

**CLIENT:**

Brisbane Water

**LOCATION:**

Five suburban Brisbane sites, QLD

**SERVICE:**

Water treatment

**CAPACITY:**

20 ML/d total

**CONTACT:**

Peter Ferrando

**ISSUES:**

As part of Brisbane Water emergency drought management measures, supplementary local groundwater supply sources were sought.

**SOLUTIONS:**

Groundwater extraction, treatment and pumping into water supply mains at five Brisbane suburban sites.

**PRODUCT:**

Borefield pumping stations, aeration, direct filtration and disinfection treatment equipment.

**COMPLETION DATE:**

December 2007

## Brisbane Aquifer Water Treatment Plants (BCAA Alliance)

Aquatec Maxcon provided all civil, mechanical and electrical/control works for the complete water treatment plant sites located at Sunnybank, Runcorn, Algester, Chandler and Forest Lake. This provided supplementary supply of high quality drinking water to consumers in times of low traditional water source reserves. Each site comprised the following main elements:

- Borefield pumping stations and reticulation to respective WTP sites.
- Aeration tower (forced draught) for CO<sub>2</sub> gas stripping and pH control.
- Pre treatment chemical dosing including pre caustic soda, coagulant (if required) and pre sodium hypochlorite (if required for treatment of manganese, in conjunction with manganese oxide coated filter media process).
- Pressure filtration equipment (self-backwashing design) including automated control valving and monitoring instrumentation.
- Post treatment chemical dosing including post caustic soda, chlorination (disinfection) and calcium chloride (treated water stabilisation).
- Treated water storage tank and pump station to Brisbane Water water mains.
- Wastewater handling system including washwater holding tank and transfer facilities.
- Complete Electrical and control works.



PRESSURE FILTER STATION



ALGESTER SITE