

Introduction

Construction of the Bairnsdale Wastewater Treatment Facility began in 1936 with the plant becoming operational in 1938/39 following completion of the sewerage reticulation system - involving gravity sewers, sewerage pumping stations and rising mains.

Bairnsdale Wastewater Treatment Facility collects wastewater (sewage) from six main catchment areas – central Bairnsdale, West Bairnsdale, East Bairnsdale, Wy Yung, Eastwood and Nicholson.

Wastewater collection and treatment

Wastewater collected via sewers and pumping stations is fed into the wastewater treatment facility. There are four stages involved in the treatment process. The water is treated to high standards enabling it to be reused to benefit the environment.

Wastewater is first screened at the **pre-treatment** shed to remove solid material such as rags, paper and grit. The solid waste is removed from site and sent to landfill.

The remaining wastewater then goes through the **primary treatment** stage, where its momentum is slowed, allowing organic, solid particles to settle out. The settled residue, known as sludge, is pumped to a lagoon on site and further treated separately. The wastewater leaving this section of the facility is now known as primary effluent.

The primary effluent is then sprayed over the Biological Trickle Filters. This is the **secondary treatment** phase. Here aerobic bacteria (microscopic organisms) consume most of the remaining organic particles. From here the effluent is passed through a rotary trickle filter to further treat the water.

The final stage of the treatment process is storage of the wastewater in the **final lagoon**, where it is held for a minimum of 30 days (for disinfection) before it can be released for beneficial reuse.

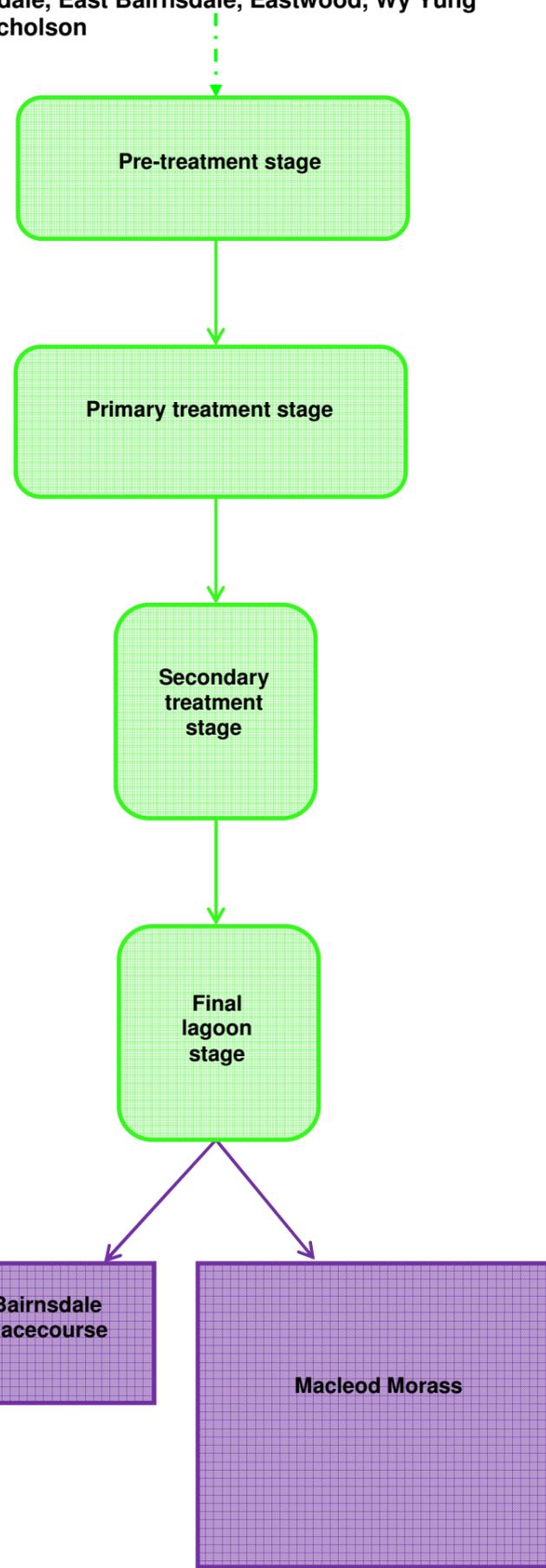
Beneficial Reuse

One hundred per cent of the reclaimed water produced by the Bairnsdale Wastewater Treatment Facility is put to beneficial reuse. The internationally significant Macleod Morass located nearby receives 95% of the water, which is helping to protect its diversity of flora and fauna by maintaining its freshwater levels.

Some five percent of the facility's reclaimed water is used on Bairnsdale Racecourse, where it is irrigated on the race track and gardens via fixed and movable sprinkler systems.

Accurate daily rainfall and evaporation records are kept and the quantity and volume of treated wastewater applied is monitored in accordance with EPA licence requirements.

Wastewater comes in from central Bairnsdale, West Bairnsdale, East Bairnsdale, Eastwood, Wy Yung and Nicholson



The Bairnsdale Wastewater Treatment Facility



Bairnsdale Racecourse uses reclaimed water for irrigation



Macleod Morass

For more information –
 Contact East Gippsland Water on 1800 671 841 or by emailing egw@egwater.vic.gov.au
 Alternatively visit the Bairnsdale office at 133 Macleod Street, Bairnsdale, weekdays during business hours.