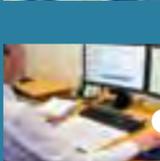
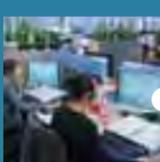


Realising the benefits of  
*integration*



**1.4**  
MILLION

WATER AND WASTEWATER  
CUSTOMERS RECEIVING  
OUR SERVICES

**\$7.8**

BILLION

VALUE OF ASSETS  
OPERATED

**16,500**

KILOMETRES

WATER AND  
WASTEWATER  
PIPELINES

**119**

BILLION

LITRES OF DRINKING WATER  
SUPPLIED EACH YEAR

**\$1.34**

REGION-WIDE COMMON WATER  
PRICE PER 1,000 LITRES FROM  
1 JULY 2012, INCLUDING GST

**645**

PERMANENT  
STAFF

INCLUDING DEDICATED  
CUSTOMER SERVICES TEAMS  
AT OUR EAST TAMAKI  
CUSTOMER CONTACT CENTRE

# CONSERVING THE RESOURCES OF TODAY FOR FUTURE GENERATIONS



## CONTENTS

Serving the people of Auckland	2
Watercare's networks	3
Key to performance measurement	4
Performance summary	5
Sustainability impacts of company activities	6
Chairman's report	8
Directors' profiles	10
Chief Executive's report	12
Executives' profiles	15
News	16
Governance	17
Local Board relationships	21
Environmental Advisory Group	22
Engagement with Tangata Whenua	23
<b>1</b> Focus 1: Safe and reliable water	24
<b>2</b> Focus 2: Healthy waterways	30
<b>3</b> Focus 3: Health, safety and well-being	34
<b>4</b> Focus 4: Customer satisfaction	40
<b>5</b> Focus 5: Stakeholder relations	44
<b>6</b> Focus 6: Sustainable environment	48
<b>7</b> Focus 7: Effective asset management	54
<b>8</b> Focus 8: Sound financial management	58
Verification report	62
Financial report	63
Report of the Auditor-General	72
Statutory information	112
Statement of Service Performance	113
G3 cross-reference table	116
Index	120
Glossary	120
Supplementary Material - Figures	Contents

## SERVING THE PEOPLE OF AUCKLAND

Water supply and wastewater services are essential to the growth of the economic, social and environmental health and well-being of the communities they serve, and are key enablers supporting Auckland's vision to be the world's most liveable city. In particular, Auckland has benefited from the provision of high-quality water for drinking and other uses, sourced mainly from catchment areas specifically set aside for water supply purposes. Wastewater is treated to a high standard before being discharged into the receiving environment. This is a major contributing factor to maintaining the health of Auckland's surroundings.

Water supply and wastewater services in the Auckland region are provided by Watercare Services Limited (Watercare), a Council-Controlled Organisation (CCO) from 1 July 2012. In managing our vast infrastructure network of dams, pump stations, pipes and treatment plants, Watercare must ensure we deliver cost-effective services and must also recognise and plan for the needs of future generations.

By law, Watercare has to manage our operations efficiently with a view to keeping the overall costs of water supply and wastewater services to our customers collectively at minimum levels. Rising population levels and changing patterns of use will lead to an increase in demand, and will require careful planning and development of assets to maintain levels of service to the people of Auckland.

The integration of Auckland-wide wholesale and retail water and wastewater services has provided opportunities for efficiencies and more effective delivery of services. Watercare has already delivered over \$100 million of savings since integration in November 2010.

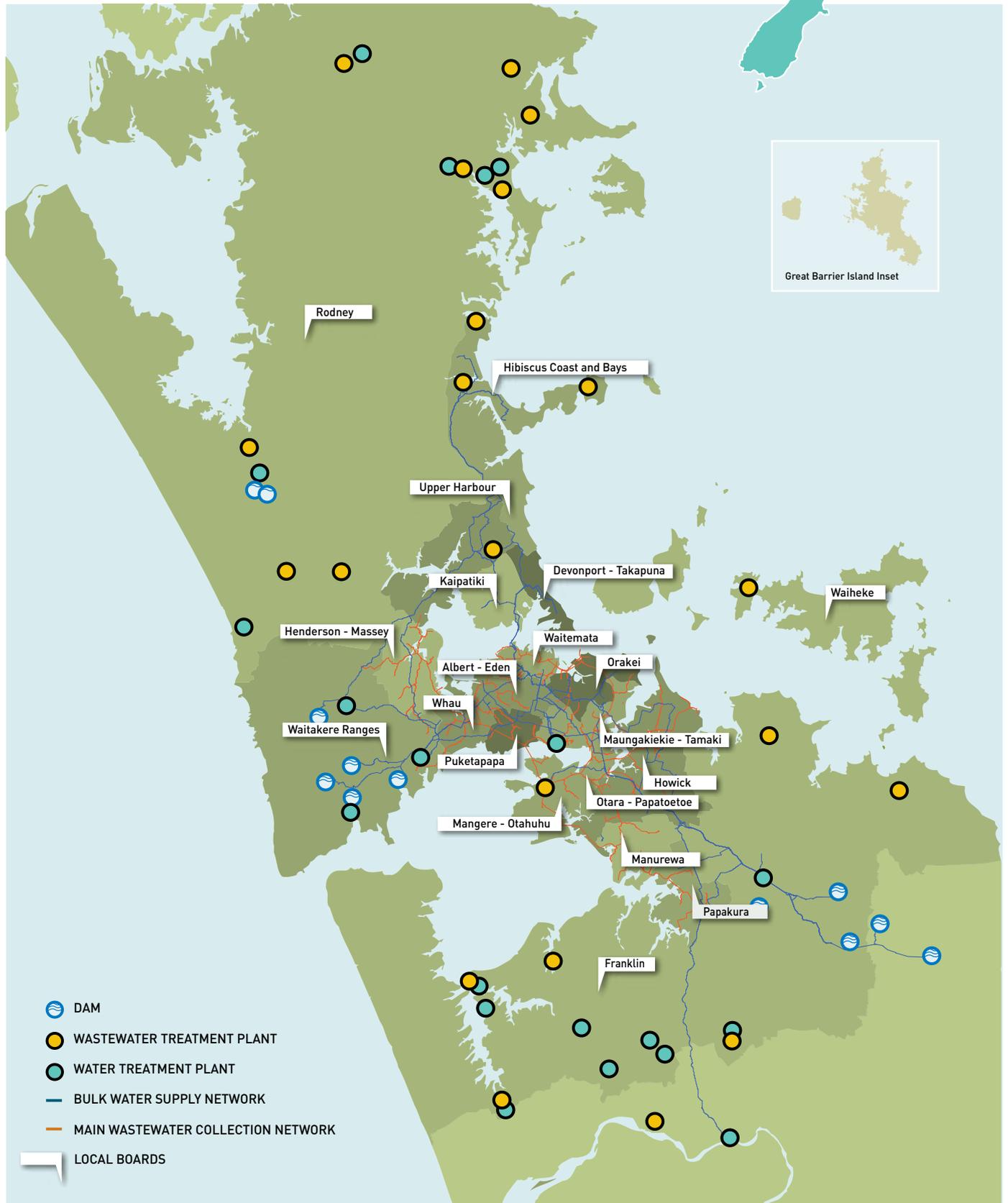
Each day, Watercare draws around 370 million litres of drinking water from some 40 sources, including dams, rivers and underground springs. The combined reservoir capacity of our dams is over 100 billion litres. Watercare provides bulk services to United Water in Papakura, which manages the local network on behalf of Watercare and retails services to the local community.

Water conservation is important in terms of sustainability and community well-being. As well as the sustainability benefits associated with encouraging people to use natural resources wisely, water efficiency makes good economic sense. Watercare is aiming to reduce gross per-capita consumption by 15 per cent by 2025.

Watercare collects and treats around 350 million litres of wastewater daily. We also treat and dispose of trade waste, working with customers with the aim of controlling the discharges of trade waste into the wastewater network and ensuring wastewater treatment plant discharges meet consent requirements. The company is responsible for enforcing trade waste compliance. We are continually seeking more environmentally friendly ways of managing our waste while balancing the social, cultural, and economic impacts of investment decisions.

# WATERCARE'S NETWORKS

And the Local Board areas that we serve



# KEY TO PERFORMANCE MEASUREMENT



## Safe and reliable water

Management of water resources to provide a safe and reliable water supply.



## Healthy waterways

Management of wastewater discharges to maintain or improve the health of the environment.



## Health, safety and well-being

To be an industry-best workplace.



## Customer satisfaction

Providing customers with great service and great value.



## Stakeholder relations

To be responsive to stakeholder requirements.



## Sustainable environment

To minimise and/or mitigate the adverse impact of the company's operations on the environment.



## Effective asset management

Managing assets to ensure the use of existing assets is maximised while optimising the scope, timing and cost of new investments.



## Sound financial management

Management of the company to meet business objectives at the lowest cost.

### HOW TO READ THE PERFORMANCE RULERS

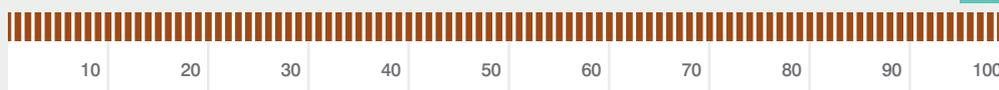
(Pages 26-60)

Watercare uses performance rulers to measure achievements against 42 targets in the eight focus areas shown above.

The way some rulers are presented has changed this year (indicated with a star ★) although the methodology for calculating the results has remained the same.

#### 3e. Percentage performance: staff training.

★ Target: 20 hours, training and study per employee.



Achieved → This year's performance



Watercare continued to invest significantly in the training and development of staff during 2011/12, with an average of 21.7 hours per employee spent undertaking training or study throughout the year. The Engineering Graduate support group continues with 25 graduates currently working towards chartered status. All water and wastewater operational staff are actively encouraged to pursue formal qualifications, with 4 staff achieving Certificate or Diploma-level qualifications during 2011/12.

#### KEY

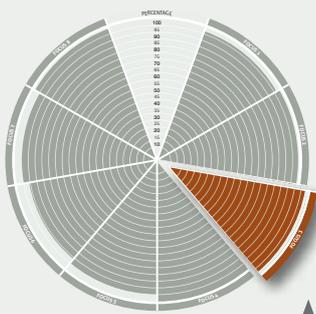
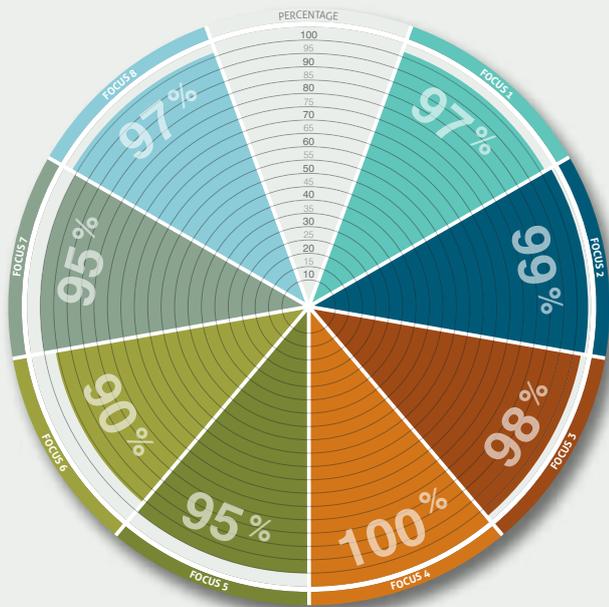
- Target met
- Target not met
- Good performance but could do better

2008	2009	2010	2011
85%	90%	85%	69%

↑ Previous years' results for comparison

# PERFORMANCE SUMMARY

Watercare measures and manages our sustainability performance against 42 targets within eight focus areas. The focus areas are: safe and reliable water; healthy waterways; health, safety and well-being; customer satisfaction; stakeholder relations; sustainable environment; effective asset management; and sound financial management. The chart below shows Watercare's performance this year against a target of 100 per cent.



OVERALL SCORE FOR FOCUS AREA

# 98%

Each section has a key which highlights the score for that particular focus group. The above example shows the overall score for focus 3, the highlighted segment shows how it relates to the main wheel.

## 1 Safe and reliable water 97%

In 2011/12, Watercare has:

- Continued to supply quality drinking water to 1.4 million Auckland residents and businesses
- Improved the security of water supply at Ardmore Water Treatment Plant which treats 61% of Auckland's drinking water
- Greatly improved drinking water quality for the Franklin area.

Outlook: Progress the \$350 million Hunua No.4 water transmission pipeline work.

## 2 Healthy waterways 99%

In 2011/12, Watercare has:

- Continued to meet high wastewater discharge standards and levels of service at metropolitan plants
- Improved the compliance of rural wastewater treatment plants inherited from Auckland's legacy councils in 2010.

Outlook: Continue planned infrastructure maintenance and renewals projects to improve the health of regional waterways.

## 3 Health, safety and well-being 98%

In 2011/12, Watercare has:

- Sustained a staff and contractor focus on health and safety
- Performed extremely well against a range of health, safety and well-being measures.

Outlook: Continue to invest in staff development and training.

## 4 Customer satisfaction 100%

In 2011/12, Watercare has:

- Improved measured service levels in all contacts with customers
- Introduced a range of online self-service and electronic billing options.

Outlook: Ensure continuous improvement in responding quickly and efficiently to customers' requirements.

## 5 Stakeholder relations 95%

In 2011/12, Watercare has:

- Contributed to the development of the Long Term Plan and developed a new Statement of Intent in consultation with Auckland Council
- Continued to work closely with environmental and Maori advisory groups.

Outlook: Focus on engagement with local boards and other key stakeholders.

## 6 Sustainable environment 90%

In 2011/12, Watercare has:

- Expanded the focus of reducing the impact of midges and odours to the communities surrounding the wastewater treatment plants and networks acquired through integration
- Begun rehabilitation of the Puketutu Island with biosolids, a whole-life project enabling saving to ratepayers of \$22 million in real terms.

Outlook: Continue to implement sustainability across the company's activities.

## 7 Effective asset management 95%

In 2011/12, Watercare has:

- Continued with the staged completion of \$48 million Waikato Treatment Plant upgrade
- Delivered 97.5% of planned Infrastructure operations capital projects, within the \$243 million capital programme.

Outlook: Ensure effective delivery of the Asset Management Plan for the period 1 July 2012 to 30 June 2022.

## 8 Sound financial management 97%

In 2011/12, Watercare has:

- Maintained focus on meeting interest targets and financial ratios.
- Continued to concentrate on procurement efficiency, realising savings of \$3.5 million.

Outlook: Maintain our focus on leveraging efficiencies and gains from the integrated company.

# SUSTAINABILITY IMPACTS OF COMPANY ACTIVITIES

## Watercare owns and operate assets...

INITIATIVE AND SUSTAINABILITY IMPACTS	OUTCOME TO DATE	OUTLOOK 2012/13
<b>... with a focus on energy</b>		
Internal power generation met more than 30% of Watercare's total energy requirements in 2011/12 through biogas engines and hydro generation from water supply dams. The engines also provide low-grade waste heat to sustain the anaerobic digesters, which neutralise the solid waste products and produce biogas in the process.	<ul style="list-style-type: none"> <li>Second annual carbon abatement report approved by the Ministry for the Environment, and Emissions units credited to Watercare's account</li> <li>Optimising biogas engine operating routine</li> <li>Investigating benefits of increased use of off-peak energy tariffs</li> <li>Proposing participation in instantaneous reserves market and proposing control and operating changes to reduce power usage and shift usage to off-peak</li> </ul>	<ul style="list-style-type: none"> <li>Assess benefits of biogas storage to achieve reduced flaring, improved engine operation and maximise peak demand generation</li> <li>Achieve energy reduction with major consumers such as the Mangere aeration system</li> <li>Work with network companies to reduce "Regional Coincident Peak Demand"</li> <li>Research initiatives such as "Contract for Differences" to reduce costs</li> </ul>
<b>... with a thorough maintenance programme</b>		
The Reliability-Centred Maintenance (RCM) programme provides a balance between environmental and service risk by identifying optimum frequency for maintenance of assets and determining when assets can continue to be used until they need replacing.	<ul style="list-style-type: none"> <li>Completed the implementation of RCM to wholesale parts of the business</li> <li>Reliability block models developed on an as needed basis</li> <li>RCM assisting other maintenance projects</li> <li>RCM assisting capital projects and equipment</li> </ul>	<ul style="list-style-type: none"> <li>Align RCM models with SAP ERP system</li> <li>Review asset failure data, update RCM Weibull data sets and run RCM model simulations to improve maintenance, procurement and design activities as well as asset performance</li> </ul>
<b>... and plans the next assets needed</b>		
Master Planning provides a comprehensive review of facilities to ensure that future capacity requirements and regulatory requirements needed by the growing region can be met in a cost-effective manner.	<ul style="list-style-type: none"> <li>Huia Water Treatment Plant and Mangere Wastewater Treatment Plant Master Plans completed</li> <li>Rosedale Network Facility Plan and Rosedale Wastewater Treatment Plant Master Plan substantially completed</li> <li>Programme for preparation of water network zone management plans developed, 11 substantially completed</li> </ul>	<ul style="list-style-type: none"> <li>Prepare other major water treatment plant master plans</li> <li>Continue development of water network zone management plans</li> <li>Continue development of wastewater network master plans</li> </ul>

## Watercare is contributing to the rehabilitation of Auckland's natural environment...

INITIATIVE AND SUSTAINABILITY IMPACTS	OUTCOME TO DATE	OUTLOOK 2012/13
<b>... through rehabilitation projects</b>		
Watercare's Coastal Walkway is a 13 km public walking track linking important public reserves to the north (Ambury Farm Park) and south (Otuaatua Stonefields).	<ul style="list-style-type: none"> <li>Further rehabilitation work undertaken at Oruarangi Creek mouth</li> <li>Additional land purchased to enhance open space and the coastal area</li> </ul>	<ul style="list-style-type: none"> <li>Continue to maintain the area</li> <li>Integrate Coastal walkways to into the new Puketutu Island parkland</li> </ul>
Puketutu Island will be rehabilitated with treated biosolids over a 35-year period. This long-term, cost-effective solution rehabilitates a former quarry and will result in a new regional park for the people of Auckland.	<ul style="list-style-type: none"> <li>Consents and appeals finalised in 2011</li> </ul>	<ul style="list-style-type: none"> <li>Begin application of biosolids in 2013</li> <li>Commence enabling works as scheduled in 2012</li> <li>Establish Governance Trust</li> </ul>
Pond Two is a former oxidation pond that will be an ecological reserve planted with trees after being treated with biosolids. The project is a least-cost solution and its proximity to the treatment plant minimises truck movements in urban areas.	<ul style="list-style-type: none"> <li>Rehabilitation progressing</li> <li>Submitted the Post-Closure Care Plan for approval</li> </ul>	<ul style="list-style-type: none"> <li>Continue rehabilitation.</li> <li>Obtain approval for the Post-Closure Care Plan from the Auckland Council</li> </ul>
<b>... through community partnerships</b>		
Tree planting: throughout the Greater Auckland area Watercare is supporting community-led tree-planting initiatives.	<ul style="list-style-type: none"> <li>Continued riparian planting in the Waitakere and Hunua ranges and with the Waikato RiverCare Trust</li> <li>Continued native tree-planting programmes for local schools through Trees for Survival initiative</li> </ul>	<ul style="list-style-type: none"> <li>Continue planting project for the Waikato RiverCare Trust and in the Waitakere and Hunua ranges</li> <li>Maintain support of Trees for Survival</li> </ul>
The Watercare Harbour Clean-Up Trust is sponsored by Watercare to remove litter from the Waitemata Harbour and the Tamaki Estuary.	<ul style="list-style-type: none"> <li>On 26 June a significant milestone was reached - a total of 3 million litres of rubbish has been removed since the Trust began operations</li> <li>New website for the Trust's activities launched, <a href="http://www.harbourcleanup.org.nz">www.harbourcleanup.org.nz</a> and new Facebook page <a href="http://www.facebook.com/pages/Watercare-Harbour-Clean-Up-Trust/201920129882257">www.facebook.com/pages/Watercare-Harbour-Clean-Up-Trust/201920129882257</a></li> </ul>	<ul style="list-style-type: none"> <li>The Trust has implemented a new contract for litter collection from July 2012</li> </ul>

The valve intake tower at Cosseys Dam.

