

## FACT SHEET



*Betka River*

### Background

East Gippsland Water sources drinking water for Mallacoota from the Betka River and ground water bores. The Mallacoota Water Treatment Plant came in to operation in 1997 and is able to treat up to 1.2 million litres of water per day the equivalent of water held by 1.2 Olympic sized swimming pools.

The off-season population of Mallacoota is roughly 1,100 people, but this can increase up to 10,000 people during the peak summer season. In 2011, two new production bores were installed to supplement the towns drinking water supply.

### Water collection

Water is pumped from the Betka River via a pipeline in to a 41 million litre raw water storage basin. During times of low river flow, groundwater is accessed from the two bores and added to the raw water basin.

### Water treatment

Water is transferred from the basin 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 other unwanted particles together. These dirt clusters are know as floc.

The water then enters the second part of the treatment cell where the floc is encouraged to settle out through gravity along cylinder-shaped tubes. The clear water is then able to continue, and passes through a filter containing sand and anthracite (filter coal).

Following this process, the treated water is disinfected with sodium hypochlorite and pumped to a 240,000 litre clear water tank, before it is supplied to the township of Mallacoota. There is a 23 million litre clear water basin which holds excess treated water that is available for use as required.

### Backwash recycling

There is also a backwash recycling system. This blasts any sediment that has formed within the water filter cell back into suspension. It is then pumped into the backwash tank. The sediment is then able to settle out and is passed into geobags. The solids remain trapped in these bags and the clean water is able to pass through and is sent to the raw water basin for reuse. The geobags are then sent to Mallacoota Wastewater Treatment Plant where the contents are reused.

### Plant control

The treatment plant control system has a programmable logic controller(PLC) for automatic stop/start control of the plant. Automatic backwashing, desludging (removal of sediment), alarms and indicators are monitored on a SCADA system. 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.

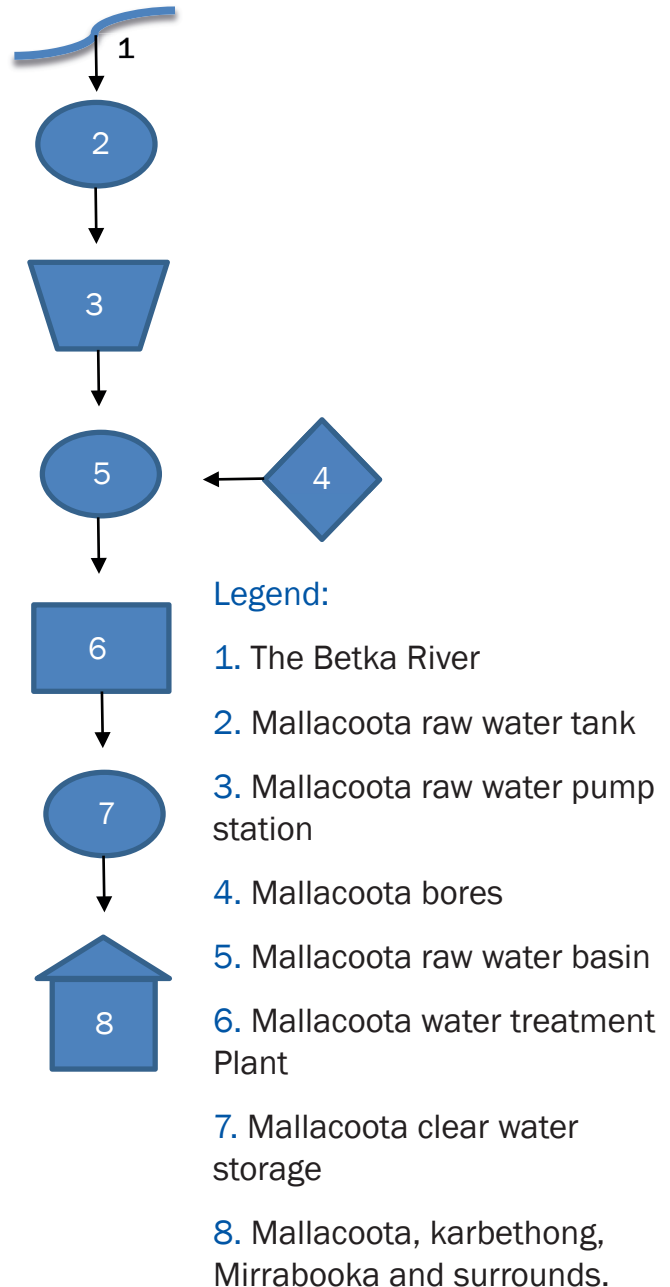
### Shadecloth covers

During 2004, Mallacoota’s clear water basin was covered by a shadecloth. This was completed as part of a CSIRO research project, which was designed to fully test the effectiveness of shadecloth covers on drinking water storages. The cover reduced the annual evaporation rate at the Mallacoota storage from 10 million litres to just one million litres. During 2011, the raw water basin was also covered by a shadecloth cover.

### For more information-

Contact East Gippsland Water on 1800 671 841 or email [egw@egwater.vic.gov.au](mailto:egw@egwater.vic.gov.au)

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



Shadecloth over Mallacoota’s raw water basin