

The Sustainability Performance Review

Sustainable Development

“Development which meets the needs of the present without compromising the ability of future generations to meet their own needs”

Our Common Future, the report of the World Commission on Environment and Development, 1987

Global Issues

Water is such a scarce and valuable resource it has been labelled ‘Blue Gold’ by many. The United Nations estimates over 1 billion people currently do not have access to safe drinking water and several billion have inadequate sanitation and sewerage facilities (the primary cause of water-related diseases). Chronic water shortages caused by rising population, drought (exacerbated by global warming) and increased demand from the emerging economies of Asia and Latin America are predicted. According to a Credit Suisse report, annual world water use has risen six-fold during the past century, more than double the rate of population growth. By 2025, almost two-thirds of the global population will live in countries where water will be a scarce commodity and experts warn that may lead to conflict¹.

International Alert, a London-based conflict resolution group, has identified 46 countries – home to 2.7 billion people – where it says the effects of climate change would create a high risk of violent conflict and a further 56 states where there was a risk of political instability². The number of wars fought over territory and oil in the 20th century could be matched by those disputing water access in the 21st century. New Zealand and Auckland will not be immune from such major global forces of change and the pressure to sustainably plan, manage and operate the three waters – drinking water, wastewater and stormwater – will only intensify so actions taken now can play a part.

¹ Richard Wachman article ‘Water becomes the new oil as world runs dry’ in The Observer Sunday December 9 2007
² Peter Apps article ‘Climate change ups war risk in many state: report’ in London Reuters Tue Nov 13, 2007 4:27pm GMT.

Committed to Sustainability

Each of the 11 organisations involved in this Annual Performance Review have taken initiatives over 2006-07 to improve their sustainability with a selection summarised below.

Water

- FDC Pukekohe Hill development including measures to provide for the recharge of aquifers as well as enhance the residential environment e.g. East Gully and Vernon’s reserve ponds.

- MWL Reducing the number of water quality complaints and the frequency of unplanned water shut downs were priority commitments for Metrowater with improved results for customers.

- RDC Encouraged installation of rainwater tanks in urban areas by providing public information (newsletter, website, and a brochure) and promoting our rainwater tank rebate scheme.

- WCC Waitakere City Council’s demand management programme has concentrated on high use customers, both residential and commercial, and is working with all schools to achieve a 25% reduction in water use at each school.

- WCC Replaced pumps at the Huia Road station with smaller more efficient water pumps, resulting in lower power costs and reduced pressure fluctuations.

Wastewater

- FDC A major upgrade of the Pukekohe Wastewater Treatment Plant involving adoption of modern technologies which enable compliance with current and foreseeable effluent standards.

- NSC The Rosedale Wastewater Treatment Plant generated on-site 48% of its own electricity use.

- RDC Developed a code of practice for the design and installation of small-bore wastewater systems utilising grinder pump technology.

- UWI Reduced the environmental impacts of wastewater overflows through a comprehensive planned maintenance programme and detailed investigations into repeat overflows.

Stormwater

- ACC Over the past 12 months, progress to modernise Auckland’s aged drainage system and & protect the environment saw nearly 500 properties separated from the City’s combined
- MWL stormwater and wastewater network, a major step towards reducing pollution of Auckland’s waterways.

- MCC Promote the beneficial use and efficient management of stormwater by constructing a joint stormwater quality and water supply pond at the Grange Golf Club in Papatoetoe.

- MCC Promote sustainable stormwater infrastructure development and management by constructing stormwater ponds in Flat Bush Catchment that provide for enhanced community amenity, recreation opportunities and improved water quality as well as alleviating flooding.

- PDC In addition to developing integrated catchment management plan for the entire district, Council has initiated low impact design approaches for new green-field developments by proactively working with developers.

- RDC Reduced the number of piped stormwater solutions by using ponds and other low-impact devices.

- RDC Ensured better protection of riparian margins.