KEY	
<span style="color: blue;">■</span>	Environmental
<span style="color: teal;">■</span>	Social
<span style="color: grey;">■</span>	Economic



## Watercare builds major new infrastructure where needed for the growth of Auckland

INITIATIVE AND SUSTAINABILITY IMPACTS	OUTCOME TO DATE	OUTLOOK 2012/13
<b>... water supply infrastructure</b>		
<p>Hunua No.4 Watermain will provide for population growth and increased security of water supply to the Auckland region through approximately 35km of trunk watermain from Manukau City to central Auckland. Approx. \$350m cost.</p>	<ul style="list-style-type: none"> <li>Redoubt Rd to Campbell Rd (28km) under construction in stages over the next 4 years</li> <li>Areas of advance works already completed to coordinate with infrastructure works by others</li> </ul>	<ul style="list-style-type: none"> <li>Progress design and consents for future stages of the project between Epsom and Khyber Pass</li> <li>Continue construction in the Manukau area</li> </ul>
<b>... wastewater treatment infrastructure</b>		
<p>Central Interceptor will provide for population growth, mitigate risks of pipe failure and reduce wastewater overflows in central Auckland. The central wastewater interceptor will go from central Auckland to the Mangere Wastewater Treatment Plant. Approx. \$800m.</p>	<ul style="list-style-type: none"> <li>Concept design completed</li> <li>Consultation and preparation of consent application continuing</li> <li>Final drafts of consent application documents are complete and undergoing final review</li> </ul>	<ul style="list-style-type: none"> <li>Complete resource consent application for submission by August 2012</li> <li>Public notification of main works package late 2012; hearing early 2013</li> </ul>

## Watercare contributes to the well-being of communities

INITIATIVE AND SUSTAINABILITY IMPACTS	OUTCOME TO DATE	OUTLOOK 2012/13
<b>... improving their neighbours' quality of life</b>		
<p>Midge control: Watercare is minimising the impact of midges on the local communities near Mangere and Rosedale wastewater treatment plants by reducing midge populations and habitats.</p>	<ul style="list-style-type: none"> <li>Conducted regular field surveys of midge species and numbers</li> <li>Proactive measures used for controlling midge breeding grounds</li> </ul>	<ul style="list-style-type: none"> <li>Continue midge control programmes</li> </ul>
<p>Odour control: Watercare is minimising the impact of odour on the local communities living near the wastewater treatment plants.</p>	<ul style="list-style-type: none"> <li>Enclosed odorous processes</li> <li>Operated biofilter odour beds</li> <li>Held regular meetings with odour auditors and local community</li> </ul>	<ul style="list-style-type: none"> <li>Continue to undertake odour monitoring programmes</li> <li>Continue to respond to odour complaints</li> </ul>
<b>... making things easy for customers</b>		
<p>Monthly billing will enable households to spread the cost of water across the year and detect leaks more easily. They were previously billed on a three-monthly or six-monthly basis.</p>	<ul style="list-style-type: none"> <li>Since 1 July 2012, all Aucklanders receive a monthly bill</li> <li>Monthly billing undertaken following customer consultation and feedback</li> </ul>	<ul style="list-style-type: none"> <li>Support given to Aucklanders by increased staff and training at Watercare's contact centre</li> </ul>
<p>Volumetric charging of wastewater enables households to be charged for what they really use. Before, the cost of wastewater was mostly a fixed charge integrated in the rates. Households had little economic interest in using water more wisely.</p>	<ul style="list-style-type: none"> <li>Since 1 July 2012, wastewater charges are not included in Council rates any longer and are mostly based on volume</li> </ul>	<ul style="list-style-type: none"> <li>Support given to Aucklanders by increased staff and training at Watercare's contact centre</li> </ul>
<p>Water demand management promotes efficient and wise use of water. It is seen as key to promoting the sustainable use of the region's water resources.</p>	<ul style="list-style-type: none"> <li>Adopted a target of 15% reduction in water demand by 2025 through the Regional Water Demand Management Plan</li> <li>Started preparing demand management tools to achieve the target</li> </ul>	<ul style="list-style-type: none"> <li>Continue existing programmes</li> <li>Continue preparing more tools to achieve the targets</li> <li>Set up the monitoring of demand across the region</li> </ul>
<b>... engaging with stakeholders</b>		
<p>Engaging with the community: Watercare is engaging in open communication with stakeholders using a variety of methods.</p>	<ul style="list-style-type: none"> <li>The new 2012 wastewater tariff underwent public consultation as part of the development of the Auckland Plan</li> <li>Continued to deliver the Adopt A Stream initiative in Auckland schools, The Rain Forest Express and increased use of social media in delivering key messages</li> <li>Held open Board meetings with agendas and minutes available online.</li> <li>Held 5 public open days to explain the Central Interceptor project and receive community feedback</li> <li>Held public meetings in Helensville and in Kumeu, Huapai and Riverhead in relation to wastewater servicing</li> <li>Extensive engagement with Local Boards</li> </ul>	<ul style="list-style-type: none"> <li>Continue Adopt A Stream and Watercare-led science lessons</li> <li>Continue the Rain Forest Express service</li> <li>Undertake customer service survey</li> </ul>
<b>... investing in staff</b>		
<p>The Graduate Engineering Programme enables engineering graduates to gain widespread experience and exposure during their early career years with Watercare.</p>	<ul style="list-style-type: none"> <li>Continuing support of Engineering Graduate group activities</li> <li>In-house mentoring group continuing to run successfully</li> <li>Continuing support of IPENZ-recognised professional development workshops</li> </ul>	<ul style="list-style-type: none"> <li>Watercare will continue to develop graduate engineers by providing a range of experiences during their early postgraduate years and ongoing support towards them achieving chartered status</li> </ul>

## CHAIRMAN'S REPORT



*"Watercare is building on the significant efficiencies realised since integration to balance the need for growth with excellent levels of service."*

Watercare's first full year as an integrated water and wastewater service provider has been a successful one.

I am pleased to commend the management and staff of Watercare for their work in building on last year's integration process, and acknowledge the contribution of my Board colleagues.

In the year and a half since November 2010, the company can claim many successes, but in my mind there are two achievements which stand out:

- the seamless transition from a bulk supplier serving six customers to a retail business servicing 1.4 million customers, with no impact on the service delivery to those customers, and
- the contribution Watercare continues to make to the success of Auckland as one of the world's most liveable cities through the delivery of safe, reliable drinking water and environmentally sustainable collection and treatment disposal of wastewater.

As we look to the year ahead and beyond, Watercare will continue to manage competing demands on its resources and funding. This means the business must prioritise when making decisions about Auckland's future water and wastewater needs.

This city is growing at a fast pace, so Watercare needs to be able to supply for peak summer water use and meet the demand for wastewater services for an increasing population at affordable prices.

Watercare is forecasting \$4.8 billion in capital investment over the next 10 years. The majority of that investment is directed towards renewing and improving the existing infrastructure, whilst ensuring sufficient capacity is available to cope with growth projections.

Key infrastructure projects in the next 10 years include:

- the Hunua No.4 Watermain pipeline, which will provide for growth and improve security of supply to central Auckland and the North Shore (\$350 million)
- North Harbour watermain duplication to provide for growth on the North Shore and in Rodney and improve security of supply from key water sources (\$265 million)
- upgrade of the Huia Water Treatment Plant (\$185 million) to renew existing assets and improve security of supply
- expansion of the Waikato Water Treatment Plant (which is a staged upgrade of the existing plant) to 150 mega-litres per day
- upgrade and expansion of the rural water treatment plants (\$100million)
- expansion of the biological nutrient removal (BNR) treatment capacity at the Mangere Wastewater Treatment Plant (\$135 million)
- the Northern Interceptor, which will cater for growth in West Auckland and the North Shore, and improve performance of the existing wastewater system leading to the Rosedale plant (\$168 million)
- the Central Interceptor – an \$800 million project which will cater for growth in central Auckland, replacing aged assets nearing the end of their lives and significantly reducing combined sewer overflows, and
- the Waterfront Interceptor – a \$135 million project designed to address combined sewer overflows in Herne Bay and Grey Lynn.

Whilst Watercare is planning ahead to safeguard the security of Auckland's water supply, it is essential that all consumers endeavour to reduce the amount of water used individually. To that end, Watercare is actively supporting the promotion of

awareness of water consumption with volumetric charging and monthly billing; minimising leaks while lifting network efficiency; and working with major users to encourage a focus on water conservation.

The Watercare board comprises a range of skills and it is our role to ensure investment decisions are economically sound and aligned with the strategic outcomes sought by our shareholder, Auckland Council.

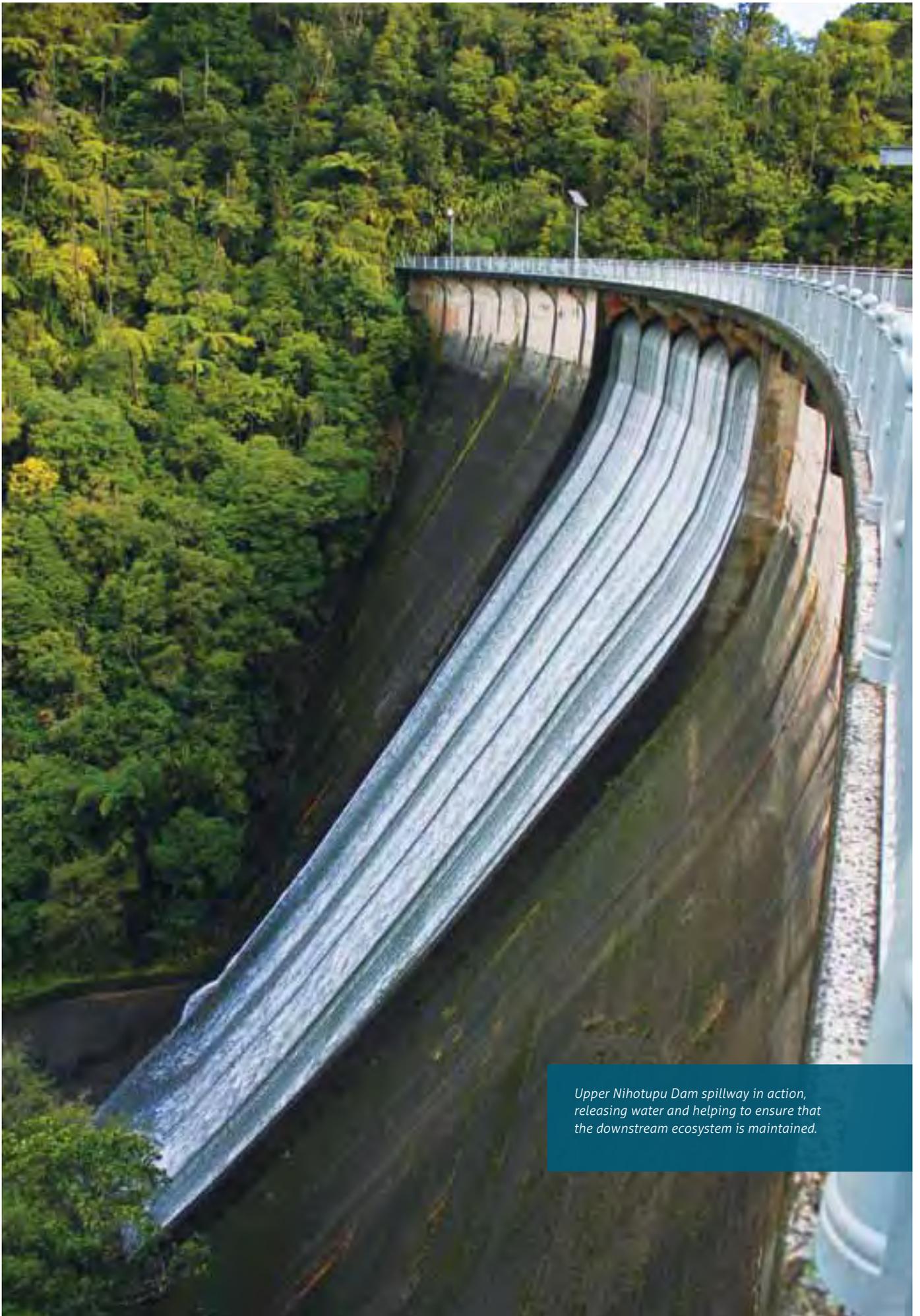
During this year, Pat Snedden retired from the Watercare board – his constructive and thoughtful contribution during his nine-year tenure was greatly appreciated. At the end of 2011 we welcomed Mike Allen to the board.

Watercare is committed to delivering water and wastewater services that meet the needs and expectations of this growing region. Our focus for the coming year is to maintain a high level of service delivery and increase much-needed system capacity.

A successful year requires the contribution of a large number of people and processes together with the establishment and maintenance of key relationships, both external and internal.

My thanks to you all.

**Ross B Keenan**  
Chairman



*Upper Nihotupu Dam spillway in action, releasing water and helping to ensure that the downstream ecosystem is maintained.*

## DIRECTORS' PROFILES



**Ross Keenan, 68**  
BCom, FCIT  
Chairman

Ross Keenan joined the Watercare board in March 2010 and was appointed Chairman in December 2010. He is an experienced company director, with corporate governance and executive experience across a diverse range of companies including airways, tourism, telecommunications, health and property development. Ross has particular knowledge and experience in the retail and wholesale water and wastewater services industry and previously served as the Chairman of Metro Water Limited.

**General disclosure of interests:**

*Chair, Allied Work Force Group Ltd; Chair, Ngai Tahu Tourism Ltd; Director, Ngai Tahu Seafood Ltd; Director, Touchdown Ltd*



**David Clarke, 53**  
BE (Hons), ME, BBS, MBA, MInstD, FNZIM  
Deputy Chairman; Chair of the Capital Review Group

David Clarke has considerable experience in the areas of biotechnology, IT, health, food and related sectors. He has been the inaugural chair for multiple technology industries and has strong commercial and governance skills. His background includes engineering, finance, marketing and sales. David is a fellow of the New Zealand Institute of Management and member of the NZ Institute of Directors.

**General disclosure of interests:**

*Chairman, Optima Corporation Ltd – Software (Ambulance/Fire systems and Airlines Rostering); Chairman, TRGG Ltd – Radiology Services; Chairman, NZ Institute of Rural Health; Chairman, Kordia Ltd; Chairman, Skin Institute; Director, Hawkins Watts Ltd – Penrose based food company; Director, Cranleigh Merchant Bankers; Director, FarmIQ Systems Ltd; Director, Ngai Tahu Tourism Ltd; Director, Hynds Group Ltd; Trustee, South Auckland Foundation (Middlemore/CMDHB)*



**Peter S Drummond, 59**  
MNZM, AFinD

Peter Drummond is an experienced director and chairman, with extensive international business management and marketing expertise. He was previously Chairman of Watercare and brings extensive knowledge of the wholesale and retail water services industry. He has also served on the boards of Vector, MidCentral Health and HortResearch Ltd, as well as a large range of community organisations such as Variety - The Children's Charity. Peter rejoined the Watercare Board in March 2010.

**General disclosure of interests:**

*Chairman, United Fire Brigade Association; Chairman, Appliance Connection Ltd; Chairman, Watercare Harbour Clean Up Trust; Chairman, Variety Medical Missions South Pacific; Chairman, Ngati Whatua o Oraki whai maia; International President Variety Childrens Charity; Director, NARTA New Zealand Ltd; Director, NARTA International Pty Ltd*



**Catherine Harland, 50**  
BA, PGDipBus (Marketing), MBA, JP

Catherine Harland has a background in research, consultancy and public policy in local and central government. She was a local government member in Auckland for 15 years, serving on and chairing major regional and city committees. Currently, Catherine is project leader at the New Zealand Institute, an independent thinktank. Previously, she worked with AUT University's Institute of Public Policy and was engaged in consultancy work with the Auckland water industry. Catherine is a Justice of the Peace and served on the Auckland Observatory and Planetarium Trust Board for 11 years, five of those as Chair.

**General disclosure of interests:**

*Director, McHar Investments Ltd; Director, Interface Partners Ltd; Trustee, Auckland Restorative Justice Trust; Trustee, One Tree Hill Jubilee Educational Trust*



**Susan Huria, 52**  
FPRINZ, MInstD  
Chair of the Organisation Committee

Susan Huria is a specialist in the Maori sector, working with Maori organisations on constitutional reviews, board appointments, support and strategic advice. She has extensive governance, marketing communications and general management experience. Susan was an executive at Auckland International Airport and worked in marketing and communications for 10 years, before starting her own management practice, Huria Anders, in 2000.

**General disclosure of interests:**

*Deputy Chair, AgResearch Ltd; Director, Northland Port Company Ltd; Director and Shareholder, Huria Anders Ltd; Director and Shareholder, Susan Huria (2003) Associates Ltd; Director and Shareholder, Te Ara Tika Properties Ltd; Director, Vermilion Design Ltd; Director, Airways Corporation of New Zealand Ltd; Director, Veterinary Enterprises Group Limited; Trustee, First Foundation*



**Tony Lanigan, 64**  
BE (Hons), PhD, FIPENZ, MICE

Tony Lanigan is a professional civil engineer (FIPENZ), project-management consultant and former General Manager of Fletcher Construction. He was Chancellor of Auckland University of Technology and a director of Infrastructure Auckland. Tony is currently Vice Chairman of Habitat for Humanity in New Zealand and Chair of the NZ Housing Foundation. He is a Director of the NZ Transport Agency (NZTA).

**General disclosure of interests:**

*Vice Chairman, Habitat for Humanity International; Director, NZ Housing Foundation; Director, NZ Transport Agency; Director, Hargrave Project Management Limited; Director, A G Lanigan & Associates Limited*



**Mike Allen, 51**  
LLB, BCom

Mike Allen has extensive experience in investment banking and general management in both New Zealand and the UK. He has previously consulted to the Australasian water and infrastructure sectors. Mike is chairman of Environmental Investments Limited.

**General disclosure of interests:**

*Chairman: Coats plc; Director, Guinness Peat Group; Director, Godfrey Hirst Limited; Director, InnoFlow Australia Limited; Director, Tower Insurance; Director, Tainui Group Holdings Limited; Director, Breakwater Consulting Limited*



**Jeff Todd, 70**  
CBE, BCom, FCA, FInstD  
Chairman of the Audit and Risk Committee

Jeff Todd is a chartered accountant and company director, and was formerly managing partner for New Zealand and the Pacific for Price Waterhouse (now PwC). He is a former Chairman of the Southern Cross Medical Care Society, Southern Cross Healthcare Trust and The New Zealand Guardian Trust Company Ltd, and Director of the Reserve Bank of New Zealand and the ANZ Banking Group (NZ) Ltd. Jeff has a particular interest in corporate governance and is a fellow of the NZ Institute of Directors.

**General disclosure of interests:**

*Chairman, Dynasty Hotel Group Limited; Chairman, Sanford Limited; President, Auckland Medical Research Foundation; Trustee, Goodfellow Foundation; Trustee, Christian Healthcare Trust*



*Watercare Senior Engineer Paul Gowans checking the interior of the new Manurewa Pump Station, constructed as part of Watercare's Southwestern Interceptor wastewater pipeline project.*

## CHIEF EXECUTIVE'S REPORT



*"Our focus for the coming year is to maintain a high standard of service to meet the expectations of a continually growing region."*

Over the last year, Watercare has continued to mature as an integrated business.

While Auckland's growing population drives increasing demand for water and wastewater services, Watercare is working to reduce water demand and expand capacity in the system where required, while also maintaining service level standards and minimising costs to customers.

Since November 2010, Watercare has brought into place the operational and retailing functions of the former six local network operators and councils, without compromising service delivery to our customers.

Each day, we deliver the things our customers want from us: secure and safe drinking water, and the collection, treatment and disposal of wastewater in a way that keeps our environment and waterways healthy.

In this year's Annual Report I am pleased to share the excellent progress Watercare is making in delivering those services.

We are a company which carefully focuses its efforts and resources in order to deliver what our shareholder requires and what our 1.4 million customers expect.

My hope is that, over time, we will see greater public recognition of Watercare's role. Here are some of the achievements that I believe deserve a mention.

### **Water and wastewater service delivery**

This year we have delivered water and wastewater services without major interruption, and maintained excellent levels of service.

Every day, our network teams are on the job throughout Auckland maintaining the 16,500-kilometre network of pipes and plants that enable the continuous supply

of safe drinking water to our customers, and that enable their wastewater to be collected and treated while minimising impacts on our environment. This is even as we integrated some under-performing water and wastewater assets from the former local network operators into the mainstream network.

Following integration we quickly moved to improve treatment at the non-metropolitan water treatment plants, including the installation of process upgrades at Warkworth and Wellsford to meet a required increase in performance.

We also introduced process changes to improve effluent quality at non-compliant wastewater treatment plants, while compliance was maintained at all other metropolitan wastewater treatment plants.

*"Since integration in November 2010, Watercare has achieved regional cost efficiencies of more than \$100 million."*

The majority of the established water assets – most of which are gravity supplied – continue to serve us well. Much of the required upgrade work has been completed, is underway or is planned.

Our two largest wastewater treatment plants are state of the art. The high quality of treatment at Mangere means we can discharge close to the shore. An international expert group recently advised that the 2003-2007 upgrade was "an outstanding success story in relation to protection of public health and the environment" and the condition of Manukau Harbour has benefited substantially.

### **Future-proofing the water and wastewater network**

Watercare's aim is to develop, operate, maintain and replace assets over the long term in order to deliver high-quality service levels and meet foreseeable future needs. Reducing water demand now defers the need for expensive upgrades and is an important focus for us.

Watercare's services are delivered via \$7.8 billion worth of assets – Auckland's entire water and wastewater infrastructure – and we are focused on using Aucklanders' investment in these assets wisely and well.

This year, by striving for efficiencies such as integrated programme delivery and project design modification, we finished the year having completed the scheduled infrastructure programme, spending 97 per-cent of our \$243 million budget.

Watercare plans capital works projects which future-proof for growth and development in the Auckland region, and which replace ageing infrastructure and ensure security of water supply.

New significant infrastructure can be subject to long lead times, sometimes a decade or more. This requires considerable foresight and planning from Watercare, working closely with Auckland Council.

In the last two years, completed major infrastructure includes Project Hobson, the Swanson Branch Wastewater Storage Tank, and Southwestern Interceptor upgrades.

*Pictured surveying work on the Hunua 4 Watermain project in Flat Bush are (left to right) contractor's Construction Manager Tony Mills; Watercare Project Manager Andy Spittal; Watercare Chief Executive Mark Ford; and contractor's STMS Vinnie Shriwastow.*



Right now, two of Watercare's biggest projects are progressing well.

Construction on the \$350 million Hunua No.4 Watermain has begun. This huge watermain, a major step in securing Auckland's water supply, will run for 28 kilometres from Redoubt North Reservoir in Manukau Heights to Campbell Crescent in Epsom, connecting to the local water supply network along the way. Several packages of advanced works were completed ahead of the main construction phase which began in May 2012. Work is currently being carried out in the Flat Bush/Manukau Heights area, and will continue until 2016.

Consenting for our single largest capital project, the \$800 million Central Interceptor, is about to commence. Watercare is proposing to construct a new 13-kilometre-long tunnel to collect and carry wastewater from Western Springs through to the Mangere Wastewater Treatment Plant. The

company has been consulting with affected local boards and the public as we move toward submitting a resource consent application in August.

Meanwhile we are planning a number of projects on the North Shore, including the Northern Interceptor, which will allow wastewater flows to be diverted from the Northern Strategic Growth Area (NorSGA), the North Harbour watermain duplication project which will provide security of water supply, and the Barry's Point Wastewater Pump Station.

#### **Making efficiencies work for our customers**

Since integration in November 2010, Watercare has achieved regional cost efficiencies of more than \$100 million.

This meant we were able to lower the retail price of drinking water across Auckland from 1 July 2011 by cutting the unit rate

and removing the fixed service charges for water that were previously payable in some areas. Had we not achieved those efficiency savings, drinking water costs had the potential to be over 30 percent higher.

