



**Gippsland Water Factory/Paper Mill Reclaimed Water Project**

**Traralgon, Victoria, Australia**

**Municipality: Gippsland Water**

**Company: Australian Paper**

**Project Fast Facts**

**Industrial Use Flowrate:** 1,466 gpm  
(333 m<sup>3</sup>/hr)

**Industrial Treatment Flowrate:** 3,487 gpm  
(792 m<sup>3</sup>/hr)

**Industry:** Pulp and Paper

**Use:** Industrial Water Supply

**Conveyance:** 48-mile (78-km) pipeline

Australia is a water-short continent and must often manage with the impacts of droughts on its water supply systems. In the search for environmental improvements coupled with sustainable water supplies, Gippsland Water has turned to water reclamation using advanced membrane bioreactor (MBR) and reverse osmosis (RO) technology to form the basis of the new Gippsland Water Factory (GWF), a state-of-the-art wastewater treatment and recycling facility that provides high-quality industrial water to the local paper mill.

A member of the Gippsland Water Factory Project Alliance, CH2M HILL helped design, construct, commission, and

perform initial operations of the 9.3-million-gallons-per-day (mgd) facility, which treats domestic and industrial wastewater from more than 19,000 households and businesses in nine townships. Operational since 2010, GWF processes 667 m<sup>3</sup>/hour (4.2 mgd) of municipal wastewater and 792 m<sup>3</sup>/hour (5.0 mgd) of industrial (pulp and paper) wastewater from Australian Paper to produce high-quality reclaimed water as an industrial water supply.

Reflecting differences in composition, the municipal and industrial wastewaters are treated in two separate process trains. Municipal treatment consists of preliminary treatment, primary treatment, MBR incorporating biological nitrogen and phosphorus removal (BNR), chlorine disinfection, and RO, with 333 m<sup>3</sup>/hour (2.1 mgd) supplied to Australian Paper (Pine Gully Reservoir) for industrial use. Stage 1 industrial treatment consists of anaerobic pre-treatment, MBR treatment without BNR, followed by discharge to the Regional Outfall Sewer.

GWF reduces its carbon footprint by generating 20 percent of its own energy. Gases produced in the treatment process are captured to fuel electricity generation, while a micro-hydro scheme in one of the pipelines creates additional power. Likewise, biosolids produced by the facility are incorporated into Gippsland Water’s soil organics and recycling facility to produce a reusable product through composting.



*GWF includes an interpretive centre to showcase the wastewater treatment technology and serve as an education resource for the community. The first of its kind in Australia, the project positions Gippsland as a leader in sustainability and innovation.*

**Our motive is simple: to promote beneficial wastewater reuse around the world today.  
Join us and help make matches happen. Because no water should be wasted.**

