

FACT SHEET



The Mitchell River at Glenaladale

Background

East Gippsland Water source drinking water from the Mitchell River at Glenaladale (north-west of Bairnsdale) for some 24,000 people from Lindenow to Nowa Nowa including the major townships of Bairnsdale, Paynesville and Lakes Entrance.

In August 1999, Woodglen storage 1 was built. This basin holds approximately 850 million litres of water, or the amount of water held by 850 Olympic-sized swimming pools.

During June 2010, Woodglen storage 2 was built. This basin holds approximately 715 million litres of water, along with the Woodglen Water Treatment Plant. This plant can treat up to 20 million litres of water per day.

Further, up to 500 million litres of water can also be stored underground in an aquifer. This water can be pumped up to the storages or treatment plant as required. This is known as Aquifer Storage and Recovery or ASR.



The Woodglen Water Treatment Plant

Water collection

The Mitchell River begins where the Dargo and Wonnangatta Rivers converge. The upper catchment includes sections of the Alpine National Park and Mitchell River National Park. The river flows through some high cliffs and gorges before entering the Mitchell River flats and ending in the Gippsland Lakes.

East Gippsland Water pumps water from the Mitchell River at Glenaladale to the Woodglen storages, four kilometres away.

Plant control

The treatment plant's control system has a Programmable Logic Controller for fully automatic stop/start control of the plant, automatic backwashing, desludging (removal of sediment), alarms and indicators. This allows operators to remotely access and operate the water treatment plant. A remote monitoring system operates around the clock and provides early warning of any faults or performance issues. The focus is on maximising operational efficiency, monitoring equipment reliability and compliance, and improving customer service.

Water treatment

Water is transferred from the storages at Woodglen to the water treatment plant, where it is treated to remove any dirt and other unwanted particles. To treat the water a coagulant is added, which draws all of the dirt and sediment together. This is known as floc.

The water then enters the second part of the treatment cell where air is added. The floc attaches to air bubbles and rises to the top of the cell. About every two hours the water level in this treatment cell rises, allowing the floating floc to overflow in to the backwash recycling system.

The water is disinfected with chlorine gas and fluoride is added. The treated water is then passed in to a 1.4 million litre clear water tank. This water is then supplied to the 88 million litre water storage at Wy Yung, where it is later released to the rest of the Mitchell Supply System.

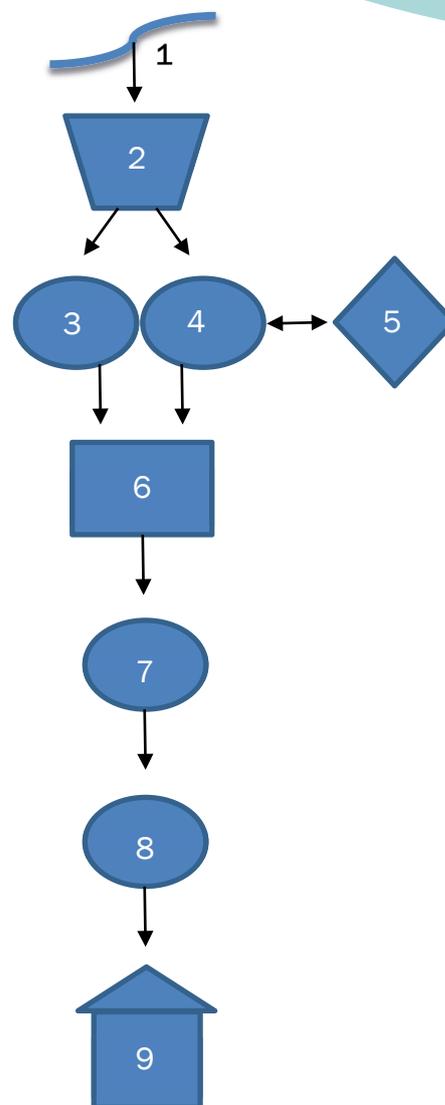
Backwash recycling

Once the floc enters the backwash recycling system, it is spun rapidly in a centrifuge to separate any remaining water. This water is then pumped back into the storages where it is held until it is reprocessed. Following this process, the remaining floc is collected and sent off site.

For more information-

Contact East Gippsland Water on 1800 671 841 or email egw@egwater.vic.gov.au

Alternatively, Visit the Bairnsdale office at 133 Macleod street, Bairnsdale on weekdays during business hours.



Legend:

1. The Mitchell River
2. The Glenaladale water pump station
3. Woodglen 1 storage basin
4. Woodglen 2 storage basin
5. Aquifer Storage and Recovery bores
6. Woodglen Water Treatment Plant
7. Clear water storage
8. Wy Yung treated water storage
9. Bairnsdale, Paynesville, Lakes Entrance and surrounds