Efficiencies from integration are ongoing. They include economies we can achieve because of our scale – such as the amalgamation of corporate and customer services, and improved procurement purchasing power – and the streamlining and savings we can achieve because we now plan from a regional rather than local perspective. The rationalisation of network service hubs and staff numbers has meant additional savings.

Following the introduction of a standardised and substantially reduced water price for all Aucklanders in July 2011, Watercare prepared to introduce the standardised wastewater tariff for residential customers on 1 July 2012.



The new tariff will address inconsistent charging across the former council areas. The tariff was selected by Auckland Council, based on principles of equity and fairness, and approved by the Watercare board following public consultation in early 2012 as part of the council's Long Term Plan.

Many Aucklanders will benefit from this change as they will be paying less than they did in 2011/12, but some households will face increases compared to what they paid during that period previously. Recognising that some customers still struggle to manage their household costs, Watercare established the Water Utility Consumer Assistance Trust in late 2011.

While the trust receives funding from Watercare, it operates independently. The trust has the ability to grant remissions to residential customers who meet its eligibility criteria and are deemed to be struggling to manage their water and/or wastewater costs.

*“Our commitment to protecting the environment is embedded in our business and operations.”*

In 2011/12, 150 customers were registered with the Water Utility Consumer Assistance Trust. To date, 52 customers have had hardship relief approved by the trust.

We have also continued refining our centralised contact centre. Here, at our single point of contact for all calls to Watercare, we are now seeing consistently high levels of service against service targets, such as response to incidents, notification of shutdowns, correspondence and complaints.

In the lead-up to 1 July 2012, we prepared for the implementation of monthly billing. Shifting the billing frequency to monthly – a large project which meant reconfiguring a number of systems all at the same time – is a business change that has been implemented because it benefits both our customers and Watercare.

Customer feedback had indicated that managing home budgets would be easier if

they received a bill every month, rather than a large bill every quarter or six months. And from a business perspective, while monthly billing adds some initial cost to Watercare, this change – along with the company's gradual shift to electronic billing – will also create savings over time, helping the business to minimise water and wastewater charges to our customers.

**Sustainability**

Our commitment to protecting the environment is embedded in our business and operations. The company is focused on delivering services that balance the needs to provide critical infrastructure to a growing region, while also ensuring our operations and services are delivered in a sustainable way.

This year, having employed a full-time Sustainability Manager, we began expanding our corporate sustainability programme, capitalising on the work done by the Watercare 'Zero Waste' group. We are also partnering with EcoMatters Environment

Trust to help our domestic customers achieve water savings at home, and continuing other external sustainability initiatives while also planning new ones within Watercare's new sustainability framework.

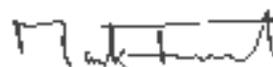
Examples of our sustainability activities this year include the following:

- Our core business sustainability impacts such as:
  - internal power generation, which in 2011/12 met more than 30% of Watercare's total energy through biogas engines and hydro generation from water supply dams
  - projects such as the Hunua No.4 Watermain and Central Interceptor, which will provide for population growth
  - direct community engagement which enables Watercare to integrate community needs into project development

- Through the Adopt A Stream programme, our dedicated educator helped nearly 6000 students learn about water and its vital role within our environment
- The Watercare Harbour Clean-Up Trust continued overseeing the removal of litter from Auckland's harbours and promoting the concept of rubbish-free waterways
- In close consultation with iwi and Auckland Council, work is underway on Puketutu Island to rehabilitate its 40 hectares of quarried land with biosolids from the Mangere Wastewater Treatment Plant. Preparation for building the biosolids placement area has begun and the site is scheduled to be operational in October 2013. Over time, as the site is gradually rehabilitated, more and more land will be relinquished back to Auckland Council and opened to the public. On completion of the quarry rehabilitation in 35 year's time, the whole island will be available as public open space.

Although the tragic accident that took the life of our colleague Philomen Gulland and seriously injured Ian Winson, James Millard and Harry Barnett was recorded in last year's Annual Report, the event is so strongly embedded in our memories that it just seems too premature to consign it to history. Since the accident, Watercare has supported the families of Philomen and Ian and we've also endeavoured to aid the recovery of Ian, James and Harry. We are pleased that they are making steady progress. The Department of Labour is taking proceedings against Watercare.

As we move into the second half of 2012, I am heartened by the progress we have made as a business, and the commitment shown daily by all our staff in providing high-quality water and wastewater services to the people of Auckland.



**K M Ford**  
Chief Executive

## EXECUTIVES' PROFILES



**Mark Ford, 62**  
CNZM, BA  
Chief Executive

Mark Ford is the Chief Executive of Watercare Services Ltd. He held the role from 1994 to June 2009 and was reappointed following the company's expansion to include retail operations. He is an experienced chief executive, director and chairman who has worked in the water, forestry, transport and petroleum industries. From July 2009 until his recent reappointment to Watercare he was Executive Chairman of the Auckland Transition Agency, the government agency responsible for planning and managing the transition to Auckland's new governance arrangements. Mark currently serves as Chairman of Auckland Transport and Independent Chair of the Christchurch Client Governance Group for the Infrastructure Rebuild. Mark is also a member of the Better Public Services Advisory Group. Since the end of the financial year, Mark has been appointed Chairman of Solid Energy Limited.

*All fees received from his association with companies or organisations outside Watercare are paid back to Watercare.*



**Brian Monk, 62**  
BCom, ACA  
Chief Financial Officer

Brian Monk is a chartered accountant with 40 years' experience in corporate financial management. He was appointed to the role of Chief Financial Officer in November 2010, and holds responsibility for Watercare's financial management, treasury and strategic planning functions, as well as the company's Laboratory and Commercial Services division. Brian has previously held senior financial management roles with Auckland Regional Council, Fletcher Energy, Air New Zealand and US multinational S.C. Johnson & Son.



**David Worsnop, 60**  
BE (Hons)  
Chief Operations Officer

David Worsnop has over 35 years' experience working in a range of infrastructure, power generation and primary industries. He is responsible for Watercare's operational, networks and compliance teams. David was Group General Manager (Service Delivery) at Vector from 2008 to 2012, and prior to this held a number of senior roles including New Zealand CEO of Hastie Group; Executive General Manager at Transfield Services Electrical Mechanical and Power, covering New Zealand and Australia; and management roles at industrial group SGS.



**Graham Wood, 55**  
MIM, BA (Hons), FIE (Aust),  
MCIWEM, CPEng (Aust), C.WEM (UK)  
Chief Infrastructure Officer

Graham Wood is a chartered mechanical engineer with 25 years' experience in the water industry across four continents. Graham has been the Managing Director of water-related businesses in Australia; at Thames Water and United Water in the United Kingdom; and at American Water in the United States of America. He joined Watercare in 2007 and now manages the company's capital programme, new developments, energy and control systems and Watercare's maintenance teams.



**Trish Langridge, 54**  
MBA, Diploma of Nursing  
Chief Services Officer

Trish Langridge is an experienced general manager who has worked in both the health and local government sectors. Her responsibilities include customer services, human resources and property. Trish developed and implemented the customer services function of Auckland Council prior to joining Watercare in 2011.



**Rob Fisher, 68**  
ONZM, LLB, Dip TP  
General Counsel

Rob Fisher is a barrister who has specialised in resource management, public law and local government law. He holds responsibility for statutory and environmental planning, resource consents and policy. As a litigator, he has appeared frequently before the Environment Court, the High Court and the Court of Appeal. In a 40-year legal career, he has provided strategic advice and expertise to both private and public bodies, especially in the consenting of large infrastructure projects. Rob was the 2010 Barrister of the Year in the New Zealand Law Awards and was made an Officer of the New Zealand Order of Merit in the 2011 Queen's Birthday Honours.



**David Hawkins, 58**  
MPP, TTC, JP  
Corporate Relations Manager

David Hawkins' responsibilities include government and community relations. He has a background in sales and marketing management for New Zealand and global brands, and has a strong commitment to local government and community engagement. David has previously served as an Auckland Regional Councillor and is a former Mayor of the Papakura District.



**David Sellars, 45**  
BCA, CA  
Risk and Assurance Manager

David Sellars is a chartered accountant with experience in banking and audit functions. He has previously been responsible for risk assurance, reporting on the internal control environment and governance of major projects. As the Risk and Assurance Manager, David is responsible for internal audit and risk management.

## New Maintenance Services group for Watercare

In July 2012, Watercare introduced a new Maintenance Services business unit which strengthens the company's maintenance and networks capability with over 70 new staff.

The new unit is split into two teams, a new Central Networks group to undertake maintenance works on Watercare's Central Auckland area network, and the existing maintenance group which will continue to maintain the company's water and wastewater treatment plants and operational facilities across Auckland. The new group is based in Penrose, and is led by Maintenance Services Manager Chris Kinley.

Watercare's Chief Infrastructure Officer Graham Wood says: "This is a strong strategic move for Watercare – with the new team now on board, I'm looking forward to collaborating with Chris and his unit to develop the networks maintenance side of the business, which we anticipate will provide more operational efficiencies and a positive outcome for our customers."

Graham says with the new Maintenance Services group now in place, Watercare is better positioned to grow and maintain the company's in-house skill base, improve the interaction and deployment of operations teams, and provide a benchmark to measure the performance levels of existing maintenance contractors.



Part of Watercare's new Maintenance Services team outside the group's operational base in Penrose.

## Hunua No.4 Watermain project

As part of the **Hunua No.4 Watermain project**, Watercare worked closely with KiwiRail and contractor Hawkins Construction to facilitate the construction of a railway pipe crossing and new pedestrian overbridge at Puhinui Station in South Auckland.

Infrastructure Project Manager at Watercare, Andy Spittal, says the project team set out to enable both important pieces of infrastructure to be developed within the same construction corridor, thus reducing costs by making best use of resources and minimising rail corridor disruption on the North Island Main Trunk rail line. "Watercare's work on site commenced in October 2011. The project encompassed the demolition of the old pedestrian footbridge, construction of a temporary footbridge for pedestrians, sheet piling and excavation work for the Hunua No.4 Watermain, and construction of the new permanent pedestrian overbridge," says Andy. "The new footbridge was opened in April 2012. This project is an excellent example of Watercare taking a collaborative approach to a problem and working with key stakeholders to achieve an outcome that's positive for everybody, including the local community."



The new pedestrian overbridge at Puhinui Station.



Construction of the Hunua No.4 Watermain is progressing.

In May the main construction contract for **Hunua No.4** got underway in Manukau Heights. The Hunua No. 4 Watermain will run for 28 kilometres from Redoubt North Reservoir in Manukau Heights to Campbell Crescent in Epsom, connecting to the local water supply along the way. Ultimately, Hunua No.4 will extend through to Khyber Reservoirs in the central city. For the majority of the route, open trenching methods are being used to lay the watermain. In sensitive areas – such as at busy intersections – more specialised construction methods are employed, for example tunnelling or pipe bridges. Several packages of advanced work have already been undertaken, such as the SH20 Manukau Harbour Bridge section that approaches Mangere Bridge and Onehunga. A 1.9-kilometre length of Hunua No.4 was installed as part of construction of the new motorway bridge on SH20 and on adjacent roads, including those at railway crossings.

# GOVERNANCE

Watercare is a wholly owned subsidiary of Auckland Council (the Shareholder). The Board of Directors (the Board) and management of Watercare remain committed to ensuring that the company applies best-practice governance policies and procedures. The Board is ultimately responsible for all decision making by the company.

Operational responsibility is delegated to the Chief Executive by way of a formal delegated authority framework. The Board comprises eight independent, non-executive directors. Their profiles and disclosures of interests are published on page 10. Directors, including the chair, are appointed by the Shareholder.

## 1. ACCOUNTABILITY

### Shareholder

The Board is appointed by the Shareholder to govern Watercare in accordance with the statutory obligations and in accordance with the agreed Statement of Corporate Intent (SCI).

The SCI sets out the activities to be undertaken by Watercare and specific economic, social and environmental objectives for the company. It establishes performance targets which are used to measure the company's performance. Watercare must consult with the Shareholder, Local Boards, the Maori Statutory Board and the public during the development of the SCI. The Shareholder's comments regarding the draft SCI were presented to the public at one of Watercare's public Board meetings.

Prior to the Board adopting the draft SCI in 2011/12, the public was invited to the Board meeting on 26 May 2011 to consider Shareholder comments on the SCI.

Watercare delivered the 2011/12 SCI to the Shareholder on 30 June 2011, and the document is available on the company website [www.watercare.co.nz](http://www.watercare.co.nz).

### Performance

Watercare is required by legislation to report quarterly to Auckland Council through the Accountability and Performance Committee. The performance of the company against the measures in the SCI is reported to the Board monthly and to the Shareholder quarterly. This annual report records performance of the company against non-financial performance measures included in the SCI. The non-financial performance measures

are set out on pages 113-115. A wider set of measures including social, economic, environmental and selected SCI measures have been grouped under eight headings and the performance of the company against these is reported on pages 24-61. These measures are selected to reflect the performance of the integrated company across a broad base.

## 2. TRANSPARENCY AND OPENNESS

### Legislative framework

Watercare is a limited liability company registered under the Companies Act 1993, and a local government organisation. The Local Government Acts of 1974 and 2002 define the role and duties of local government organisations in New Zealand.

The legislative framework enabling and governing Watercare's operations as the regional provider of water and wastewater services in Auckland is largely found in three Acts and amendments:

1. Local Government (Tamaki Makaurau Reorganisation) Act 2009
2. Local Government (Auckland Council) Act 2009
3. Local Government (Auckland Transitional Provisions) Act 2010

The company's obligations to deliver water and wastewater services for Auckland are established under Part 5 section 57(1) of the Local Government (Auckland Council) Act 2009 which stipulates that an Auckland water organisation:

- (a) must manage its operations efficiently with a view to keeping the overall costs of water supply and wastewater services to its customers (collectively) at the minimum levels consistent with the effective conduct of its undertakings and the maintenance of the long-term integrity of its assets; and
- (b) must not pay any dividend or distribute any surplus in any way, directly or indirectly, to any owner or shareholder; and

- (c) is not required to comply with section 68(b) of the Local Government Act 2002 (*avoiding the requirement to pay a dividend*); and
- (d) must have regard for public safety (for example, the safety of children in urban areas) in relation to its structures.

Also under the legislative framework:

- the company became a Council Controlled Organisation on 1 July 2012, and must remain a CCO of Auckland Council at least until 30 June 2015
- at least two Board meetings a year are required to be held in public; before 30 June to consider the Council's comments on the draft SCI, and after 1 July to consider the company's performance under the SCI in the previous year
- the company's financial statements, the SCI and specified long-term plans must be audited by the Auditor-General, or by an auditor acting on behalf of the Auditor-General.

### Company goals and strategies

The goals and strategies for Watercare are set as part of the process of developing the SCI in association with the Shareholder and with approval by the Watercare Board of Directors. The process follows the receipt of the Mayor of Auckland's letter of expectation which includes the vision and objectives for Auckland and the outcomes sought by the Auckland Plan. A draft SCI is then prepared by Watercare as the basis of consultation with the Shareholder which identifies the relationship between Watercare's activity and delivery of the outcomes sought by the Mayor and those specified within the Auckland Plan. Prior to final adoption by the Board, comment on the final draft SCI is invited from Local Boards, the Maori Statutory Board and key stakeholders. This year, Watercare hosted a joint workshop between the Board and Auckland Council councillors to discuss water and wastewater strategy as a precursor to the development of a new water strategy, as required as part of the Auckland Plan.

*Watercare’s objectives are closely aligned with those of Auckland Council, Local Boards and key stakeholders such as tangata whenua.*

Of special importance are the Local Boards which represent local communities under a co-governance model with the Auckland Council governing body. Watercare maintains purposeful relationships with the Local Boards chairs and members arranged through a dedicated company executive which ensures flexible, transparent and timely communication and ready access to meaningful information. The relationship and channels of communication recognise the diverse needs of Local Boards and communities and the varying level of interest in Watercare’s services and projects.

**Performance of the Board and Chief Executive**

The performance of the Board is reviewed by the Shareholder annually, both in relation to the Board as a whole and the contribution of its individual members. Board remuneration is determined by the Shareholder. The performance of the Chief Executive is reviewed annually by the Board.

**Transparency in reporting**

Watercare remains committed to transparent reporting. Recognising this, the company publishes:

- an annual Statement of Corporate Intent (SCI)
- an annual Financial Plan
- annual and long-term Asset Management Plan (AMP)
- an annual report that reports performance against the SCI, non-mandatory measures, and the United Nations’ Global Reporting G3 Initiative guidelines (see page 116)
- an overview of current water storage levels and other information published weekly
- special reports and project newsletters for interested parties.

The Board agenda, papers and minutes of the previous meeting are made available in advance of the Board meeting through the company website.

**Setting standards of conduct for staff**

Watercare demands the highest standards of behaviour from its staff. All policies governing the conduct of employees are published on the company’s intranet including: Business Conduct and Ethics Policy, Gift and Inducement Policy Conflict of Interest Policy, Control of Discretionary Expenditure and Protected Disclosures Policy. All contracts managed by staff must be in writing. The policies also set out the delegated authority within the company. Watercare’s projects are subject to internal probity reviews, and external probity auditors are appointed to provide additional assurance on major projects.

**Complaints disclosure**

Any complaints against the company and the quality of response are recorded. Targets have been set for the management of these processes and the level of service is reported in the Annual Report, to the Shareholder quarterly, to the Board monthly and are made public at the board meetings and published on Watercare’s website.

**Whistleblowing**

The company has a specific policy to receive and deal with information about any serious wrong-doing within the company, as required by the Protected Disclosures Act 2000. Watercare’s policy prescribes how its Watercare staff and others report matters of serious wrong-doing, and provides contacts to whom such reporting can be made. The policy defines serious wrong-doing and applies to present and past employees, and to any individual either seconded to or working on a contract basis for Watercare.

**3. INTEGRITY**

**Corporate governance charter**

The charter defines the duties and obligations of the Board and Board members covering fiduciary duty, duty of care, diligence, legal and statutory duties and conflicts of interest. It incorporates the principles of the New Zealand Institute of Directors’ Code of Proper Practice for Directors, relevant sections of the

*Below: Members of the Watercare Board of Directors visit Ardmore Water Treatment Plant: from left, Tony Lanigan; Catherine Harland; Susan Huria; Ross Keenan (Chairman); and Jeff Todd; with Stuart Urquhart, Operations Controller and Gil Miers, Treatment Plant Manager.*



*Watercare's Board of Directors applies its specialist knowledge through subcommittees such as the Audit and Risk Committee and the Capital Projects Review Group.*

New Zealand Exchange Limited (NZX) Corporate Governance Best Practice Code and the Securities Commission's nine principles of corporate governance.

**Disclosures of interest**

A register of directors' interests is maintained by Watercare and is updated as and when necessary. Directors' interests are a standard agenda item at every Board meeting. Any disclosure of interest is recorded in the meeting minutes and the participant refrains from taking part in the discussion or voting on any related resolution. In 2011/12, Board members disclosed a potential conflict of interest on two occasions.

**Audit and Risk Committee**

The Board is responsible for appointing the members of the Audit and Risk Committee. The committee's role is to assist the Board to fulfil its responsibilities in the areas of financial reporting and to provide assurance regarding compliance with internal controls, policies and procedures. Its responsibilities are established in the Audit and Risk Committee Charter which is reviewed annually. The committee has no delegated authority. In carrying out its duties, the committee meets regularly with the external and internal auditors (both with and without management present) and the management of the company. At least one member must have accounting or financial management expertise. The chairman of the Board may not be chairman of the Audit and Risk Committee. The current chairman of the Audit and Risk Committee is Jeff Todd. All Watercare's directors receive the papers of the Audit and Risk Committee in advance, and all are invited to attend committee meetings.

**Organisation Committee**

Following completion of the integration process the Board established an Organisation Committee to provide a link between the Chief Executive and the Board around senior staff remuneration and organisational development. The committee consists of two Board members: Susan Huria as Chair, and Ross Keenan. The Committee

provides a reference point for the Chief Executive in matters around organisational change and succession planning.

**Capital Project Review Group**

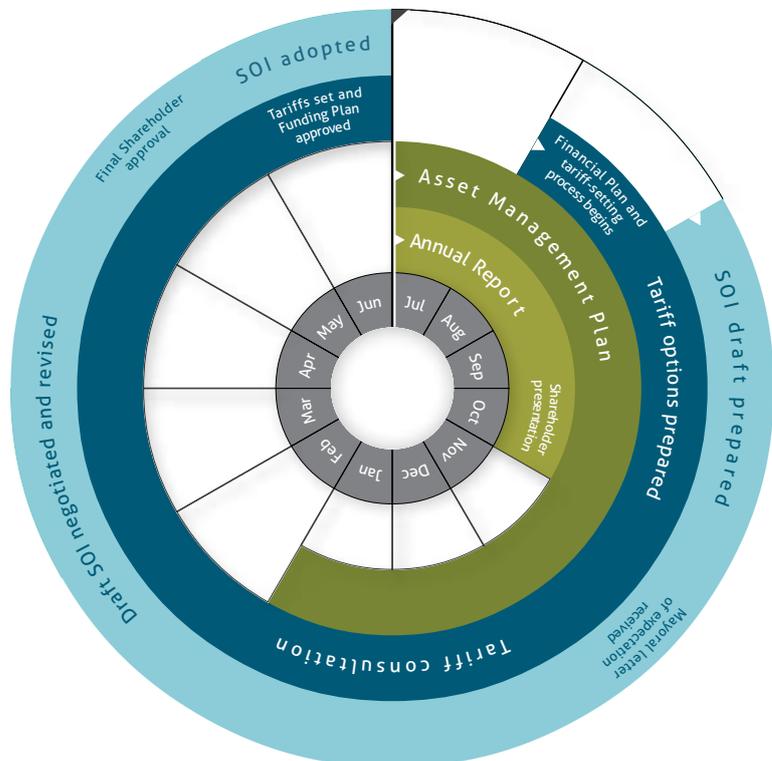
The Capital Projects Review Group (the Group) is chaired by a member of the Watercare Board of Directors, currently David Clarke, and includes other Board members and senior management as required. The Group is responsible for reviewing the process and formulation of the company's Asset Management Plan (AMP), including a review of the business drivers and prioritisation methodology included within the AMP framework. The Group also reviews the capital planning and expenditure process, the project reporting framework and the development of specific strategic projects. Papers that

are reviewed by the Group are circulated to all Board members and all members of the Board of Directors can attend Group meetings. All major capital projects require approval of the full Board.

