

Our water sources

Casterton, Coleraine, Sandford and Merino

Water for the towns of Casterton, Coleraine, Sandford and Merino is sourced from the Bridgewater Formation Aquifer.

Water source

Four bores around 30 metres deep are used to extract water from the Bridgewater Formation Aquifer. The Tullich borefield is located in state forest around 15 kilometres west of Casterton. It's then sent to the Casterton Water Treatment Plant.

The bores are connected virtually by our automated control system, with the treatment plant automatically starting the necessary bores based on demand from customers.

Treatment process

We have invested significantly in upgrading the Casterton Water Treatment Plant to ensure a reliable, high quality drinking water supply.

The drinking water treatment process at Casterton includes:

- Dosing with sodium hypochlorite for oxidisation
- Dosing with ferric chloride and polymer for coagulation and flocculation
- Clarification
- Filtration
- Disinfection with sodium hypochlorite
- Detention time in a clear water storage
- Washwater management.

The raw water has high levels of naturally occurring iron and manganese. Sodium hypochlorite is added to the raw water as an oxidant as it enters the water treatment plant. Ferric chloride is then added and mixed thoroughly as a coagulant, prior to the raw water entering tanks where flocculation occurs.

This process creates aggregated lumpy or fluffy material from the metals that can be readily removed by the next 'clarification' stage.

The partially treated water then passes through a clarifier system which removes the flocculated particles, before it reaches a set of sand filters that complete the process of producing clear water.

The water is dosed with sodium hypochlorite as a disinfectant prior to entering a clear water storage. Here it has adequate detention time for disinfection before being distributed to customers.

Backwash water from the filters undergoes a settling process on site and excess water is supplied to the local golf course for irrigation use.



Casterton, Coleraine, Sandford and Merino supply

Treated drinking water is stored on site in a clear water storage and a covered storage basin at Arundel Road, east of Casterton, from where it supplies Casterton and Sandford by gravity.

Treated water is also pumped via a 32-kilometre-long pipeline to a storage tank in Coleraine where it receives additional disinfection, and then flows by gravity throughout the town.

Water is pumped to Merino via a 20-kilometre long pipeline from Casterton. The water is stored in a large tank on high ground to the west of town where it receives additional disinfection before flowing by gravity to customers in Merino.

