

Industry Drivers and challenges

Drivers

1. Providing for Growth

Regional growth of up to 2.5 times the current population could occur by 2100 placing significant demands on existing infrastructure and increasing pressure for investment in major new infrastructure.

2. Meeting wide-ranging legal requirements

A wide range of legislation governs the industry with five being the most significant. The Health Act 1956 establishes the obligations for local authorities and others to ensure the protection of public health along with the Health (Drinking Water) Amendment Act 2007 which promotes adequate supplies of safe and wholesome drinking water from all drinking-water supplies. The Building Act 2004 sets performance standards that include the efficient use of water and water conservation in buildings. The Local Government Act 2002 provides a framework for the ownership and provision of water services. The Resource Management Act 1991 promotes the sustainable management of natural and physical resources, provides for tangata whenua (Maori) participation, requires decision makers to take into account the Treaty of Waitangi and the effects of climate change. The RMA based Regional and District Plans of the eight local authorities establish specific requirements and provide guidelines for the provision of water services and the protection of the environment.

3. Delivering service levels in a sustainable and resilient manner

Customers expect excellent water in terms of health, taste and odour, pressure and reliability, and safe and effective removal of wastewater and stormwater. They are demanding higher levels of service and reporting, transparent and competitive prices, and service delivery that can stand the test of time with efficient sustainable practices which provide for today without compromising the future.

Challenges

Asset Life Cycles

The water industry must balance infrastructure maintenance and service with cost and risk issues. Assets constructed around the region many years or decades ago require increasing levels of maintenance. The challenge is to optimise the costs of operating these older systems, adopt new technologies where possible, and minimise asset replacement costs.

Security of Supply

To be an attractive internationally competitive city-region, Auckland needs an optimised, secure water network. As population growth occurs and industry demands rise, management practices that protect and extend the life of existing infrastructure, integrated risk management and joint planning between water industry members for the provision of future infrastructure becomes increasingly significant.

Skill shortages

Auckland faces global competition for skilled labour especially from Australia where the water industry is grappling with significant issues and offering attractive packages. This is at a time when the demands for planning and project delivery in Auckland are rising and the overall workforce is aging, requiring a stronger focus on training and mentoring.

Cost and Affordability

While the industry is committed to maintaining fair prices to customers, costs have increased and will continue to do so due to heightened customer demands and more stringent health and environmental regulations.

Climate Change

Warmer weather in Auckland is predicted to result from climate change along with more extremes of flood, drought, cyclone, storm surge and sea-level rise. Costs to maintain infrastructure will increase to avoid, or repair, damage from

these more extreme climatic conditions. The Government's Emissions Trading Scheme aimed at reducing greenhouse gases and encouraging more sustainable practices may also result in increased energy costs for the water sector.

Sustainability

With careful planning, management and operation including water conservation, demand management, proactive environmental protection that balances social and financial impacts, the cycle of water use can be sustainable. Undertaking its responsibilities sustainably and acting as environmental stewards by providing for customers of today while planning for future communities is a key challenge for the Auckland water industry.



Symonds Creek waterfalls, Papakura District.

Asset Quantities

Auckland's water supply mains, wastewater sewers and stormwater networks have a total length of 22,101 km or about 14 times the length of New Zealand. Associated with this network of conduits are 432,934 water supply meters, 48,466 fire hydrants, 83,588 valves, 109 water pumpstations, 142 reservoirs, 509 wastewater pumpstations, 147,455 wastewater manholes and 135,564 stormwater manholes.

Watercare Services operates six water treatment plants and sources water from 10 dams, 1 river (Waikato) and one ground water source (Onehunga). Rodney District Council supplements the water supply from Watercare with five water treatment plants using locally sourced water.

Franklin District Council operates seven water treatment plants and sources all its water from local streams and groundwater supplies. In addition, there are 19 wastewater treatment plants throughout the region.