**Regular independent reviews**

Watercare subjects its planning, operations and reporting to review by independent consultants on a regular basis. This year, the Board and the Audit and Risk Committee received reports from specialist advisers on risk and control issues to inform the maintenance and development of good practice and procedures. The company is committed to a culture of continuous improvement and seeks independent feedback from specialist advisers as necessary to achieve this objective.

**WATERCARE GOVERNANCE PLANNING CYCLE\***



- SOI Process
- Financial Planning Process
- Asset Management Plan
- Annual Report

\* From 1 July 2012, Watercare will produce a Statement of Intent (SOI) rather than an SCL.



Suzanne Naylor, Operations Headworks Engineer, and Anin Nama, Network Manager Operations, with Watercare Board members at Cosseys Dam in the Hunua Ranges.

**4. STEWARDSHIP**

**Indemnity and insurance**

Watercare has executed a deed of indemnity with each director which indemnifies the director in accordance with the company’s constitution, and grants certain rights in respect of access to documents and the maintenance of liability insurance cover.

**Board meetings**

The Board had seven Board meetings scheduled during the year. In addition, its members met three times in workshops to allow the Board to progress matters of policy to finality. The matters discussed were later dealt with at Board meetings once the policies and strategies were finalised. At two meetings the public was invited to provide feedback (one on performance for the previous year and the other on the SCI for the following year). The Board invites the public to attend all public sessions of Board meetings.

**Risk management**

Watercare’s framework for risk identification, measurement and reporting is well developed, and meets the requirements of the Australian and New Zealand Standard 4360. There are regular external reviews to ensure the company meets and exceeds good-practice measures in risk management. As part of the risk management framework, the company has established a Risk Steering Committee which meets six times per year to monitor emerging risk and risk-mitigating

actions and strategies. The committee comprises the Chief Executive, senior management, the internal auditor and the risk manager. Risks that have serious consequences are in turn directly monitored by the Board, with updates presented to each Board meeting.

**External auditor**

The Auditor-General is the auditor of the company’s financial statements. The Auditor-General has appointed Jamie Schmidt, using the staff and resources of Deloitte, to undertake the external audit work on behalf of the Auditor-General, in accordance with the Auditor-General’s Audit Standards, which incorporate New Zealand Auditing Standards. Deloitte has no relationship with the company outside of the audit and related assurance activities. This satisfies the independence requirements of the Auditor-General and the Institute of Chartered Accountants of New Zealand.

**Regulators**

Watercare is subject to regulation in planning, health and environmental matters. The principal regulators include Auckland Council, Waikato Regional Council and the Ministry of Health. The company also engages with these bodies by providing input on the impacts of existing and proposed policy and regulation on Watercare’s activities.

**Advisory groups**

Watercare has a standing consultative and advisory committee, the Environmental

Advisory Group that comments on company plans and projects in 2011/12. The Environmental Advisory Group comprises experts who advise on how the company’s activities impact on the environment. In addition, Watercare is developing a new Maori advisory group, the Mana Whenua Forum, which will advise Watercare on how its plans and operations impact on Maori and on the relationship between the natural environment and Maori. The report of the Environmental Advisory Group and a summary of the new Mana Whenua Forum can be found on pages 22 and 23.

**Other stakeholders**

Watercare consults extensively with the Shareholder, the Accountability and Performance Committee, environmental regulators, special interest groups and advisory groups. Considerable effort is also put into engaging with parties and communities likely to be affected by the activities of the company in their neighbourhood. The performance of Watercare’s performance is very closely monitored in terms of the level and quality of the service provided to both customers and the community. The level of service is reported to the Board monthly and to the Shareholder on a quarterly basis.

**Official information requests**

In 2011/12, Watercare received 12 requests under the Local Government Official Information and Meetings Act 1987. The average response rate was 7.3 days.

Board Member Attendance 2011/12	Date Appointed	Date Retired	Attendance at Board meetings/workshops	Attendance at Audit & Risk Committee	Attendance at Capital Projects Working Group
Ross Keenan (Chairman)	March 2010		10/10	4/5	4/4
David Clarke (Deputy Chairman, Chair Capital Projects Working Group)	July 2008		10/10		4/4
Mike Allen	Dec 2011		4/5	0/1	
Susan Huria	July 2008		9/10		
Peter Drummond	March 2010		7/10		4/4
Jeff Todd (Chairman, Audit & Risk Committee)	May 2007		10/10	5/5	
Catherine Harland	May 2011		10/10	5/5	
Tony Lanigan	May 2011		9/10		4/4
Pat Snedden	Dec 2002	Dec 2011	5/5	3/3	

## Watercare at work

## LOCAL BOARD RELATIONSHIPS

Local Boards are a key part of Auckland's governance, enabling local representation and decision-making on behalf of local communities. There are 21 Local Boards throughout the Auckland region from Rodney to Franklin.



*Pictured left to right: Central Interceptor Project Manager Mike Sheffield discusses the project with Albert-Eden Local Board members and Council Parks staff; contractors installing new water filtration equipment at the Pukekohe Water Treatment Plant; Planning Manager Belinda Petersen talks with local residents at a Central Interceptor community open day.*

Watercare recognises the important role of Local Boards in local decision-making and community representation, and has worked to build purposeful relationships with the board chairs and members based on flexible, transparent and timely communication.

An operational engagement plan has been developed, agreed and is in place with the Local Boards to help facilitate the working relationship. This is supported by a dedicated staff executive who works to help maintain the relationships and communication flows. The nature of Watercare's relationship with various Local Boards varies due to the range of issues, local priorities and varying levels of community interest. To date, the majority of Local Board engagement has focused on areas where there is significant activity or public interest. However, the major premise for all Local Board communication has been a

free flow of information regarding issues of mutual interest consistent with a no surprises approach.

Notable activities over the past 12 months have been with Rodney Local Board in engaging with the Helensville community to obtain resource consents for the wastewater treatment plant, and with the Kumeu, Huapai and Riverhead community to prepare for new wastewater connections. Similarly, Watercare has communicated with the Franklin Local Board and key stakeholders during installation of the new \$14 million Pukekohe local watermain. Local Boards in the central area have provided Watercare with constructive feedback on works in local parks associated with the proposed Central Interceptor project, and feedback from the boards was incorporated into five public open days held along the proposed route.

Watercare has also worked with the Local Boards to help increase understanding of the Auckland-wide network discharge consent application which will build on the work previously undertaken on the North Shore in authorising and managing wet-weather overflow impacts on sensitive receiving environments.

Watercare's issues that impact Local Boards are diverse and varied, and require a variety of approaches. The company will continue to remain flexible and responsive in working with Local Boards to best meet their individual needs.

In the coming 12 months, Watercare will look to build on the excellent foundation established and remain responsive to the needs of Local Boards in representing the interests of their diverse local communities.

# ENVIRONMENTAL ADVISORY GROUP

31 July 2012



The Environmental Advisory Group (EAG) has worked with Watercare over the course of the year to advise and challenge its approach to the environmental aspects of providing integrated water supply and wastewater services across the region. With our collective experience and involvement in community environmental organisations, we provide Watercare with insights into how its projects and activities may be received within the community.

Key projects that EAG has been involved in are the Central Interceptor and the Greater Auckland Regional Network Discharge Consent, two projects that are fundamental to Watercare’s strategy for managing wastewater overflows. The EAG strongly supports the Central Interceptor project as a means of addressing, in an integrated manner, inner Auckland’s future growth and the current environment impacts associated with wet-weather wastewater overflows. We have provided advice as the project develops and are monitoring the implications of the resource management application required for the construction and operation of the Central Interceptor.

Other issues that the EAG has actively contributed to during the year include:

- ◆ the Auckland Plan and what it means for Watercare’s activities
- ◆ Water Demand Management Strategy
- ◆ the future of the trade waste regulation for the Auckland region, and
- ◆ ongoing initiatives to upgrade the non-metropolitan wastewater treatment plants inherited from the former territorial authorities.

These issues will continue to be critical for Watercare during the coming year, and the EAG will continue its involvement in them.

In March 2012, the Maori Advisory Group (MAG) held its final meeting celebrating ten years of the MAG. The EAG wishes to acknowledge and thank the MAG for its contribution to Watercare’s projects over the years. The two groups have had a number of shared meetings and workshops over the years and we have valued the interaction and shared discussion on the environmental and cultural aspects of Watercare’s projects.

It has been a very demanding year for Watercare as it dealt with the extra responsibilities arising from council amalgamation and we have appreciated the hard work of the staff members who brief us. We also wish to commend the organisation for the assistance it has given to Christchurch – once again going the extra mile.

We look forward to continuing to work with Watercare in the year ahead.

**Paul Walbran**  
*Chairman*  
Environmental Advisory Group

## MEMBERS

**Paul Walbran**  
Water quality, harbour health and heritage

**Ken Catt**  
The water cycle

**Anne Fenn**  
Environmental policy and implementation

**Carol McSweeney**  
Air quality, ecosystems and botany

**Judy Bischoff**  
Water and land use, energy

**Bob Tait**  
Biosolids

## ENGAGEMENT WITH TANGATA WHENUA

### Mana Whenua Forum

Watercare has recently consulted with hapu and iwi from throughout Tamaki Makaurau on their preferred form of engagement with Watercare. Following a series of hui (meetings), a resolution was passed to establish a Mana Whenua Forum in conjunction with Watercare.

Hapū and iwi in Tāmaki Makaurau have agreed to sign a Relationship Agreement with Watercare. The Forum will comprise designated representatives from each Mana Whenua entity.

The Relationship Agreement has been designed to promote partnership, protection, and focused action. An associated Charter has been prepared which includes the following principles:

- Relationship Building – Building understanding and enhancing the relationship between mana whenua and Watercare
- Integrity – Ensuring cultural integrity and respect
- Opportunities – Identifying opportunities of mutual interest and benefit
- Best practice – Advising on best practices for meeting Watercare’s cultural, environmental, social and economic responsibilities
- Efficiency – Establishing efficient, collective processes for building the relationship and engagement.



*Watercare wishes to thank Tame Te Rangi for his contribution as Mana Whenua Forum Interim Chair.*

### Māori Advisory Group

The Māori Advisory Group (MAG) was established in 2001 in recognition of the stewardship role of Māori in relation to the supply of water services in the Auckland region. The group’s role was to provide advice to Watercare from a Māori perspective on Watercare’s response to national and local policy and plans and the development of Watercare’s infrastructure projects. In addition, the MAG provided guidance to Watercare’s senior managers on cultural issues and facilitated relationship building and understanding between Watercare management and iwi. The MAG was not established to represent the different Mana Whenua groups, but rather to advise Watercare on matters relating to iwi, including how to approach and relate to the mana whenua groups. Recent projects the MAG has provided advice on include the Hunua No. 4 Watermain project, the Central Interceptor project, wastewater network consents and the management of biosolids.

Watercare acknowledges and thanks the members of the Māori Advisory Group for their contribution to Watercare over the last decade by assisting management in understanding Māori culture and protocols, the implications of the Treaty of Waitangi, the history of the region from an iwi perspective, the value of water to Māori, and the significance of kaitiakitanga (guardianship and conservation). In particular, Watercare wishes to recognise the MAG Chairman, Bill Kapea, for his long-standing commitment and support to Watercare and the MAG over years.



#### The Māori Advisory Group members were:

**Chairman**  
William Kapea

**Members**  
Norma Rae Arlidge  
Paul Brown

George Kahi  
Kowhai Olsen  
Pita Pou  
Lucile Rutherford  
Heta Tobin  
Pamera Warner

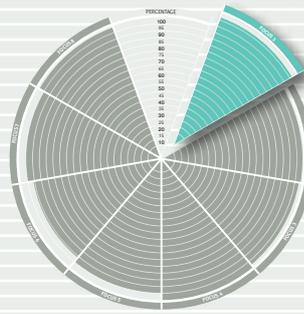
1

# SAFE AND RELIABLE WATER

Management of water resources to provide a safe and reliable water supply.



*Sedimentation beds at Ardmore Water Treatment Plant, where settlement of suspended solids takes place as part of the water treatment process.*



OVERALL SCORE FOR FOCUS AREA

**97%**

See page 5



Watercare is on schedule to complete a \$22 million upgrade of the company's Ardmore Water Treatment Plant which will provide additional capacity and increased security of water supply to Aucklanders. The upgrade works will enhance the plant's 'Rapid Restart' capability, reducing any disruption of Auckland's water supply following operational interruption. In addition, improved solids-handling systems will improve long-term capacity and provide additional environmental protection against potential overflows. Contractors have already completed de-sludging, drainage and pipe-strengthening activities on site, and work is continuing on construction of overflow chambers and earthworks.

*Anin Nama (r), Operations Manager Networks, and Stuart Urquhart (l), Operations Controller, surveying the sedimentation beds at Ardmore Water Treatment Plant.*

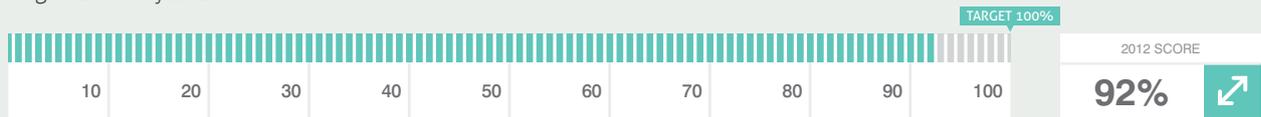


1

# SAFE AND RELIABLE WATER

## 1a. Percentage of drinking water treated in Watercare’s plants that are graded ‘A’ by the Ministry of Health.

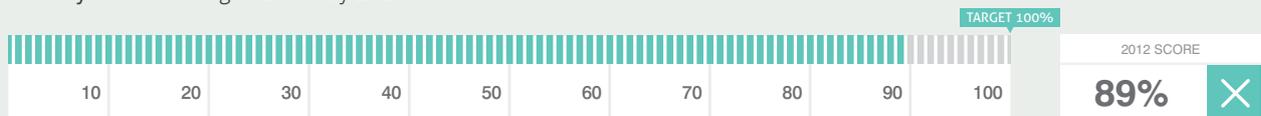
Target: 100% by 2020.



Water quality has been maintained based on the 2010 grading assessment carried out by the Auckland District Health Board on behalf of the Ministry of Health<sup>1</sup>. All the metropolitan water treatment plants that supply the bulk of drinking water to the people in the Auckland region meet the ‘A’ grade standard.

Of the smaller non-metropolitan plants transferred to Watercare on 1 November 2010, nine remain ungraded. Watercare is continuing with a programme of work to ensure all plants meet the ‘A’ grade standard by 2020, at a capital cost of \$100 million for both water treatment plants and the distribution network.

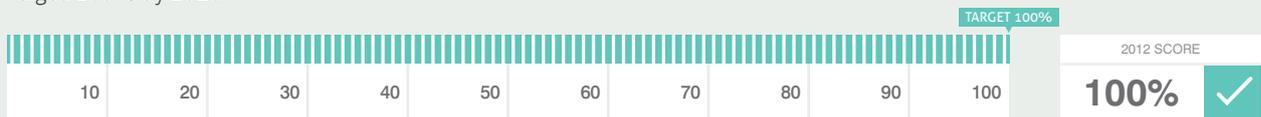
## 1b. Percentage of drinking water distributed through the Watercare network that is graded ‘a’ by the Ministry of Health. Target: 100% by 2020.



The same risk-based assessment used for water treatment plants also applies to the pipes and pump stations that make up the water distribution networks. The metropolitan network is graded ‘a’ under the Ministry of Health’s standards and supplies the bulk of the drinking water to the people in the Auckland region. Of the 15 non-metropolitan networks (inherited on 1 November 2010), three are ‘a’ graded, three are ‘b’ graded and nine are ungraded. Watercare has set in place a programme to ensure that all the networks meet the ‘a’ grade standard by 2020.

## 1c. Percentage performance against Statement of Corporate Intent target: quality of drinking water.

Target: 100% by 2020.



Watercare fully met the Ministry of Health’s Drinking Water Standards for New Zealand (DWSNZ), at Ministry of Health-graded water treatment plants (Ruler 1a). The DWSNZ standards are based on a quality assurance approach, underpinned by the requirement to develop public health risk-management plans. Information on DWSNZ is available at [www.moh.govt.nz/water](http://www.moh.govt.nz/water).

<sup>1</sup> The next grading assessment is due in the last calendar quarter of 2012.

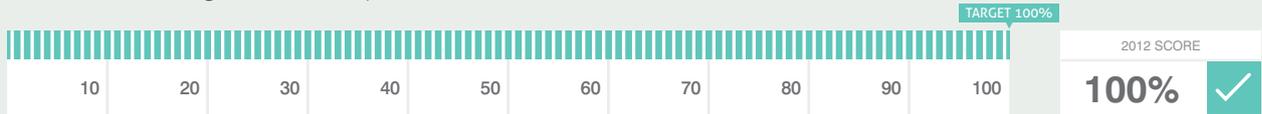
**SUPPORTING INFORMATION**

- Fig. 1 Water and wastewater facts
- Fig. 8 Grading of water treatment plants and networks
- Fig. 9 Drinking water quality
- Fig. 10 Typical analysis of Auckland's drinking water
- Fig. 11 Water supply interruptions
- Fig. 12 Water supply restoration
- Fig. 13 Water quality complaints

**KEY**

- ✔ Target met
- ✘ Target not met
- ↗ Good performance but could do better
- ★ Presentation of ruler updated from 2011

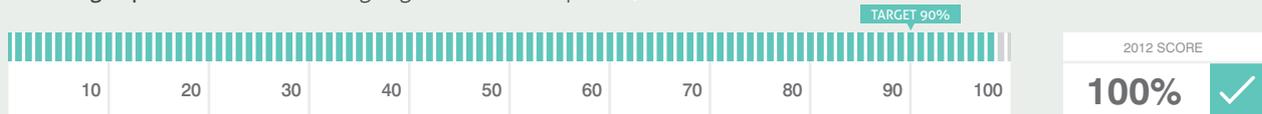
**1d. Percentage performance against Statement of Corporate Intent target: service interruption to customer connection ratio. Target: less than 10 per 1,000 connections.**



Watercare monitors the number of times the water supply to its customers is disrupted as a measure of reliability of service. The SCI target is set at achieving fewer than 10 interruptions per 1,000 connections for the year. The result for the year from 1 July 2011 was 5.8, which was well within the target.

2010	2011
100%	100%

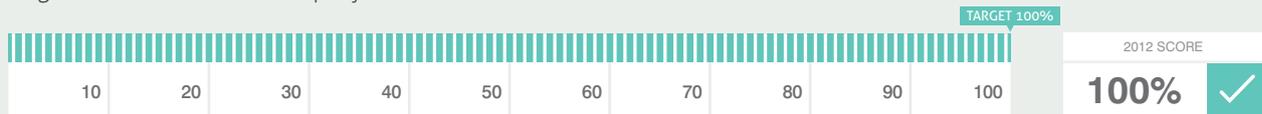
**1e. Percentage performance against Statement of Corporate Intent target: service restoration following unplanned shutdowns. Target: greater than or equal to 90%.**



Watercare has a target of restoring greater than 90% of unplanned water shutdowns within 5 hours. The result for the 2011/12 period was 98%, achieving the target.

2011
100%

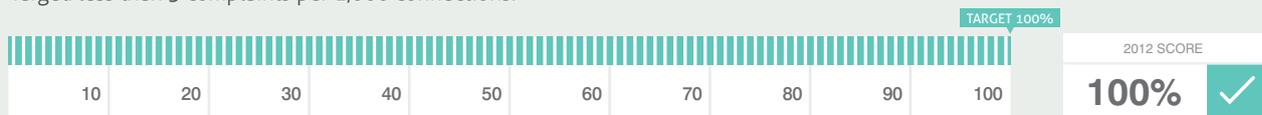
**1f. Percentage performance against Statement of Corporate Intent target: unaccounted-for water loss. Target: less than 17.7million m<sup>3</sup> per year.**



Watercare operates a continuous process of identifying, assessing and addressing water losses from its system that cannot be accounted for. For 2011/12 the volume of unaccounted-for water from the Watercare system was 15.2 million m<sup>3</sup> against a target of less than 17.7 million m<sup>3</sup>, achieving the target.

2011
100%

**1g. Percentage performance against Statement of Corporate Intent target: water quality complaints. Target: less than 5 complaints per 1,000 connections.**



Watercare monitors the number and type of water quality complaints received from customers. The result of 4.1 complaints per 1000 connections covering taste, odour and appearance per 1,000 connections was lower than the target of 5 per year.

2011
88%

## Watercare at work

## Cost-effective investment providing clearer drinking water for Pukekohe customers

Watercare inherited the Franklin Water Treatment Plant facilities on 1 November 2010, and quickly began a retrofit upgrade project to address a number of complaints from Pukekohe customers about ongoing discolouration of local drinking water. Prior to the plant upgrade, naturally occurring iron and manganese particles in the bore water were reacting to the addition of chlorine as part of the treatment process, causing a slight (completely non-hazardous) orange tint in some Pukekohe residents' treated tap water.

In mid-2011 Watercare's Water Supply Process Engineering group began pilot testing of additional filtration systems at Pukekohe to address the water discolouration, a problem unique to the local water supply. Water Supply Operations Manager Shayne Cunis says that Watercare worked with contractor Canadian Pacific Limited to reach a solution to the problem which utilises three containerised membrane filtration units. The containerised units were designed so that when they are no longer required at Pukekohe they can be relocated and stored for emergency use, such as

providing a treated water supply in the event of a natural disaster.

The containerised membrane filtration units re-use several high-quality filtration membranes that had become available as part of Watercare's expansion project at the Waikato Water Treatment Plant. This approach allowed the company to reduce the overall equipment costs of the project significantly, without compromising on the quality of water treatment.

