

Our Water

#Moreton Bay Water
provides water services to
132,000 properties





Our Water

Council amalgamations and the State Government's water reforms have had a substantial impact on the operations of Moreton Bay Water – the business arm of council's water and sewage treatment operations.

Under the South East Queensland Water (Restructuring) Act 2007 the Queensland Government adopted changes to South-East Queensland's water supply arrangements that have significantly changed the role local governments have traditionally played. While SEQwater now manages dams, weirs and treatment plants, council is responsible for delivering water to customers and collecting, transporting and treating sewage. As part of ongoing reforms, the commercial water businesses of Moreton Bay Regional Council and the Sunshine Coast Regional Council will be amalgamated to form one of three new South-East Queensland water distribution companies by 1 July, 2010. This new business will own the region's water distribution, sewage treatment and sewerage infrastructure and sell water and sewerage services to customers.

Under the objectives of its corporate plan, council through its water business is committed to providing high public health standards to its communities and managing the region's valuable water resources. This management includes improving and maintaining the quality of our water resources, promoting water conservation awareness, fostering water reuse and recycling initiatives, ensuring safe drinking water supply and continuing to implement integrated water management solutions. Council is continuing to implement many of these strategies and is delivering on infrastructure that will help achieve those objectives.

Meeting needs

As the region's population grows, so does the demand for water. Moreton Bay Water provides water services to 132,000 properties and sewerage services to 114,000. It is responsible for 2,901 kilometres of water mains, 27 water pumping stations and 35 water reservoirs. It also operates 2,643 kilometres of sewerage mains with 390 sewerage pumping stations that feed into eight wastewater treatment plants and two advanced water treatment plants.

Moreton Bay Water has established vital water infrastructure and is continually developing strategies to conserve water while providing a cost-effective service to residents and ratepayers.

Moreton Bay Water delivered projects totalling \$184 million through a range of strategies including alliances, traditional construction contracts, partnering arrangements with design consultant MWH, and construction performed by staff. Council is continuing to look at other innovative ways to deliver projects in the future.



Murrumba projects

The \$47 million Murrumba Downs Advanced Water Treatment Plant was completed a fortnight ahead of time and under budget in September 2008. Built through an alliance that involved Moreton Bay Regional Council, the John Holland Group and Montgomery Watson Harza (*MWH*), the plant was officially inaugurated on 3 November, 2008, by Mayor Allan Sutherland and Member for Murrumba Dean Wells. The advanced water treatment plant produces four megalitres a day of purified recycled water, which is supplied for local industrial use.

At 30 June 2009, work to upgrade the Murrumba Downs Wastewater Treatment Plant was about 60 per cent completed. The \$152 million project is on target for completion by July 2010. The project so far has involved the pouring of more than 9,000 cubic metres of concrete and 1,500 tonnes of reinforcing steel.

Burpengary East

Work has begun on a \$46 million upgrade to increase the capacity of the Burpengary East Sewerage Treatment Plant. The project is due for completion in January 2011. Part of the works will involve installing an Australian-made membrane system in one of the bioreactors. The system will produce three million litres of Class A+ quality recycled water a day which will be available for industrial reuse.

Other sewerage infrastructure upgrades

Design work for the upgrade of Caboolture South and Woodford sewerage treatment works was completed in May 2009. Construction at Caboolture South is expected to start in February 2010. Design work for an upgrade of the Brendale plant will start in early 2010 with construction expected to begin in the second half of 2010. The upgrades will increase the capacity of the plants and improve the quality of discharges, which in turn will help improve the quality of water in catchment areas.

New water and sewerage transportation infrastructure was also installed to serve the growing populations of Kallangur and Dakabin. The \$25 million project commenced in June 2008 and was due for completion in July 2009.

Sewerage schemes for Godwin Beach and Donnybrook connecting 440 properties are expected to reduce the environmental impact of both townships on Pumicestone Passage. The Godwin Beach scheme was completed by December 2008 and the Donnybrook scheme will be nearing completion next financial year. The sewerage provision at Godwin Beach and Donnybrook uses a pressure system where each property is fitted with a small grinder pump which is owned and maintained by council.

Across the region 145 network projects ranging from \$100,000 to \$6 million, are being designed or constructed. The projects will assist council in maintaining existing water supply and sewerage standards and also continue to meet development needs to cater to the region's growing population.

Bribie borefields

On October 1, 2008, Moreton Bay Water handed over the ownership and management of the Banksia Beach Water Treatment Plant and associated borefields to the State Government. The handover was carried out after council had performed rigorous testing and reviews of the finished plant that was built as a Regional Drought Strategy mandated project in just over a year. A maximum of 4.3 megalitres a day is drawn from the borefields in the pine forest north of the treatment plant, sourced from Bribie's deep sand aquifer about 20 metres below the surface. There are 18 bores and another 30 around the island that are being used to monitor the impact of drawing water from the aquifer.



