. Coliban Water is one of the largest Victorian regional urban water corporations covering approximately 20 per cent of north central Victoria.

It manages, maintains and operates 46 reservoirs and water storage basins across north central Victoria and provides water and wastewater services to urban and regional towns.

What

ETEC operates the Echuca and Rochester Water Reclamation Plants under a 25-year BOOT contract CWRS.

Where

The townships of Rochester and Echuca in Victoria.

Why

The previous Wastewater Treatment Plant (WWTP) was inadequate and experienced problems of seepage, salt and nutrient build-up, capacity and odour.

Awards

2005 Environment and Sustainability Award from the Engineers Australia, Victoria Chapter

Snapshot

Client	ETE Coliban Pty Ltd
Type of Contract	Build, Own, Operate, Transfer (BOOT)
Facilities	Reuse wastewater treatment plants
Technology	Up-flow Anaerobic Sequencing Batch aerobic treatment in intermittently decanted extended aeration tanks, dual media filtration, and gaseous chlorine disinfection
Design Capacity	Echuca 8ML/d Rochester 0.8ML/d
Term	25 years
Capital Cost	N/A



For further information

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