The filtration process now in use at Pukekohe advances the oxidation reaction within the water treatment plant, removing the iron and manganese solids by way of a filtration barrier and allowing Watercare to provide Pukekohe residents with vastly improved drinking water. Shayne says the project was completed in January 2012, and Watercare has since seen a significant reduction in the number of water quality complaints from Pukekohe customers. "Since the completion of this project we've noticed a huge reduction in the number of 'dirty water' complaints being received from Pukekohe customers, from almost 50 per month in late 2010 to virtually none in 2012," he says.

Shayne explains, "Watercare is working on a permanent long-term solution which addresses Pukekohe's requirement for additional water supply due to population growth. We're currently constructing a new water supply pipeline which will draw Pukekohe drinking water from the Waikato Treated Watermain, and this is scheduled for operation by June 2013."

Process Engineer Jeremy Booth says the Pukekohe membrane plant project is just one aspect of Watercare's innovative approach to upgrading the company's water treatment facilities in the Franklin district. "We've made a substantial investment into automated, online monitoring of water treatment facilities in Franklin, which means we're able to keep an eye on water quality from our centralised control room and act quickly if there's a problem."

Jeremy adds that at a number of smaller local facilities – such as the water treatment plant at Glenbrook Beach – Watercare has installed UV treatment systems, and these have been very successful in helping to provide local communities with safe and reliable drinking water.

*Pictured left to right are: Process Engineer Jeremy Booth, Southern Area Water Supply Manager Gil Miers, and Senior Process Engineer Tom Surrey on site at Watercare's Pukekohe Membrane Plant.*



## Water Utility Consumer Assistance Trust established to help support at-risk Auckland consumers

Watercare established the Water Utility Consumer Assistance Trust in late 2011 with the purpose of providing "financial support to customers of Watercare who are struggling to manage their water and/or wastewater costs."

The trust has been granted a nominal budget of up to \$1 million per year. The Trust relies heavily on advice from budgeting centres including the Otara, Otahuhu, Mangere and Auckland Central budgeting services. The Trust has its own secretary and operates in a fully independent manner.

Customers (including tenants) are alerted to the trust via the Watercare credit team; our Customer Centre; in overdue account reminder letters; on the Watercare and Trust websites [www.waterassistance.org.nz](http://www.waterassistance.org.nz); and via budget advisory service and Citizens' Advice Bureau offices.

### Trust results as of July 2012:

- 150 Watercare customers registered with the Trust
- 52 applications granted – total value \$41,192

### Trustees:

- John Lusk (chairman)
  - retired senior commercial lawyer (Watercare Services Limited appointee)
- Dr Bruce Hucker (deputy chairman)
  - former Deputy Mayor of Auckland City (Watercare appointee)
- Anne Candy
  - former Deputy Mayor of Manukau City (Maori Women's Welfare League appointee)
- Lauren Godsiff
  - Auckland City Mission appointee
- Maureen Little
  - Presbyterian Support Services appointee

## Watercare Harbour Clean-Up Trust

**24,015,910**

Total estimated individual pieces of litter collected from Auckland waterways since the Harbour Clean-Up Trust's inception in December 2002, based on an average of 8 individual pieces of trash per litre.

**3,001,989 LITRES**

Volume of litter collected since the inception of the Harbour Clean-Up Trust across the Auckland region.

**2,076,320**

Total estimated individual pieces of litter collected from Auckland waterways in the year July 2011 – June 2012, based on an average of 8 individual pieces of trash per litre.

**2923.5 HOURS**

Time worked by the Watercare Harbour Clean-Up Trust during the year July 2011 – June 2012.

**16,342.5 HOURS**

Total number of volunteer hours which assisted the Watercare Harbour Clean-Up Trust during the year July 2011 – June 2012.



*Watercare is the principal sponsor of the Watercare Harbour Clean-Up Trust, which works to remove litter from Waitemata Harbour and the gulf islands. Central to the Trust's activities is 'The Phil Warren' boat, pictured here alongside the Auckland Ferry Terminal.*

## 2

## HEALTHY WATERWAYS

Management of wastewater discharges to maintain or improve the health of the environment.

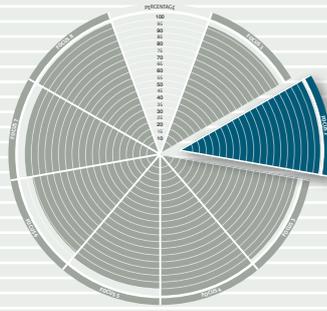


Maintaining the health of Auckland's valuable harbours, estuaries, beaches and islands remains a fundamental part of Watercare's role in the community. The company's 20 wastewater treatment plants and network of wastewater pipes continue to treat the majority of Auckland's wastewater to a very high standard, helping to protect the health of Auckland's waterways.

Watercare closely monitors all wastewater discharges, dry-weather sewer overflows, unplanned sewer interruptions, and rates for responding to urgent wastewater blockages.

In 2011/12 Watercare performed at an extremely high level against the company's performance targets and consent conditions.

*Infrastructure Projects Manager Dave Shepherd on site during construction at The Concourse, Watercare's new 13-million-litre wastewater overflow facility in Henderson.*



OVERALL SCORE FOR FOCUS AREA

**99%**

See page 5



2

# HEALTHY WATERWAYS

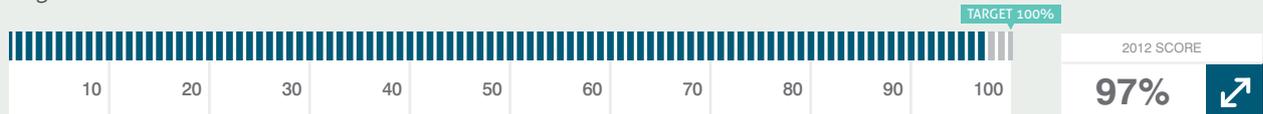
**SUPPORTING INFORMATION**

- Fig. 14 Resource consent compliance
- Fig. 15 Wastewater treatment plant discharge
- Fig. 16 Treated wastewater standards
- Fig. 17 Overflows from wastewater systems
- Fig. 18 Wastewater network interruptions
- Fig. 19 Wastewater network restoration performance

**KEY**

-  Target met
-  Target not met
-  Good performance but could do better
-  Presentation of ruler updated from 2011

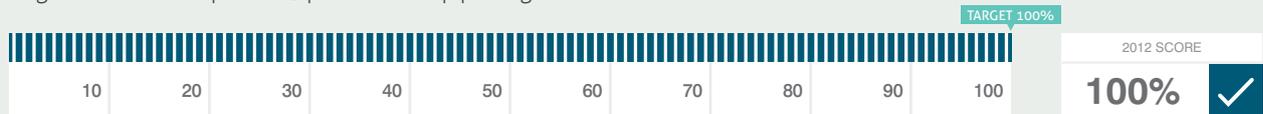
**2a. Percentage of wastewater discharged compliant with consent conditions (excluding minor or non-technical).**  
Target: 100%.



Watercare achieved a 97% level of overall compliance with consent requirements at its wastewater treatment plants on a volumetric basis, excluding minor and technical breaches. Compliance with consents at the major urban wastewater treatment plants was 99% against a target of 100%. The non-compliance reported this year was due to illegal trade waste discharge and an off-site power failure, circumstances beyond Watercare’s control. There were several transient periods of technical or minor non-compliance<sup>1</sup> at the Mangere Wastewater Treatment Plant during the year. An upgrade programme has been implemented to address this situation.

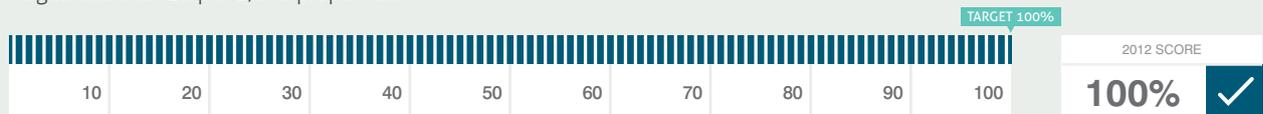
The remaining non-compliance levels were influenced by the poor performance of some of the rural wastewater treatment plants transferred to Watercare by legacy councils upon integration. These plants performed at 64% against a target of 65% by 2015, and a target of 100% compliance by 2020. The company has developed a longer-term strategy and more immediate measures, forecast to cost \$50 million, to reduce the impacts of these plants on the environment.

**2b. Percentage performance against Statement of Corporate Intent target: dry-weather sewer overflows.**  
Target: less than or equal to 15 per 100km of pipe length.



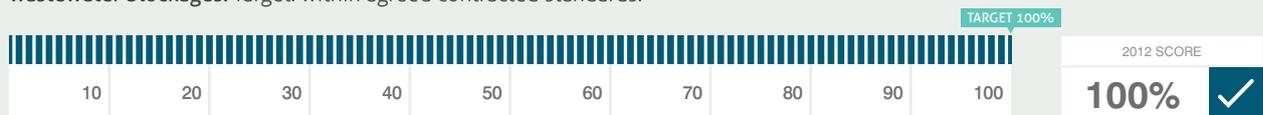
Watercare reports on the number of wastewater overflows from its retail network during dry weather as a measure of the ability of the network to manage current demand. The result for the 2011/12 year was 2.3 overflows per 100km of wastewater pipe, well within the target.

**2c. Percentage performance against Statement of Corporate Intent target: unplanned sewer interruptions.**  
Target: less than 10 per 1,000 properties.



The number of unplanned wastewater network interruptions as a result of breaks and chokes is a measure of the integrity of the system. The result for the 2011/12 year was 6.4 incidences, which was within the target.

**2d. Percentage performance against Statement of Corporate Intent target: response rate for urgent wastewater blockages.**  
Target: within agreed contracted standards.



The 2011/12 SCI required Watercare to respond to all urgent wastewater blockages within the standard agreed with contractors, 98% of the time. The target was achieved 99% of the time.

<sup>1</sup> For instance, a technical non-compliance might be late completion of documentation; minor non-compliance might be a single reading above a target, the impact of which is total load based where there is no material impact on the environment. In each case, the regulator Auckland Council, is fully informed.

Watercare at work

# Watercare project to support urban growth in South Auckland passes major milestone



A \$31.5 million project by Watercare to support urban growth in the suburbs of Manurewa, Takanini, Wattle Downs and Papakura has passed a major milestone, with a newly-constructed wastewater pump station and pipe extension going live.

Watercare’s new high-capacity pump station has been built alongside the existing Manurewa Pump Station in Wattle Farm Reserve. Senior Engineer Paul Gowans says the old pump station, which was demolished in June, was reaching the end of its service life. “The new pump station, which is the largest of its kind in South Auckland, houses four heavy-duty pumps,” explains Paul. “It also provides 1.5 million litres of storage capacity and will provide Watercare with improved operational flexibility for the region.”

Paul says the construction of the pump station was a major undertaking and was carried out over a 19-month period between August 2010 and March 2012. “If you were to look at the pump station from the outside,

you would have no idea of its true scale. Inside, there is a major shaft that drops 14 metres underground. At the bottom are the pumps, separated from the storage well by a thick, reinforced concrete wall.”

The pump station pushes wastewater into two major wastewater pipes: the Southern Interceptor and the Southwestern Interceptor. As part of the project-the Southwestern Interceptor has been extended by 4.2 kilometres from the pump station to Roscommon Road. Paul says extending the Southwestern Interceptor has provided additional wastewater network capacity for the growth forecast in South Auckland, and provides Watercare with greater flexibility for future maintenance work.

The company adopted best-practice construction methods throughout the project to minimise the impact on the surrounding community. For example, Watercare used a trenchless method to install the section of pipe that runs beneath Mahia Road. By not having to excavate a deep trench, a two-way

flow of traffic and access to properties was maintained during the work.

A tunnel-boring machine was used to install the section of pipe beneath Roscommon Road, again minimising the impact on the local community. One of the first custom-made machines to be made in New Zealand, it worked from February to November 2011, installing up to 15 metres of pipe per 12-hour shift. The machine’s head cut through the earth, and soil was removed using an underground conveyor belt and small locomotive.

With the pump station and pipe extension constructed and demolition of the old Manurewa Pump Station complete, project work will now focus on reinstating the site and planting vegetation at Wattle Farm Reserve.

This project is part of a programme of work Watercare has planned in support of urban growth in the area. Other work includes diverting the Manurewa Branch Sewer and extending the Mahia Branch Sewer in Takanini.

### Southwestern Interceptor – project timeline:

January 2009 to March 2010 <b>Project planning and design</b>	August 2010 to November 2011 <b>Construction of gravity wastewater pipe</b>	August 2010 to November 2011 <b>Construction of pressure wastewater pipe</b>	August 2010 to November 2011 <b>Construction of pump station</b>	December 2011 to March 2012 <b>Commissioning of pump station and new wastewater pipes</b>	May – July 2012 <b>Decommissioning and demolition of the old Manurewa Pump Station</b>
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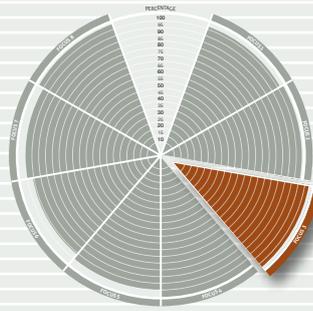
3

# HEALTH, SAFETY AND WELL-BEING

To be an industry-best workplace.



*Water network contractors replace a water meter at a Watercare customer's residential property in East Auckland.*



OVERALL SCORE FOR FOCUS AREA

**98%**

See page 5



Watercare remains focused on recruiting, developing and retaining highly skilled people in all aspects of the company's activities. The company maintains a long-term commitment to industry-best health and safety practices, and to providing ongoing training and development opportunities to employees.

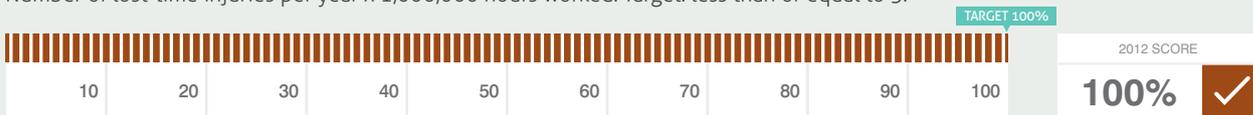
Watercare employs a highly diverse and skilled workforce from a range of nationalities, ethnicities and backgrounds. In addition, all water and wastewater operational staff are actively encouraged to pursue formal qualifications. The company continues to provide a comprehensive occupational health service to all staff, including: medical consultation, influenza immunisation, mandatory vaccinations for working in certain environments, skin checks and rehabilitation programmes.

3

# HEALTH, SAFETY AND WELL-BEING

**3a. Percentage performance against Statement of Corporate Intent target: lost-time injury frequency rate.**

★ Number of lost-time injuries per year x 1,000,000 hours worked. Target: less than or equal to 5.

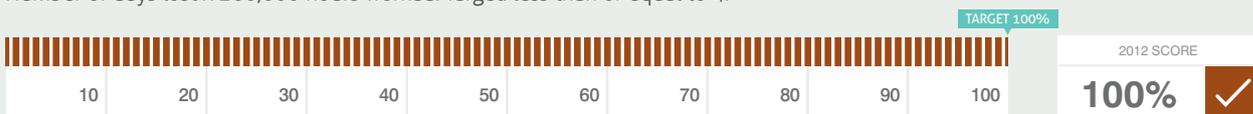


The lost-time injury frequency rate (LTIFR) measures the number of lost-time injuries per million hours worked and allows for comparisons across industries. Watercare achieved a rate of 1.39 which is well below the SCI target of not more than 5. This year, the company held 178 health and safety inductions which were attended by 2,025 internal and external people. Additionally, 284 health and safety inspections were completed.

2008	2009	2010	2011
85%	95%	90%	92%

**3b. Percentage performance against target: lost-time severity rate.**

★ Number of days lost x 200,000 hours worked. Target: less than or equal to 4.

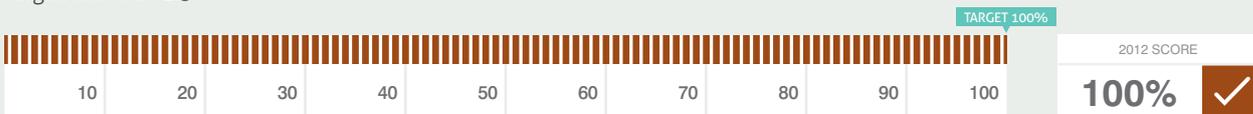


The severity rate measures the number of days lost from injury per 200,000 hours worked. Watercare had an injury severity rate of 0.0278 at the end of the 2011/12 financial year, which decreased from 9.48 the previous year. This significant reduction reflects the fact that the serious injuries occurring in the previous year were annualised out of the year-end results. The low severity rate reflects the fact that there was only one lost-time incident in the 12-month period and the total lost time for that incident was 72 hours.

2008	2009	2010	2011
60%	95%	90%	92%

**3c. Percentage performance against Statement of Corporate Intent target: staff wellness.**

★ Target: less than 2.5.



As a measure of staff wellness Watercare monitors and reports the levels of absence due to staff illness. During 2011/12 The company recorded that 1.81% of available work hours were lost due to the illness of staff. This is significantly below the SCI target of 2.5.

2008	2009	2010	2011
75%	85%	80%	70%

Watercare provides a comprehensive occupational health service to all staff including: medical consultation, influenza immunisation, mandatory vaccinations for working in certain environments, skin checks and rehabilitation programmes. Employee Assistance Programme services are also available to all employees on a confidential basis.

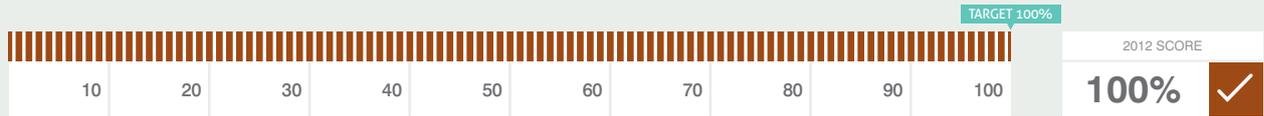
**SUPPORTING INFORMATION**

- Fig. 20 Lost-time injury frequencies
- Fig. 21 Health and safety notes
- Fig. 22 Staff wellness and absenteeism
- Fig. 23 Staff voluntary turnover
- Fig. 24 Investment in staff
- Fig. 25 Staff service profiles
- Fig. 26 Staff demographics
- Fig. 27 Average staff numbers
- Fig. 28 Workforce employment type, contract and region

**KEY**

-  Target met
-  Target not met
-  Good performance but could do better
-  Presentation of ruler updated from 2011

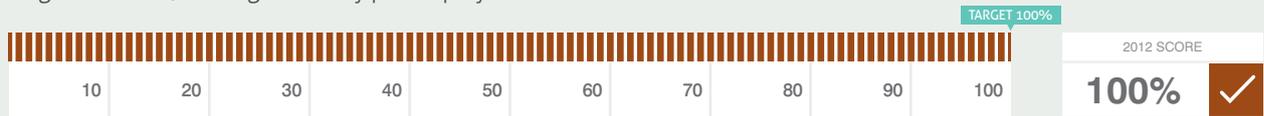
**3d. Percentage performance against Statement of Corporate Intent target: staff turnover. Target 10 to 12%.**



Voluntary staff turnover at 11.81% was within the SCI target of 10 to 12%, which is generally recognised as a healthy staffing refreshment rate.

2008	2009	2010	2011
45%	100%	50%	100%

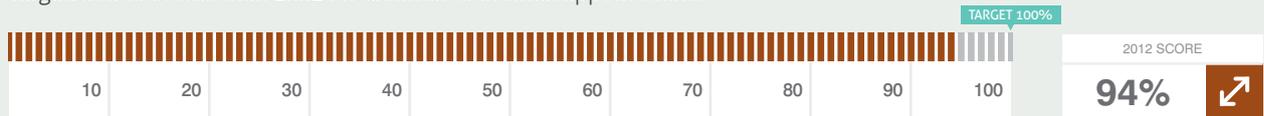
**3e. Percentage performance: staff training.**  
★ Target: 20 hours, training and study per employee.



Watercare continued to invest significantly in the training and development of staff during 2011/12, with an average of 21.7 hours per employee spent undertaking training or study throughout the year. The Engineering Graduate support group continues with 25 graduates currently working towards chartered status. All water and wastewater operational staff are actively encouraged to pursue formal qualifications, with 4 staff achieving Certificate or Diploma-level qualifications during 2011/12.

2008	2009	2010	2011
85%	90%	85%	69%

**3f. Percentage performance against Statement of Corporate Intent target: staff appointment ratio.**  
★ Target: a ratio of less than 1.6:1 for external to internal appointments



The ratio of new hires (excluding entry positions) to promotions is monitored and a more challenging target was set for this year of 1.6:1 compared to 2.25:1 last year. During the period, Watercare achieved a ratio of 1 promotion to every 1.7:1 new hires, the majority of new hires being at an entry level.

2008	2009	2010	2011
45%	85%	45%	92%

**3g. Percentage performance: Employment equity and diversity. Target: 100%.**



Watercare strives to appoint the best candidates for all jobs. The workforce is diverse and comes from a wide range of backgrounds and experiences. Over 37 different nationalities are represented within the company.

2008	2009	2010	2011
85%	85%	85%	88%

Watercare at work

## Watercare monitoring shows continuing improvements in Manukau Harbour’s water quality

Major improvements in Manukau Harbour’s water quality have been achieved as a result of substantial long-term investment at the Mangere Wastewater Treatment Plant.

Watercare completed a \$450 million upgrade of the Mangere Wastewater Treatment Plant between 1997 and 2003, which included the largest harbour restoration project ever undertaken in New Zealand.

The company’s Wastewater Operations Manager, Mark Bourne, says Watercare maintains a Manukau Harbour-specific water quality monitoring programme, while Auckland Council monitors water quality readings Auckland-wide through its own monitoring programme. “There is now more than 20 years of water quality monitoring data available which Watercare has analysed. We’ve been able to compare

with a mean reduction of more than 100,000 times

- Reduced peak chlorophyll A concentrations and associated risk of algal blooms.

In addition, concentrations of metals in harbour sediments have decreased substantially compared with levels found when the old oxidation ponds were first decommissioned, and now meet guideline values in the majority of cases. Residual organic oxidation pond sludges have largely stabilised or disappeared.