Efficiency, Environment and Community

MWT	Manukau Water commenced preliminary work toward benchmarking its key performance indicators using the United Nations Global Reporting Initiative. The GRI is the most widely used sustainability reporting framework and has been adopted by thousands of organisations around the world including Melbourne Water, Sydney Water and Watercare. Manukau Water will develop its reporting over the next few years.
MCC	Flat Bush, New Zealand's largest planned development, recently won a gold award in the Environmentally Sustainable Project category at the International Awards for Liveable Communities in London. It has abundant open spaces including 55km of protected natural gully and stream areas, known as green fingers, with most houses just a five minute walk away. By 2020 Flat Bush is expected to be home to more than 40,000 people.
MWL	For the second successive year, Metrowater was named as a finalist in the Safeguard Health and Safety Awards with its 'Take 5 Stay Alive' booklet to promote and communicate an improved safety culture.
NSC	Three waters and transport contractors are required to send all staff that work on any North Shore City Council sites to an environmental practices as well as health and safety induction.
NSC	North Shore City Council is now a member of the Communities for Climate Protection Programme and has active waste management, energy efficiency, investors in people and workplace travel plans plus a fuel efficient fleet.
PDC	The Water Resources Team has promoted the integrated use of stormwater treatment devices within Council's walking and cycling strategy and the use of treatment devices as linkages in parks and recreation areas.
PDC	Several of Papakura District Council's larger and older cars have been replaced with hybrid petrol-electric vehicles as it works toward reducing its carbon footprint.
PDC	Moving towards becoming a zero-emission Council, Papakura District commenced promoting the use of mountain bikes for Council business in and around the central area, with at least two staff regularly adopting this in their day-to-day activities.
UWI	Continued efforts to minimise asset failures which may result in environmental harm, through asset conditioning programmes and instituting international best practice asset management planning.
WCC	The Twin Streams Project to restore riparian margins used eco-sourced plants that were collected locally as seeds or cuttings and grown on locally, giving business and employment support to a number of Waitakere City based companies and residents. Using eco-sourced plants ensures the most appropriate population of any given naturally occurring species are used to increase the distribution of that species in the relevant local habitat.
WSL	Increased self-sufficiency in energy generation by using hybrid vehicles, continuing work on methane power generation at Mangere Wastewater Treatment Plant and hydroelectric generation at dams.
WSL	Obtained a lease from the Puketutu Island owners with a view, subject to resource consents, to rehabilitating part of the island with treated biosolids, ultimately returning the island to public ownership and creating a regional park.
WSL	Consolidated the majority of staff from multiple sites to either Newmarket (adjacent to public transport links) or Mangere and introduced water and energy saving devices. A full listing of the sustainability impacts of Watercare's major initiatives can be found on pages 4-5 in its 2007 Annual Report.

Changes This Year

Sustainability reporting is a process for publicly disclosing an organisation's economic, environmental, social and cultural performance as financial indicators alone are insufficient to satisfy the needs of shareholders, customers, communities and other stakeholders. In this the fifth year of reporting, changes were made to the Definitions Guide improving descriptions of some measures (see Appendix IV for definitions) with a few measures deleted and replaced to reflect industry practice or newly adopted guidelines. These changes have resulted in the replacement of some graphs and tables to provide readers with data that has a greater level of confidence across the

Auckland industry. However incremental changes over the years have impacted on the extent of comparability of some measures and it is important that this is considered when reviewing the data for this and the previous two years.

The audit process covered all key measures but also concentrated on a few measures previously identified as problematic as organisations struggle to provide effective systems for collecting or modelling information on a consistent basis. Overall the verification audit undertaken found the accuracy and consistency of the data in the 75-85% range, the same as last year. A copy of the Auditor's letter can be found in Appendix V.

A shaded bar is used to gain a quick impression of the data confidence (see Appendix III for details) across the region in any particular measure. High confidence levels are shown in the darkest colour and as confidence levels decline lighter shades are progressively used from left to right. The confidence bar only includes organisations that are relevant contributors for each measure.

