

**CLIENT:**

Western Downs Regional Council (WDRC)

LOCATION:

Chinchilla, QLD

SERVICE:

Wastewater Treatment Plant

CAPACITY:

10,000 EP

CONTACT:

Peter Ferrando

ISSUES:

Existing plant highly overloaded and failure of existing infrastructures

SOLUTIONS:

Construction of new BNR facility.

BENEFITS:

Optimised design and produces effluent that meets design criteria.

PRODUCT:

Inlet works, diffused aeration, pump stations, chemical dosing, sludge dewatering, aerobic digestion

COMPLETION DATE:

March 2016

Chinchilla Wastewater Treatment Plant

Western Downs Regional Council identified that the Chinchilla WWTP required an urgent upgrade, as it was already overloaded and would not be able to cater for the expected population growth in the region. Additionally, some of the existing infrastructure had failed and required replacement.

Aquatec Maxcon was selected via a competitive ECI process to replace the existing plant under a Design and Construct Contract. Aquatec Maxcon provided in-house process, mechanical, electrical and civil works for the upgrade.

We maintained the same team that had successfully delivered treatment plants at Wandoan and Miles for WDRC to ensure continuity and efficiency of project delivery.

Key features of the new plant are:

- A new Inlet Works.
- Biological Reactors utilising unique Hybrid Biological Nutrient Reduction (HBNR) technology to achieve a median TN<5mg/L and TP<2mg/L.
- Aerobic Sludge Digestion for Biosolids Management.
- Sludge Dewatering System (Centrifuge) including Polymer Dosing.
- Chemical dosing including Lime and Sodium Hypochlorite.

The project met all key targets including delivery timelines, safety, and quality KPIs and achieved Practical Completion on the 7th March 2016.