Since the completion of the upgrade, Watercare’s observations of the harbour have included:

- No recorded toxic algal blooms (none were recorded before the upgrade either, even when total nitrogen loads

- The reinstatement of 13 kilometres of Manukau Harbour shoreline, reinstating native vegetation and natural wildlife habitats.

Watercare’s Coastal Walkway provides recreational access to the culturally significant Mangere Ihumatao foreshore, and stretches seven kilometres from Ambury Park to the Otuataua Stonefields. Substantial restoration of the Manukau Harbour bed has also now been completed, and further enhancements underway include the rehabilitation of the former quarry on Puketutu Island.

Mark says Watercare remains strongly committed to continuing to protect the Manukau Harbour, and in particular to continuing to maintaining the same levels of public health protection for Aucklanders.

In addition, Watercare will uphold compliance with the limits on nitrogen load stipulated in the conditions applied at the time discharge permits for the Mangere plant upgrade were granted. These conditions, along with the removal of the old oxidation ponds, were put in place to ensure that outcomes agreed with the community would be met, specifically:

- To ensure that the treated wastewater meets appropriate standards for recreational use and the taking of shellfish (outside an agreed zone of non-compliance)
- To ensure that the proliferation of undesirable biological growth as a result of the discharge of nitrogen is avoided
- To restore as much as possible of the former harbour bed to its natural marine estuary condition.

Watercare has committed to continue to monitor and publicly report on Manukau Harbour’s water quality, to make sure that treatment capacity is suitably expanded in response to the growing demands of Auckland. The Mangere Wastewater Treatment Plant continues to meet appropriate environmental performance targets.

### *“Extensive upgrades have transformed the old Mangere plant into a totally new-generation, multi-stage treatment facility”*

harbour water quality data before the Mangere plant upgrade with test results collected since the completion of the upgrade.”

Mark says Watercare’s monitoring of treated wastewater concentrations at Mangere has shown large reductions in contaminants in the 10 years since the upgrade was completed. These decreases have included:

- A greater than 90% reduction in biochemical oxygen demand, with improved levels of dissolved oxygen
- A greater than 80% reduction in suspended solids
- A greater than 75% reduction in total nitrogen levels
- A greater than 95% reduction in ammoniacal nitrogen
- A greater than 10,000 times reduction in enteric human virus numbers through the upgraded plant under most conditions,

discharged were four times higher than they are now)

- No recorded nuisance blooms
- An approximate reduction of 55% in the area of the harbour covered by the macroalga Gracillaria.

The extensive upgrade transformed the old Mangere plant into a totally new-generation, multi-stage treatment facility. The plant itself no longer uses oxidation ponds to treat wastewater, instead using land-based treatment technology including reactor clarifiers and ultraviolet filtration. The multi-million-dollar plant upgrade included:

- An intensive public consultation and consent process
- The removal of 500 hectares of oxidation ponds, reuniting the original foreshore with the sea
- The restoration of Oruarangi Creek and Mangere Lagoon

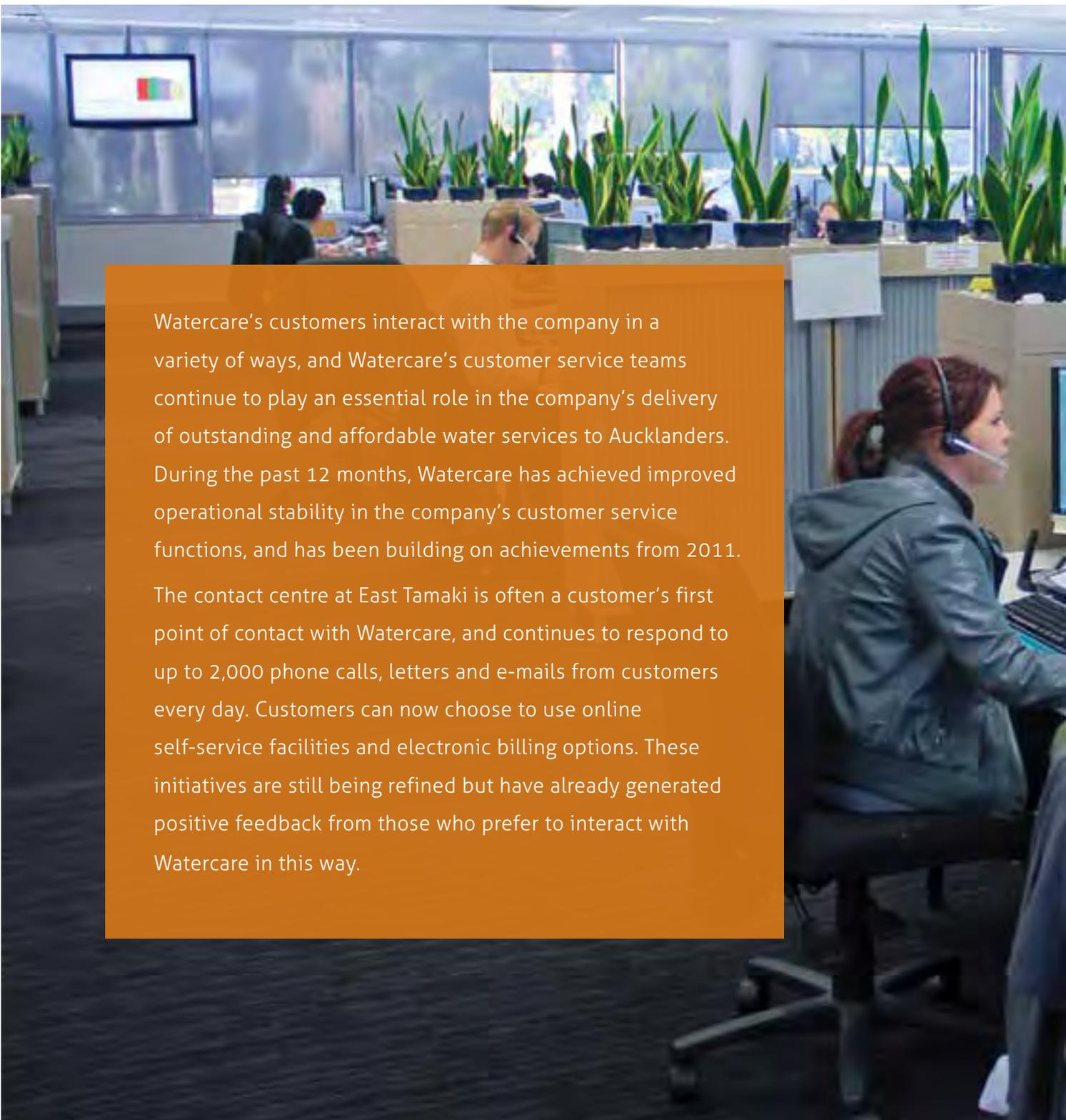


*Mangere Wastewater Treatment Plant and Puketutu Island. Watercare completed a \$450 million upgrade of the Mangere Wastewater Treatment Plant between 1997 and 2003, and water quality monitoring has since shown continuing improvements in Manukau Harbour's water quality.*

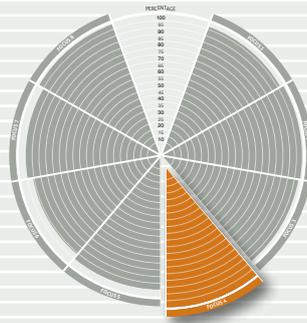
## 4

## CUSTOMER SATISFACTION

Providing customers with great service and great value.



Watercare's customers interact with the company in a variety of ways, and Watercare's customer service teams continue to play an essential role in the company's delivery of outstanding and affordable water services to Aucklanders. During the past 12 months, Watercare has achieved improved operational stability in the company's customer service functions, and has been building on achievements from 2011. The contact centre at East Tamaki is often a customer's first point of contact with Watercare, and continues to respond to up to 2,000 phone calls, letters and e-mails from customers every day. Customers can now choose to use online self-service facilities and electronic billing options. These initiatives are still being refined but have already generated positive feedback from those who prefer to interact with Watercare in this way.



OVERALL SCORE  
FOR FOCUS AREA

**100%**

See page 5

*Watercare's East Tamaki  
Customer Contact  
Centre in action.*



4

# CUSTOMER SATISFACTION

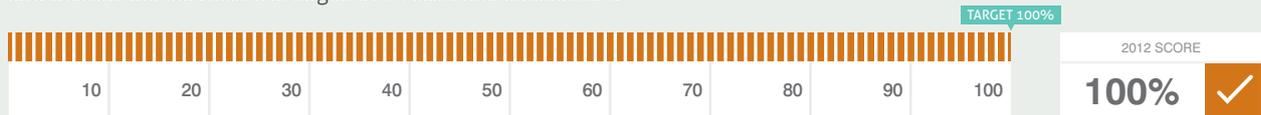
**SUPPORTING INFORMATION**

- Fig. 29 Customer satisfaction
- Fig. 30 Grade of service
- Fig. 31 Complaint types and response rates
- Fig. 32 Household affordability

**KEY**

- ✓ Target met
- ✗ Target not met
- ↗ Good performance but could do better
- ★ Presentation of ruler updated from 2011

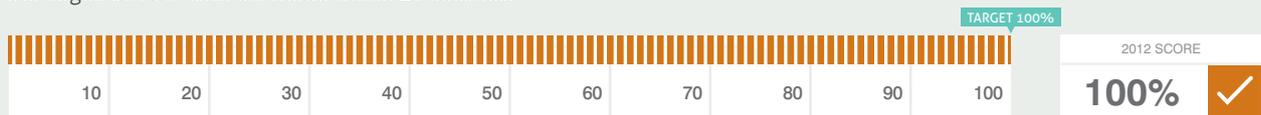
**4a. Percentage performance against Statement of Corporate Intent target: customer satisfaction with water and wastewater services. SCI target: 80% customer satisfaction.**



Watercare achieved an 82.2% performance against the customer service target of 80%. Of the customers who contacted the company to report faults and were surveyed by independent researchers, 82.2% were satisfied – this being an overall score of at least 7 out of a possible 9. In 2011, Watercare met its customer service target but this was not clearly evident in the reported results. Watercare has exceeded the customer service target in 2012, thereby achieving a performance score of 100%.

2011  
90%

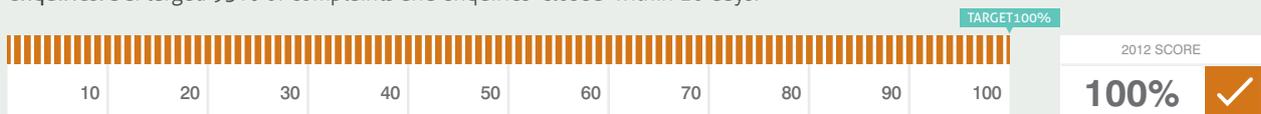
**4b. Percentage performance against Statement of Corporate Intent target: grade of service. SCI target: 80% of calls answered within 20 seconds.**



Grade of service is an industry best-practice performance measure, aimed at ensuring 80% of calls are answered within 20 seconds. During the 2011/12 year, the grade of service target was met. Overall performance was 81.8%. First Contact (after-hours) calls were not included in the grade of service SCI. First Contact performance was 81.6%. For 2012, Watercare's performance is illustrated as a percentage of the target achieved. This differs from 2011, where our performance was illustrated against the Statement of Corporate Intent grade of service target. This year the company exceeded its target, thereby achieving a performance score of 100%.

2011  
87%

**4c. Percentage performance against Statement of Corporate Intent target: 'closed' complaints and enquiries. SCI target: 95% of complaints and enquiries 'closed' within 10 days.**



The SCI target of 'closed' complaints and enquiries measures the time taken for an issue to be resolved and feedback given to the customer. A 10-day target is considered industry best practice. Performance was 99.7% for the 2011/12 period, against an SCI target of 95%. Complaints performed at 96.4% and enquiries at 99.8%. Complaints (1355) made up 5.1% of the total enquiries (26,762). For 2012, Watercare's performance is illustrated as a percentage of the target achieved. This differs from 2011, where our performance was illustrated against the Statement of Corporate Intent target. This year the company exceeded its target, thereby achieving a performance score of 100%.

2011  
90%

**4d. Percentage performance against Statement of Corporate Intent target: household affordability. SCI target: water bill is less than 1.5% of the average Auckland household income.**



The average monthly household water and wastewater bill from Watercare was \$52.30 for the period 1 July 2011 to 30 June 2012. Based on Statistics NZ's average monthly household income in Auckland of \$7,219, the bill represents 0.72% of the average household income.

2010 2011  
100% 100%

## Watercare at work

## Services evolving to meet customers' needs



*Watercare Networks Engineer Monique Furniss (right) talks with customer Verity Ricklan about the water meter on Verity's Oteha property.*

Watercare's Customer Service Manager Penelope Webster says the company is focused on responding quickly and efficiently to customers' requirements, improving consistency of services and continuing to evolve to meet customers' service expectations. "By better understanding our customers' changing needs and experience of our services we can focus on improvements that will make it easier for customers to deal with us, and help us to be proactive as well as responsive."

The company's customer-facing teams have access to a range of intranet-based tools designed to help them achieve this objective, including H2Know, a new information and knowledge resource which was successfully introduced during 2012. "H2Know has been a vital tool in our service delivery this year as

we responded to customers' queries about the new Auckland-wide water and wastewater tariffs and streamlining of invoicing cycles to monthly billing," Penelope says.

As well as organisation-wide invoicing, financial management and customer database management tools, Watercare staff utilise an Auckland-specific Geographic Information System (GIS) with the ability to map water and wastewater pipe networks, faults and meter locations in relation to customers' Auckland property locations.

Watercare's Chief Services Officer Trish Langridge says the company has been striving to provide customers with more self-service options. "This year we introduced e-billing and website self-service options for customers who prefer to interact with

us online. Our customers have the choice to receive their invoices electronically and make payments, update their details or ask for assistance through our website."

Trish says Watercare has also taken steps to introduce efficiencies in the collection and storage of data, improve residential and commercial customer invoicing, and satisfactorily resolve greater numbers of customer enquiries without escalation. "We've also been supporting our contact centre teams in expanding their own knowledge and experience of Watercare's activities, and our role as a service provider to Aucklanders. All of this has contributed to a significant reduction in the number of customer complaints being received by our customer contact centre."

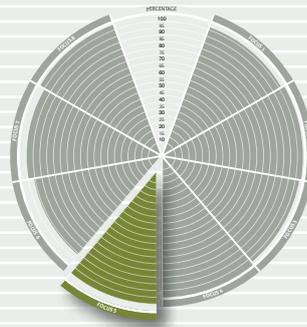
5

# STAKEHOLDER RELATIONS

To be responsive to stakeholder requirements.



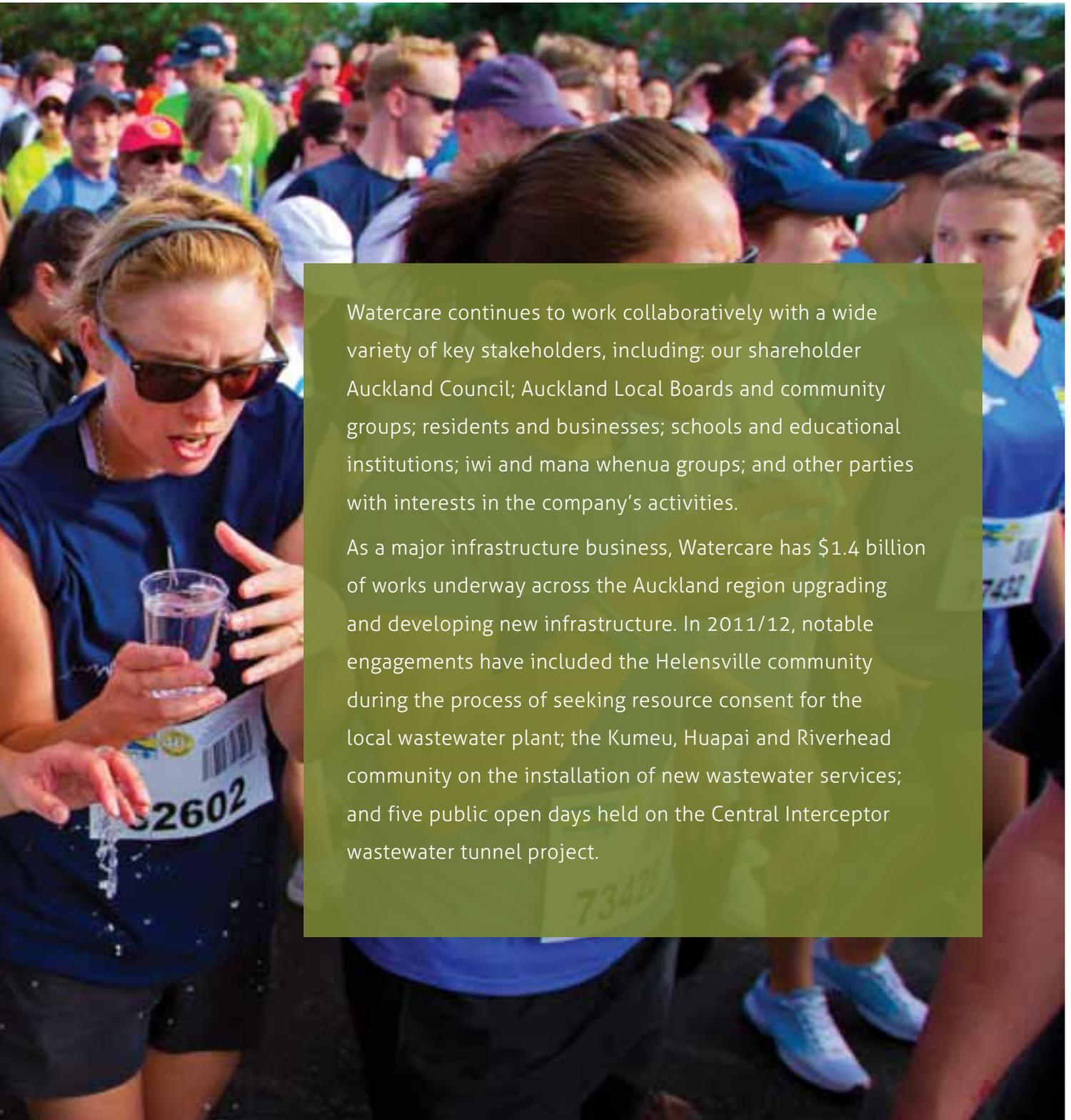
*Watercare has been supporting Auckland's Round the Bays fun run since 1993. The company's staff provide runners with fresh drinking water at water stations along the 8.4 kilometre route.*



OVERALL SCORE FOR FOCUS AREA

**95%**

See page 5



Watercare continues to work collaboratively with a wide variety of key stakeholders, including: our shareholder Auckland Council; Auckland Local Boards and community groups; residents and businesses; schools and educational institutions; iwi and mana whenua groups; and other parties with interests in the company's activities.

As a major infrastructure business, Watercare has \$1.4 billion of works underway across the Auckland region upgrading and developing new infrastructure. In 2011/12, notable engagements have included the Helensville community during the process of seeking resource consent for the local wastewater plant; the Kumeu, Huapai and Riverhead community on the installation of new wastewater services; and five public open days held on the Central Interceptor wastewater tunnel project.

5

# STAKEHOLDER RELATIONS

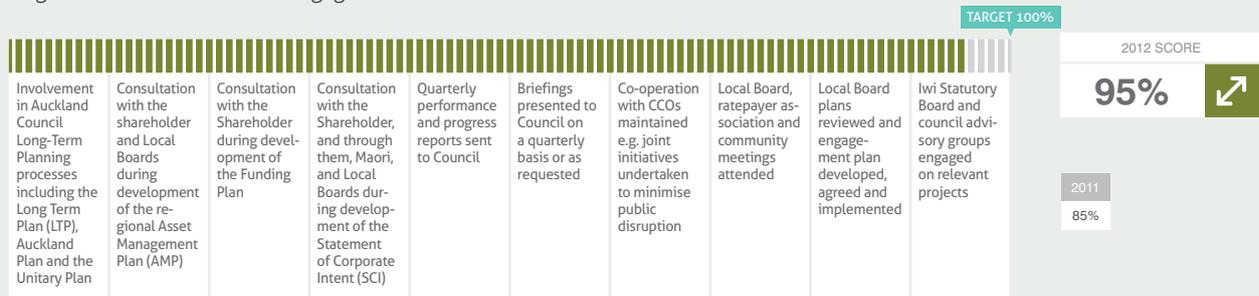
**SUPPORTING INFORMATION**

- Fig. 33 Community impact of operations
- Fig. 34 Public policy participation
- Fig. 35 Rain Forest Express passengers and trips
- Fig. 36 Adopt A Stream

**KEY**

- ✓ Target met
- ✗ Target not met
- ↗ Good performance but could do better
- ★ Presentation of ruler updated from 2011

**5a. Percentage performance against target: engaged shareholder.**  
Target: 100% of shareholder engagement outcomes achieved.



Watercare has worked closely with its shareholder Auckland Council to develop key planning documents including the Auckland Plan, the plan to deliver Auckland’s vision of becoming the world’s most liveable city and the Long Term Plan (LTP). The LTP is the shareholder’s, strategic planning document that represents the following 10 years’ investment to deliver the outcomes of the Auckland Plan.

Watercare supports the delivery of the shareholder’s outcomes through the development of a Statement of Corporate Intent (SCI), a document that sets out the governance arrangements between the company and the shareholder and by aligning investment through its Financial Plans and Asset Management Plan (AMP).

Local Board relationships continued to develop significantly with the introduction of an agreed engagement plan as Watercare strengthened its working relationships with the Local Boards, keeping them informed of projects and decisions that affect their communities.

Watercare is working with iwi authorities throughout Auckland to establish the Mana Whenua Forum. The emergence of the forum resulted

from a collective desire to engage with Maori proactively to build relationships and to enhance business efficiencies. The primary purpose of the forum is to develop creative, innovative solutions for water and wastewater strategies and projects throughout Auckland to ensure Watercare operates in a manner that enhances environmental, social, and economic values, whilst maintaining cultural integrity.

The company also continues to be an active participant in the development of relevant legislation and policy initiatives and has made submissions on the following:

- Tamaki Collective Claim on Volcanic Cones
- Code of Practice for Utilities Access in the Transport Corridors
- Building Act Amendment Bill
- Proposed Waikato Regional Policy Statement.