Major maintenance programs

- Moreton Bay Water's pressure and leakage management project, aimed at reducing water losses from the supply network, has involved integrating three separate projects begun by the former councils into a comprehensive system of monitoring stations. Fine tuning is still under way and Moreton Bay Water has employed a specialised engineer to oversee the monitoring equipment that helps identify leaks and modulate excess water pressure across the region. When fully operational, it is estimated the system will significantly reduce the amount of water lost to pipe bursts and leakage, saving 2.5 megalitres of water a day. This project will assist council to comply with the Water Act's requirement for a strategy to reduce water losses. The State Government has provided a 40 per cent subsidy towards the \$5.8 million project.
- Council contracted IPCQ Pty Ltd to carry out routine maintenance work on the water main attached to the Bribie Island bridge that involved providing a protective coating to the main and replacing its support brackets. The work was carried out using a barge so that traffic wouldn't be disrupted and environmentally sensitive practices were used to reduce the impacts and potential contamination of Pumicestone Passage.

Our treatment technology

Moreton Bay Water's seven sewage treatment plants, not including the Redcliffe Wastewater Treatment Plant which is operated by a contractor, treated 14.6 billion litres in 2008/09. Data measuring quality control aspects at the plants met licence requirements to the satisfaction of the Department of Environment and Resource Management.

More than 970 million litres was reused and the new Murrumba Downs advanced water treatment plant produced 273 million litres for use by industry.

Moreton Bay Water is always seeking cost-effective opportunities to increase effluent reuse, which ultimately helps improve the quality of water in our catchment areas by reducing the amount of nutrients entering our waterways.

Moreton Bay Water's laboratory performed over 103,000 tests on approximately 20,000 samples. External clients include Linkwater, the Northern Pipeline Interconnector Alliance, Aquatec-Maxcon, and Seqwater. The laboratory meets stringent National Association of Testing Authorities (NATA) accreditation requirements for microbiological and chemical testing and is continuously seeking to increase its scope of accreditation.

A strategic approach to business

As a commercialised business unit in a competitive environment, Moreton Bay Water has to maintain a comprehensive strategic management framework that includes:

- A combined Total Management Plan and Strategic Asset Management Plan (*TMP SAMP*)
- An Annual Performance Plan
- Customer service indicators

Moreton Bay Water's Annual Performance Plan is consistent with council's corporate and operational plans and focuses on the implementation of four key principles of commercialisation: clarity of objectives, management autonomy and authority, accountability for performance and competitive neutrality.

Approved in April 2009, the combined TMP SAMP ensures council meets the State Government's mandatory requirements.

Moreton Bay Water's customer service indicators will be used in the next financial year to compare actual performance to targets.

The indicators quantify:

- Continuity of water supply
- Adequacy and quality of the water supply system
- Effective transport of waste effluent
- Long-term continuity of water supply and sewerage services.

During the 15-month reporting period, Moreton Bay Water has forged ahead in aligning its processes. It is improving its customer focus and productivity through introducing an integrated quality management system.

The system focuses the organisation on its customers, environmental protection and workplace health and safety matters through quality assurance, risk management, review and continual improvement. A new electronic information system called Intellex is helping analyse trends with non-conformance issues and incidents. This information can then be used to devise effective preventative measures.

There are plans to have the system rolled out across the region with certified third party accreditation by August 2009. This business certification encompasses the ISO 9001 quality management standard including ISO 14001 Environmental Management and AS1480 Safety Management.

Moreton Bay Water has a strong environmental team who focus on environmental compliance and management for the sewerage treatment plants and infrastructure construction teams. These are regularly audited by the environmental team.

A new incident management plan has been prepared using a risk management approach designed to minimise the impacts of incidents on customers, the community, the environment and our business reputation.

Our people

During 2008, an enterprise bargaining agreement was certified by Moreton Bay Regional Council and staff salaries and wages were equalised across Moreton Bay Water's operations. Parity negotiations are continuing for allowances and employment working conditions in close consultation with the Sunshine Coast water business, ahead of the amalgamation of the two. The State Government has put in place a formal consultation framework to deal with industrial relations in further detail. This consultation process involves relevant unions, council, the Queensland Water Commission, Queensland Treasury and the Department of Employment and Industrial Relations.

Safety and training

Moreton Bay Water's key performance indicators showed that injury rates roughly halved during the first 15 months of operations. The Medical Injury Rate dropped from around 40 injuries per million hours worked in June 2008 to 20.7 in June 2009. The Lost Time Injury Rate dropped from 36 to 17 injuries per million hours worked over the same period.

An average of 400 staff equivalent hours of training was conducted per month.

Water reform and the future

Implementing the State Government's reforms has involved collecting a significant quantity of data for analysis as part of a due diligence program to ensure council's interests are best served.

The project has included examining the areas of asset valuation and management, financial statements, economic and regulatory measures, human resources and industrial relations issues, business readiness, tax issues, legal equity determination and supporting strategies.

In July 2008, council received compensation from the State Government for the handover of its bulk water assets of approximately \$79 million. This amount was applied to reducing council's loans with the Queensland Treasury Corporation. In the coming financial year, Moreton Bay Water will work closely with its Sunshine Coast counterpart to form the new joint water business that will become operational on 1 July, 2010. This new water distribution retail business will be wholly owned, but independent of the shareholding councils and take over the functions of water distribution, sewage collection and treatment from the councils.