



case study:

Mackay Water Recycling Project

Tenix formed a joint venture with John Holland to implement the groundbreaking Mackay Water Recycling Project (MWRP), the largest regional water recycling project in Queensland.

The project delivered significant enhancements to the current methods of treatment enabling up to 90 per cent of Mackay's wastewater to be recycled to irrigate local sugar cane.

The new water recycling infrastructure reduced the nutrient load discharged into the Great Barrier Reef Marine Park by some 250 tonnes per year as well as greatly reducing odours generated from wastewater across the city.

Key Features and Outcomes

Specifically the scope included:

- Demolition of Mt Basset Sewerage Treatment Plant
- Construction of Mt Basset pumping station
- New rising main from Sydney St to Bakers Creek (11 km, 900 mm MSCL)
- Design & Construction of Mackay South Water Recycling Facility (Bakers Creek), an upgrade (from 10,000 ep – 97,000 ep)
- Design & Construction of 2.2 GL recycled water and chlorination plant
- Recycled water transfer system (6 km, 600 mm GRP) and pumping station
- Design & Construction of Mackay North Water Recycling Facility (WRF)
- Operations and maintenance of Mackay South WRF and Mackay North WRF for a period of 10 – 15 years



Tenix[®]



Field Services

- ✓ Preventative Maintenance
- ✓ Corrective Maintenance
- ✓ Fault Services (24/7)
- ✓ Asset Replacement
- ✓ New Build
- Connection services

Management Services

- ✓ Design
- ✓ Project Management & Systems
- ✓ Quality Management & Systems
- ✓ HR & IR Management
- ✓ Construction Management
- ✓ Procurement Management
- ✓ Subcontractor Management
- ✓ Cost Planning & Estimation
- Planning Approvals
- Stakeholder Management



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“A significant amount of the design work was undertaken ‘inhouse’, using Tenix resources in Brisbane, Perth and Melbourne...”

Our Role

Tenix was a 50 per cent partner in the MWRP, delivered by a fully integrated team. Tenix had involvement across all aspects of the project including the Design, Construction and Commissioning of the program. Within the joint venture, Tenix is solely responsible for the Operation of the Water Recycling Facilities (WRFs) for a minimum period of ten years.

Tenix was the ‘process design contractor’ for the project and managed all design activities within the joint venture. This included process design, detailed design, commissioning and design management. Tenix undertook a significant portion of the design work using Tenix design resources in Brisbane, Perth and Melbourne.

Resources & Skills

During the Design Phase Tenix had over 40 design and process control engineers working on the project.

Asset Type: Wastewater reticulation & treatment	Duration: Construction- 2 years Operation- 10 years
Client: Mackay City Council	Value: \$100 million
Location: Mackay, Northern Queensland	Scope: Design, Build & Operate
Contracting Style: Design, Build & Operate	Contract Secured: August, 2006