Watercare has continued also an active member of the Land and Water Forum.

**5b. Percentage performance against target: engaged communities.**  
Target: 100% of communities’ engagement outcomes achieved.



As a major infrastructure company, Watercare has \$1.4 billion of works underway across the Auckland region upgrading and developing new infrastructure. The company has carried out a wide variety of engagement with residents, businesses, Local Boards, Auckland Council and other affected parties. Notable engagements have included: the Helensville community during the process of seeking resource consent for the local wastewater plant; the Kumeu, Huapai and Riverhead community on the installation of new wastewater services; and, most recently, the five public open days held on the Central Interceptor wastewater tunnel project.

Watercare runs an education programme – Adopt A Stream – offering primary and intermediate school children lessons about water quality, the water cycle, conservation and the environment. In 2011/12, demand for lessons remained high with 6,988 pupils participating. The Rain Forest Express, a narrow-gauge railway built to service the Upper Nihotupu Dam around 1912, continues to be a very popular attraction for tourists and locals.

In addition, in 2011 the company became the principal sponsor of the Watercare Harbour Clean-Up Trust which has removed over 2.5 million litres of litter from Auckland’s harbours and waterways since it was established in 2002.

Watercare at work

# Helensville plant upgrade requires a consultative approach

*Pictured below: Watercare contractors installing mechanical aerators into oxidation ponds as part of upgrade works at the Helensville Wastewater Treatment Plant. Four new cage aerators were lowered into the wastewater treatment pond by crane. The aerators will be fitted out and moved into separate locations alongside the existing single aerator inside the pond, to provide oxygen transfer for beneficial bacteria which treat the wastewater and remove pollutants.*



Watercare has worked closely with Auckland Council and the Helensville local community to achieve compliance with required effluent quality levels, and to resolve historical resource consent issues with the Helensville wastewater treatment plant inherited from a legacy local authority. The company has also begun the first in a series of staged upgrades at the plant to ensure the discharge continues to meet environmental standards and projected increases in the local area population.

Watercare’s Wastewater Planning Manager, Phil Jaggard, says Watercare commenced work to improve the performance of the plant by de-sludging it’s oxidation ponds in January 2011, and the installation of new mechanical aerators which is now complete. “We’re anticipating the full completion of design, upgrade works and compliance at Helensville by early 2014.” Watercare has worked closely with Auckland Council, Local Board members and the

local community to obtain new resource consents for the plant, and facility performance levels are continuing to improve. Phil says: “Now that the first upgrades are in place, we will continue to monitor the performance of the plant, and in early 2013 we’ll review the situation with regard to allowance for new connections. It’s been pleasing to be able to work constructively and collaboratively with Council for the benefit of Helensville residents.”

### 5c. Percentage performance: legal compliance.

Target: 100% of shareholder engagement outcomes achieved.



Watercare has many statutory obligations under a number of Acts and invests a considerable amount of resources in complying with and monitoring statutory requirements. Technical non-compliance with resource consents relating to the inherited non-metropolitan wastewater treatment plants are reported under Ruler 2a on page 32.

Following careful consideration, Watercare decided to defend health and safety charges brought by the Department of Labour relating to the Onehunga explosion of June 2011. The matter is currently before the courts. In every other respect, the company achieved compliance with all statutory obligations specified in the relevant Acts during the past year.

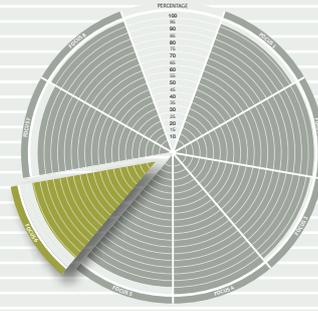
6

## SUSTAINABLE ENVIRONMENT

To minimise and/or mitigate the adverse impact of the company's operations on the environment.



*Pictured below: Watercare Operations staff Dave Hodgson and John Pattenwise trapping eels at Lower Nihotupu Reservoir. Watercare traps eels in the company's reservoirs and transfers them downstream of dams to reduce any impacts on their natural breeding lifecycle.*



OVERALL SCORE FOR FOCUS AREA

**90%**

See page 5



Watercare is committed to providing water and wastewater services to Auckland using methods that are environmentally sustainable. The company seeks to maintain an environmentally acceptable approach in all of its activities, including reducing greenhouse gas emissions, sourcing energy from internal sources, decreasing the amount of general waste ending up in landfills and promoting a zero waste policy in recycling. Watercare is actively involved in the long-term restoration and rehabilitation of Auckland's harbours, beaches and islands, as well as community tree-planting days, wildlife protection programmes and sponsorship of not-for-profit community groups such as the Watercare Harbour Clean-Up Trust.

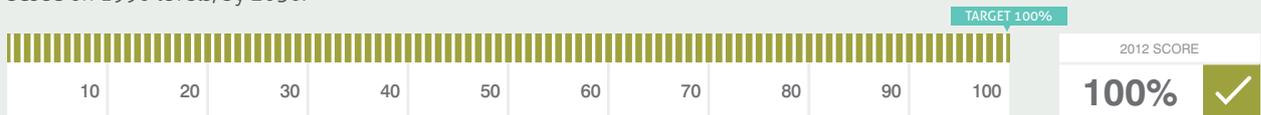
*Watercare's new Sustainability Manager, Roseline Klein, started with the company in February. Roseline's role involves leading Watercare's internal sustainability programme, as well as implementing sustainability across the company's activities and engaging with internal and external stakeholders. Roseline is closely involved in monitoring Watercare's demand management; mapping the company's sustainability impact; and building new projects to address these effects.*



6

SUSTAINABLE ENVIRONMENT

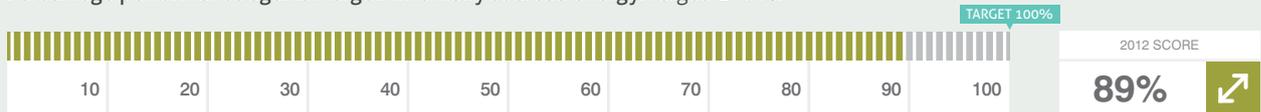
**6a. Percentage performance against target: atmospheric CO<sub>2</sub> emissions.** Target: greater than 50% reduction, based on 1990 levels, by 2050.



Watercare calculates its greenhouse gas emissions including carbon dioxide (CO<sub>2</sub>), methane and nitrous oxide which are largely generated from the treatment of wastewater. This year, the company maintained emitted greenhouse gas levels equivalent to 78% lower than in 1990. 75% is the company's historic benchmark for performance in this area. This long-term target has already been achieved. In previous years, Watercare exceeded its emissions target but this was not clearly evident in the reported results. Watercare again exceeded the emissions target in 2012, thereby achieving a performance score of 100%.

2008	2009	2010	2011
85%	85%	85%	75%

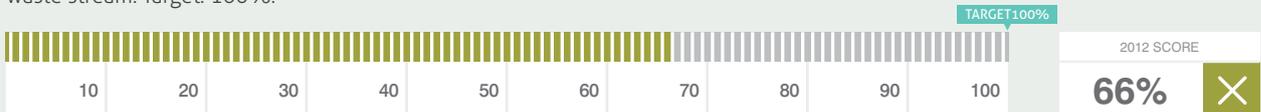
**6b. Percentage performance against target: internally sourced energy.** Target: 100%.



Watercare aims to source 35% of all its energy requirements from internal sources, principally from generators burning biogas at its two largest wastewater plants, Mangere and Rosedale, and from five hydro-electric generators within the water supply system. This year the company sourced 31% of its energy, achieving 89% of its target.

2011
91%

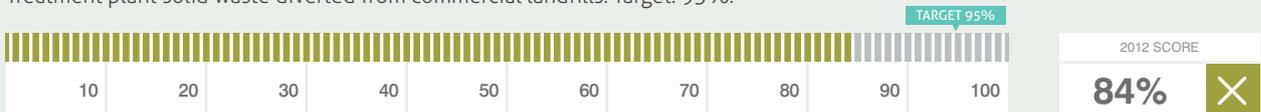
**6c. Percentage performance: recycling.** Elimination of recyclable and compostable material in the general waste stream. Target: 100%.



The zero-waste recycling programme aims to eliminate all general waste going to landfill. The immediate objective is to ensure that all material that can be either recycled or composted is diverted from entering the general waste stream and ending up in a landfill. In 2012 Watercare achieved 66% of its target. Watercare operates a three-bin system for general waste, recycling and organic material, which is used to feed the worm farms at each of our main facilities. The company has created a new Sustainability Manager role to champion Demand Management and Zero Waste and other programmes to help advance Watercare's sustainable approach.

2008	2009	2010	2011
75%	75%	70%	70%

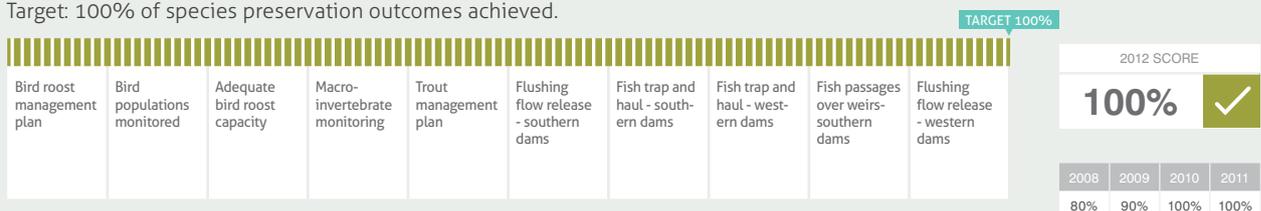
**6d. Percentage performance against target: waste management.** Treatment plant solid waste diverted from commercial landfills. Target: 95%.



Watercare aims to minimise the volume of material being sent to commercial landfills from its water and wastewater treatment plants. To do this, the company is successfully using biosolids to rehabilitate a small part of the old oxidation ponds at the Mangere Wastewater Treatment Plant, achieving 84% disposal this year. A key part of the future of this programme is the Puketutu Island project which gained regulatory approval this year and is a significant step towards achieving the target of 95%.

2011
80%

**6e. Percentage performance against target: species preservation.** Target: 100% of species preservation outcomes achieved.



**SUPPORTING INFORMATION**

- Fig. 37 Greenhouse gas emissions
- Fig. 38 Initiatives to reduce greenhouse gas emissions
- Fig. 39 Source of emissions
- Fig. 40 Watercare's ecological footprint
- Fig. 41 Internal energy usage
- Fig. 42 Recycling of general waste
- Fig. 43 Biosolids metal levels
- Fig. 44 Solids disposal

- Fig. 45 Weight of hazardous substances in waste
- Fig. 46 Protected areas of high ecological value
- Fig. 47 Significant biodiversity impacts
- Fig. 48 Midge and odour complaints
- Fig. 49 Trade waste customers
- Fig. 50 Trade waste sampling programme
- Fig. 51 Key trade waste substances
- Fig. 52 Materials and chemicals

**KEY**

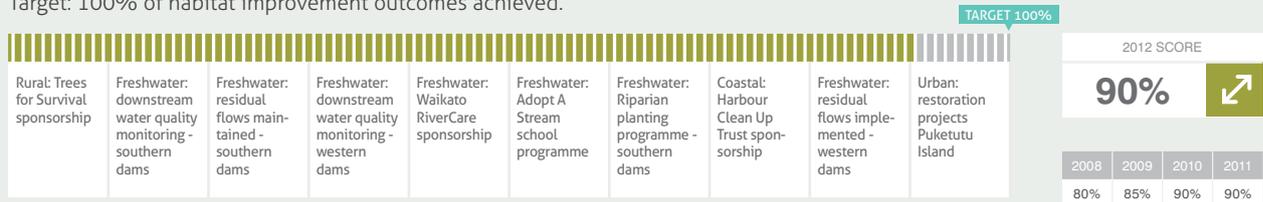
- ✓ Target met
- ✗ Target not met
- ↗ Good performance but could do better
- ★ Presentation of ruler updated from 2011

**6e. Percentage performance against target: species preservation (continued).**

Watercare interacts with many species during its activities and we work hard to minimise any impacts and, where possible, improve conditions for them. An example is the coastal areas around the Mangere Wastewater Treatment Plant which support a large and diverse range of bird species, which have flourished in bird roosts built and maintained by Watercare. An additional benefit is that these roosts have helped to reduce bird strikes by planes at Auckland Airport. The company also puts significant resources into minimising the effects that our water supply dams have on the surrounding freshwater ecologies. This includes simulating flood flows downstream from our dams, installing fish passages and performing a trap and haul programme, where migrating fish and eels are transferred around our dams.

**6f. Percentage performance against target: habitat improvement.**

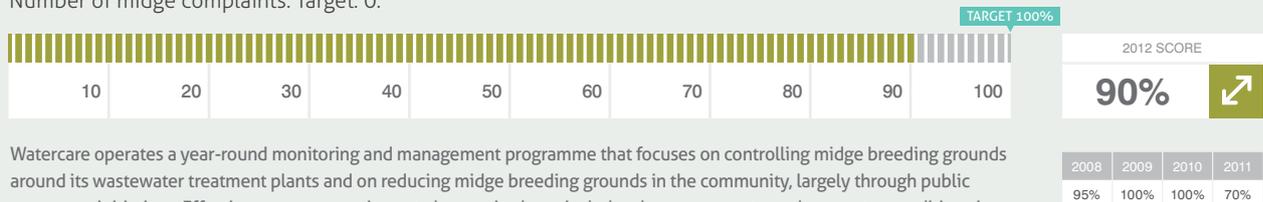
Target: 100% of habitat improvement outcomes achieved.



This year, Watercare became the principal sponsor of the Watercare Harbour Clean-Up Trust. The trust oversees the removal of litter from Auckland's Waitemata Harbour and inner Hauraki Gulf islands. The restoration of Puketutu Island is a step closer with the issuing of the resource consents and works are expected to begin late 2012. Watercare staff participate in planting days for the Trees for Survival and Waikato RiverCare programmes. Recent testing has shown that there has been a significant improvement in the quality of the water in the Manukau Harbour following extensive investment at the Mangere Wastewater Treatment Plant.

**6g. Percentage performance against target: midge complaints at wastewater treatment plants.**

★ Number of midge complaints. Target: 0.



Watercare operates a year-round monitoring and management programme that focuses on controlling midge breeding grounds around its wastewater treatment plants and on reducing midge breeding grounds in the community, largely through public awareness initiatives. Effective response continues to be required, particularly when warm, wet weather creates conditions in which midges thrive. The plants continued to achieve low levels of midge complaints (2 received at Mangere, 3 at Omaha); and no complaints were received at other plants.

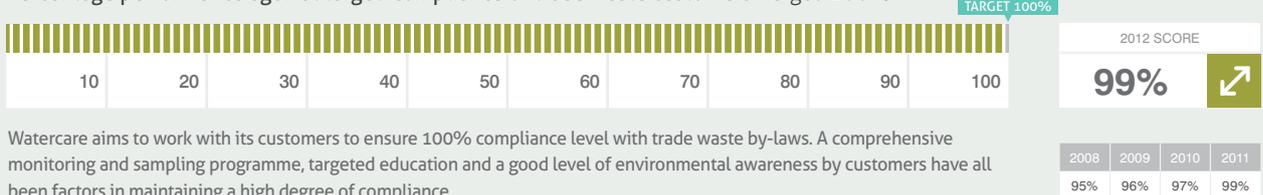
**6h. Percentage performance against target: odour complaints at wastewater treatment plants.**

Number of odour complaints. Target: 0.



Odour control measures continue to be an important focus at Watercare's wastewater treatment plants and include the use of covers and odour filter beds, as well as stationary and mobile deodoriser spraying units. The company undertakes periodic plant boundary odour surveys that involve an independent 'odour scout' to investigate and report any odour detection. For 2011/12, there were two verified odour complaints at Mangere, and one each at the Waiwera, Beachlands and Omaha area. All complaints were responded to in a timely manner and a 95% performance against the target was achieved.

**6i. Percentage performance against target: compliance of trade waste customers. Target: 100%.**



Watercare aims to work with its customers to ensure 100% compliance level with trade waste by-laws. A comprehensive monitoring and sampling programme, targeted education and a good level of environmental awareness by customers have all been factors in maintaining a high degree of compliance.

## Watercare at work

## Puketutu Island

Watercare's rehabilitation of a 40 hectare former quarry on Puketutu Island is well underway. The 35-year rehabilitation is using clean fill and treated bio-solids to restore the existing natural volcanic cone on the island in a sustainable, socially and culturally responsible, and economically favourable way.



Puketutu Island holds important historical and cultural value for the Greater Auckland region, and in particular for iwi. Successful negotiations between Waikato-Tainui, local iwi, Watercare and the Kelliher Charitable Trust have resulted in an agreement to develop Puketutu Island as a public open space. The proposal has been approved by the Environment Court.

For Watercare, there is also a commercial reward. Without the availability of Puketutu Island, the company would need to transport bio-solids produced at the Mangere Wastewater Treatment Plant to landfills a considerable distance from the plant, which would result in higher operating costs, potential safety issues and inconvenience to neighbours. While the \$23.9 million purchase price for the island lease – plus the \$2.00-per-tonne levy – is a considerable investment, there will be a saving of up to \$22 million in real terms over the 35-year life of the project. This saving will be reflected in future wastewater charges to customers.

There is also a huge benefit for local residents in Mangere, who will not have to tolerate up to 30 trucks a day travelling through their neighbourhood with associated nuisances of noise, dust and road damage.

In order to ensure benefits to all parties, the ownership agreement is quite complex. Watercare will lease the island for 55 years and the Kelliher Charitable Trust will transfer the freehold title to an island trust comprising three to nine members representing Waikato-Tainui, Makaurau and Te Kawerau. A marae and associated cultural facilities will be constructed on an area specially designated for that purpose, and the marae precinct will be freely accessible to the people of Auckland and other visitors to the island. Visitors will also be shown places of historical and cultural significance.

A governance trust comprising members representing the island trust, Watercare and Auckland Council (proposed), will: allocate funding for the marae construction, development of the island, scholarships

for education or training and employment opportunities; as well as provide a forum to consider issues relating to the island. Under the agreement it is proposed that Auckland Council will take up a concurrent renewable lease with 999- year terms to guarantee that Puketutu Island remains available to the people of Auckland in perpetuity.

Under Watercare's rehabilitation plan, stormwater on the island will be collected and treated, and liners will be used to collect any leachate so that this can be returned to the Mangere Wastewater Treatment Plant for treatment.

Watercare is committed to the long-term vision of making Puketutu Island accessible to the people of Auckland as part of the region's enhanced recreational parks network. The new regional park on Puketutu Island will comprise 197 hectares, which is larger than Cornwall Park at 172 hectares.

## Watercare at work

## Kawakawa Bay wastewater treatment scheme providing environmental benefits

The Kawakawa Bay Wastewater Treatment Scheme has now been successfully serving Kawakawa Bay residents for over 12 months. Officially opened by Mayor of Auckland Len Brown and members of the Franklin Local Board in September 2011, the completion of the Kawakawa Bay scheme has been the result of long-term co-operation between: residents; the former Manukau City Council and Manukau Water Limited; iwi Ngati Paoa and Ngai Tai; contractor Fulton Hogan; Watercare; and Auckland Council.

Watercare's Southern Area Wastewater Operations Manager, Allan Twinch, says the completion of the scheme in Kawakawa Bay is an impressive achievement. "Kawakawa Bay now has: an extensive network of underground pipes and pits which convey the wastewater from residents' properties to the treatment facility; an efficient and quiet pump station; a sophisticated biological treatment plant; and a 9000-cubic-metre seasonal lagoon that you barely notice even when you're standing next to it."

Allan says the wastewater treatment plant at Kawakawa Bay, which uses a vacuum system, is working well and the decommissioning of residents' failing septic tanks is now complete. With the volume of flow through the plant steadily increasing, Watercare has begun to make use of treated effluent as fertiliser into local forests via spray irrigation.

Wastewater treatment and disposal in Kawakawa Bay had historically been by the use of private septic tanks. However, in the early 2000s failing septic tanks were confirmed as a major source of stormwater contamination. A number of factors contributed to this situation, including: high groundwater levels; the negligible capacity of shell and sand soils near the foreshore to treat wastewater; the very poor soakage characteristics of the soil further inland; the lack of sufficient land area for effluent disposal; and difficult terrain (a large, flat residential area surrounded by steep, rugged hill country).

When monitoring revealed the scale of the pollution and the environmental and public health impacts in 2003, the former Manukau City Council moved to address the problem. The Council initiated a wastewater scheme



*Pictured at the opening of the Kawakawa Bay Wastewater Treatment Plant are (clockwise from top): Andrew Baker, Chair, Franklin Local Board; Bill Cashmore, Franklin Local Board member; Jan Sinclair, Deputy Chair Franklin Local Board; Lynn Chatterton, Kawakawa Bay Community Association.*

*"It's encouraging to see the new Kawakawa Bay wastewater scheme operating successfully, serving the local community and helping to protect public health and the environment."*

*- Andrew Baker, Chair, Franklin Local Board*

which aimed to overcome the complex engineering challenges involved, prevent further beach and water contamination in Kawakawa Bay, and allow the environment to recover and beach water quality to improve.

Throughout the community consultation process, there was widespread support for a local treatment plant with land disposal. The scheme designed by the company which was awarded the contract (Fulton Hogan) included:

- Treatment plant and irrigation sites located at a reasonable distance from the main settlements
- A 'watertight' vacuum system which prevents inflow and infiltration
- A high level of treatment to ensure that the effects on the receiving environment are minor
- Treatment which includes pathogen removal to minimise any risks to public health
- Insect control and odour and noise control incorporated into the design.

The scheme was specifically designed to prevent further stream, beach and sea contamination, and allow the environment to recover naturally and water quality in the bay to gradually improve.

Having taken over the development of the Kawakawa Bay scheme from the former Manukau Water, Watercare is now responsible for overseeing the operation of the new facility and has been working closely with Fulton Hogan to resolve any issues involved in making the system 'go live'.

Usage of the scheme began at 258 Kawakawa Bay households – comprising 1500 permanent residents and holidaymakers – and there are now around 280 households connected to the scheme. The facility has the potential to serve 3000 residents.

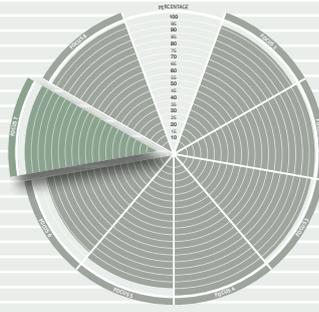
7

## EFFECTIVE ASSET MANAGEMENT

Managing assets to ensure the use of existing assets is maximised while optimising the scope, timing and cost of new investments.



*Watercare engineers Chris Aspinall and Axel Dumont overlooking one of the new water clarifiers at the company's Waikato Water Treatment Plant near Tuakau.*



OVERALL SCORE FOR FOCUS AREA

**95%**

See page 5



Watercare is on target to complete a three-year, \$48 million expansion of the Waikato Water Treatment Plant by early 2013. The company's principal engineer for the project, David Ward, says the expanded plant will help support the Auckland region's continued long-term growth and increasing demand for high-quality treated drinking water. "The expansion project significantly increases the capacity of the Waikato plant by 50 million litres of treated drinking water per day, with provision to expand further by an additional 25 million litres per day when the future demand is there. By utilising world-leading technology at the Waikato plant we're able to stage the expansion of the plant's capacity as demand increases, all without disrupting the supply of drinking water to Auckland. The choice of technology used at the plant also ensures that the expansion works are contained within the boundaries of the existing site, thus minimising impacts on the environment and respecting the cultural heritage of the local area."

# 7

## EFFECTIVE ASSET MANAGEMENT

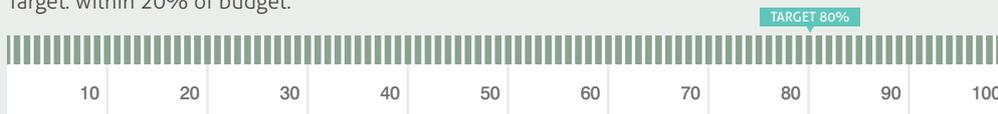
### SUPPORTING INFORMATION

Fig. 53 Capital expenditure programme  
 Fig. 54 Infrastructure provided for public benefit

### KEY

-  Target met
-  Target not met
-  Good performance but could do better
-  Presentation of ruler updated from 2011

#### 7a. Percentage performance against Statement of Corporate Intent target: capital expenditure. Target: within 20% of budget.



2012 SCORE

**100%** 

2011  
100%

A significant focus for Watercare is to ensure an efficient delivery of planned capital work across the business. To achieve this, the company set a target that capital expenditure should be within 20% of the approved financial budget. For 2011/12, the actual capital expenditure was 96.5%, within 3.5% of budget and meeting the target fully.

#### 7b. Percentage performance against target: demand management. Target: 100% of demand management outcomes achieved.



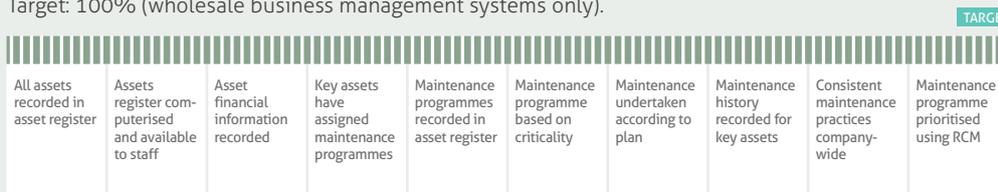
2012 SCORE

**78%** 

2011  
75%

Future asset requirements are largely driven by demand for water. By developing and implementing demand management programmes, Watercare aims to reduce or delay future capital expenditure. Implementation of the Regional Water Demand Management Plan, developed last year has started. Progress towards the 15% reduction in per capita demand by 2025 has been made. Further projects will be developed in 2012/13 to carry on implementing the plan and engaging with stakeholders.

#### 7c. Percentage performance against target: maintenance management systems. Target: 100% (wholesale business management systems only).



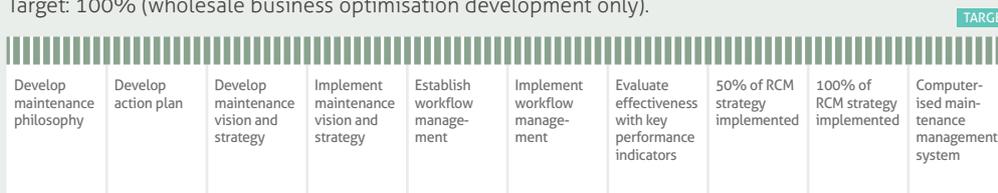
2012 SCORE

**100%** 

2008	2009	2010	2011
95%	100%	100%	100%

Maintenance management systems have been enhanced with the implementation of enterprise asset management software (SAP). All wholesale asset information now resides within this repository, facilitating the decision-making-process to determine whether to repair/replace/rehabilitate an asset based on condition, cost, health and safety, the environment and operational impact.

#### 7d. Percentage performance against target: maintenance optimisation development. Target: 100% (wholesale business optimisation development only).



2012 SCORE

**100%** 

2008	2009	2010	2011
85%	90%	90%	95%

Reliability-Centred Maintenance (RCM) is the framework for the wholesale business maintenance programme which forms a fundamental part of the asset management programme. Implementation of the enterprise asset management software (SAP) has increased opportunities for optimisation following its seamless integration with RCM.

## Watercare at work

## Major Mangere plant improvements now complete

*Pictured on site at Watercare's Mangere Wastewater Treatment Plant are (left to right): Projects Manager John Heywood; Senior Process Engineer Sanjay Kumarasingham; Project Engineer Alan Brooks; and Process Engineer Jonathan Piggot.*



Watercare recently completed a major five-year operational upgrade project on the sludge dewatering and conveying systems at Mangere Wastewater Treatment Plant in response to forecasted growth in solid waste levels from an increasing Auckland population. The project was initiated to resolve a number of operational obstacles, including breakdowns in existing plant.

The upgrade involved the overhaul of four existing centrifuges on site and the installation of two new, large centrifuges in lieu of two of the old ones, to provide an 80% increase in the plant's capacity to process sludge. A new conveying system with a lime blender was constructed to add the lime Watercare uses in the process of converting dewatered digested sludge into environmentally sustainable bio-solids. Air

extraction improvements on the enclosed screw conveyors and lime mixer provide better working environments for staff, and improved odour control for local residents.

For Aucklanders, the outcome of Watercare's \$6.14 million investment at Mangere is a wastewater treatment service that's now even more capable of meeting the needs of a growing city.

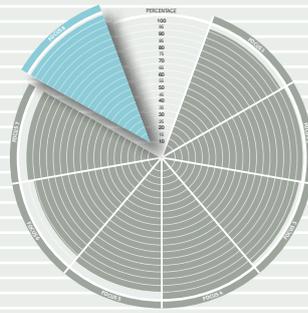
8

# SOUND FINANCIAL MANAGEMENT

Management of the company to meet business objectives at the lowest cost.



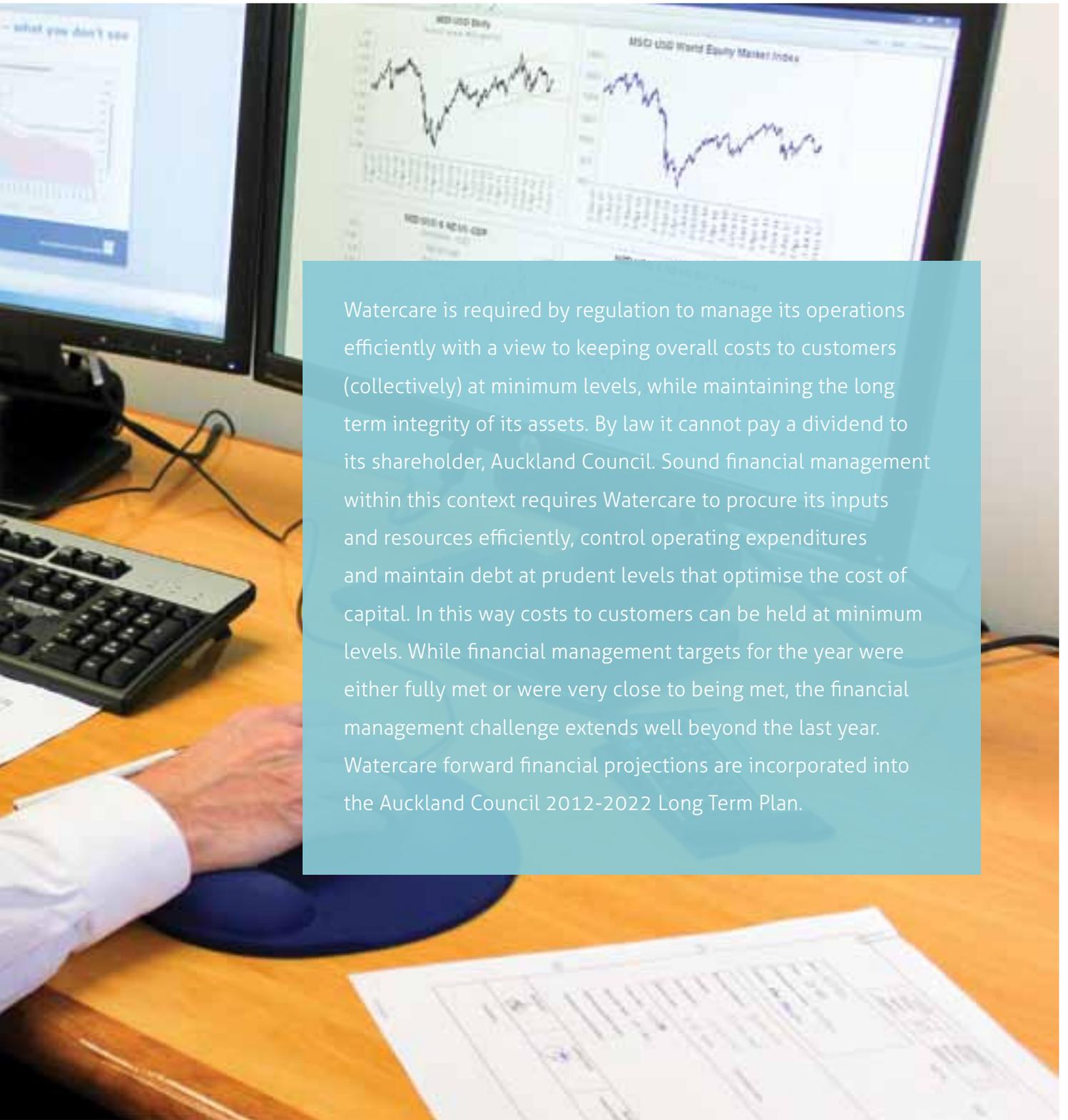
Treasury Manager Jason Isherwood finalises Watercare's financial data prior to reporting the company's month-end performance to the Board of Directors.



OVERALL SCORE FOR FOCUS AREA

97%

See page 5



Watercare is required by regulation to manage its operations efficiently with a view to keeping overall costs to customers (collectively) at minimum levels, while maintaining the long term integrity of its assets. By law it cannot pay a dividend to its shareholder, Auckland Council. Sound financial management within this context requires Watercare to procure its inputs and resources efficiently, control operating expenditures and maintain debt at prudent levels that optimise the cost of capital. In this way costs to customers can be held at minimum levels. While financial management targets for the year were either fully met or were very close to being met, the financial management challenge extends well beyond the last year. Watercare forward financial projections are incorporated into the Auckland Council 2012-2022 Long Term Plan.

8

**SOUND FINANCIAL MANAGEMENT**

**SUPPORTING INFORMATION**

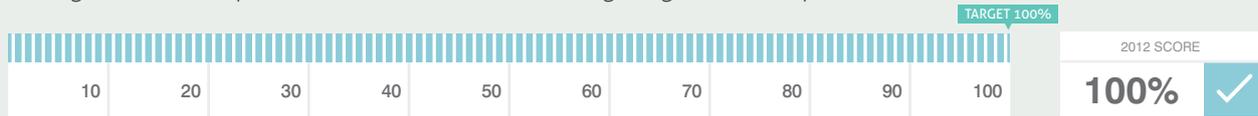
- Fig. 55 Major suppliers and contractors
- Fig. 56 Suppliers by spend and industry
- Fig. 57 Interest rate performance
- Fig. 58 Ethics and business integrity
- Fig. 59 Product information disclosure
- Fig. 60 Product life cycle, health and safety impact assessment
- Fig. 61 Financial implications of climate change

**KEY**

- ✓ Target met
- ✗ Target not met
- ↗ Good performance but could do better
- ★ Presentation of ruler updated from 2011

**8a. Performance against Statement of Corporate Intent target: Funds from operations (FFO), ratio.**

★ Funds generated from operations as a ratio of interest cost. Target: higher than or equal to 2.5.



The funds from operations (FFO) to interest cover ratio for the year ending 30 June 2012 was 3.22, higher than the budget figure of 2.94 and the required target at a minimum of 2.50. Cost savings achieved during the year led to lower than budgeted operating expenses and more than offset the reduced revenues arising from lower than projected water volumes. Interest expense was also significantly below budget, due to a combination of lower than budgeted new borrowings and a lower than projected cost of funds.

**8b. Percentage performance against target: savings through efficient procurement.**

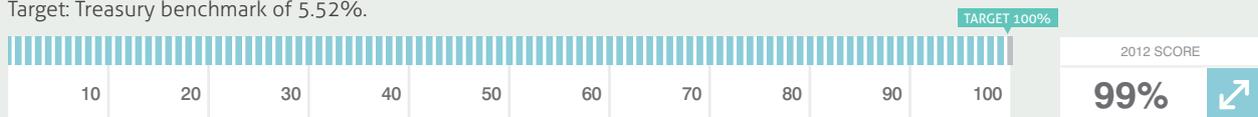
Target: achieve efficiency savings outcomes.



In total, savings of \$3.5 million were achieved in 2011/12 exceeding the target of \$3 million. All of Government Agreements delivered significant savings in IT, office consumables and fleet purchases. All of Government Agreements are centralised contracts for the supply of selected common goods and services purchased across government agencies. Other significant savings were achieved in the chemical category, bio-solids disposal and meter reading services. All other targets were achieved with the exception of implementing a procurement planning process which will be formalised in 2012.

**8c. Percentage performance against target: interest rate percentage.**

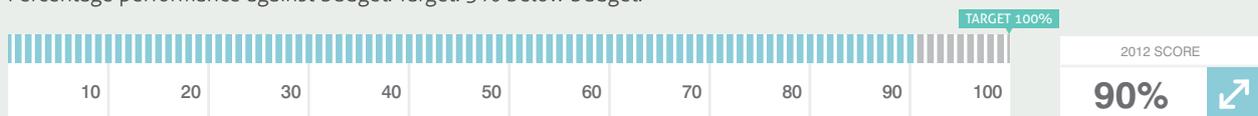
★ Target: Treasury benchmark of 5.52%.



Watercare locks-in long-term interest rate cover to provide certainty over future funding costs. This makes it difficult to achieve performance against a short term benchmark. Despite this, the company's actual weighted average interest rate excluding credit margins and fees at 5.57 per cent was only marginally above the 5.52 per cent benchmark.

**8d. Percentage performance against target: actual operating expense.**

★ Percentage performance against budget. Target: 5% below budget.



Watercare is required to minimise operating costs and seeks to achieve actual operating expenses of at least 5% below budget. For 2011/12, the company achieved an actual operating expense that was 4% below budget as a result of labour cost savings, lower asset operating costs and reduced other costs including professional fees and general overheads.

## Watercare at work

## Laboratory team anticipating strong future growth



*Watercare's Laboratory Services team comprises over 80 people and is poised for further growth.*

Watercare's Laboratory Services business has recently completed a significant expansion programme and is poised for further growth during the next five years. The company operates a state-of-the-art laboratory facility in Mangere which specialises in providing water and environmental testing services – as well as air quality monitoring expertise – both internally to Watercare operational teams, and externally to corporate clients which include industrial companies, regulatory authorities and government agencies.

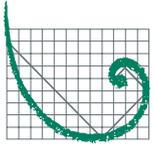
Watercare recently completed a major expansion of the laboratory operation's organic chemistry department, and has also introduced new Labware software which provides a platform for future growth and

will allow the laboratory team to better meet clients' needs. The laboratory employs more than 80 people and is made up of six analytical departments: microbiology; inorganic chemistry; organic chemistry; general chemistry; air quality; and sampling logistics.

Watercare's Commercial Services Manager Ian Shand says the Laboratory Services team carries out 870,000 analyses on over 102,000 samples each year, as well as continuously monitoring air quality for clients at a number of sites throughout New Zealand. "Recently we've been doing a considerable amount of work with clients to provide specialised testing services in the areas of National Environmental Standards (NES) monitoring, odour and wastewater

analysis, large roading projects and industrial discharge monitoring". Ian adds that the Auckland laboratory currently tests drinking water for over one third of New Zealand's population, and is one of the few laboratories in the country that is accredited for water sampling services. "We're proud of what we've achieved already, and we're preparing for further significant growth in the future."

Ian says that the Mangere laboratory operates 365 days per year, and that business continuity is of utmost importance to the laboratory operation's clients. Watercare has invested in emergency back-up facilities which include a power generator, a water reservoir and off-site emergency laboratories.



**ERM**

Environmental  
Resources  
Management

## ERM Independent Assurance Report to Watercare Services Limited

ERM New Zealand Limited (ERM) was engaged by Watercare Services Limited (Watercare) to provide independent assurance of selected non-financial data contained within Watercare's 2012 Annual Report, to the scope of work outlined below.

### Our Brief

We were asked to provide external independent assurance as to whether the material data and disclosures contained within the following sections of the Watercare 2012 Annual Report were appropriately reported:

- Performance Rulers relating to: Safe & Reliable Water Supply; Healthy Waterways; Health, Safety and Wellbeing; Customer Satisfaction; Stakeholder Relations; Sustainable Development; and Effective Asset Management.
- Data contained within the 'Sustainability Impacts of Company Activity' section.
- Global Reporting Initiative (GRI) G3 Application Level A+ requirements.

The scope excluded data and statements relating to financial information as well as data that had been assured in 2011 and not changed for the 2012 Annual Report. Data reported within the 2012 Statement of Service Performance and duplicated within the 2012 Performance Rulers detailed above have been assured by Watercare's financial auditors and have consequently also been excluded from the scope of ERM's assurance.

### Our Approach

We delivered our work in accordance with ERM's assurance methodology, which is based on the following international assurance and audit standards: ISAE 3000, ISO14064-3, and ISO 19011.

We planned and performed our work to obtain all the relevant information and explanations that we believe were necessary to gather sufficient evidence to provide a basis for our assurance conclusions as to whether the reported information and data set out in the 'Our Brief' were appropriately reported i.e. that nothing has come to our attention through the course of our work that the data are materially mis-reported (limited assurance).

Our assurance activities included:

- Face-to-face interviews at corporate level to understand and test the processes in place for reporting non-financial data and underlying data management system. This was followed up with a review of relevant documentation;
- Review of the presentation of information relevant to the scope of our work in the report to ensure consistency with our findings.

### Respective Responsibilities and ERM's Independence

Watercare was responsible for preparing the 2012 Annual Report, including the collection and presentation of data and statements within it. The ERM team, led by Tracey Ryan, Managing Partner, ERM New Zealand, was responsible for expressing assurance conclusions in line with the scope of work agreed with Watercare. During 2011/12, ERM did not work with Watercare on other consulting engagements.

### Our Conclusion

On the basis of its scope of work, and in consideration of the assurance engagement brief and approach presented above, ERM concludes that in all material respects, the above selected sustainability performance data for 2011-12 are appropriately presented in the report. The report also adheres to the GRI G3 Application Level A+.

### Key Findings

Based on the scope of work, and without affecting our assurance conclusion, ERM identified the following key findings:

- The recruitment of a dedicated Sustainability Manager during the reporting year demonstrates Watercare's on-going commitment to corporate sustainability as well as to addressing the key operational issue of user demand management.
- A large portion of the mechanisms used to gather data used within the Annual Report are integrated electronic systems that help to minimise the potential for data inaccuracies and calculation/transposition errors. While we are satisfied with the final data presentations, we have discussed with management potential improvements to the process for compiling data tables in the annual report.

ERM congratulates Watercare on its 2012 Annual Report.

ERM New Zealand Ltd,  
20 August 2012,  
Auckland, New Zealand

ERM New Zealand Limited (ERM) is an independent global provider of environmental, social and corporate responsibility consulting and assurance services. ERM has prepared this statement for Watercare Services Limited in accordance with ERM's standard terms and the standard practised by members of the environmental consulting profession performing this type of service at the same time. No other warranty, express or implied, is given by ERM as a result of the provision of this statement. To the extent permitted by law, this statement is provided for informational purposes only, without the right to rely, and ERM will not be liable for any reliance which may be placed on this statement by a third party. This statement may not be used by any third party without ERM's express written permission.

# FINANCIAL REPORT 2012 CONTENTS

*Watercare's Rain Forest Express railway continues to be a hugely popular attraction for both tourists and Auckland families.*



Historical financial summary and key statistics	64	<b>Notes to the financial statements</b>		<b>Statutory information</b>	
Financial commentary	66	1. Revenue	85	Employees' remuneration range	112
Responsibility for the financial statements and statement of service performance	71	2. Price adjustment	85	<b>2011 Statement of Service Performance</b>	
Report of the Auditor-General	72	3. Operating expenses	86	Environmental care	113
<b>Financial statements</b>		4. Depreciation and amortisation	86	Health, safety and well-being	113
Statement of Comprehensive Income	74	5. Finance costs	86	Stakeholder relationships	113
Statement of Financial Position	75	6. Revaluation of derivative financial instruments	87	Customer service commitment	114
Statement of Cash Flows	76	7. Operating cash flows	87	Asset management	114
Statement of Changes in Equity	77	8. Income tax expense	88	Economic performance	114
Statement of Comprehensive Income by business unit	78	9. Deferred tax liability	89	Customer services performance	115
Statement of Financial Position by business unit	79	10. Issued capital	89	G3 cross-reference table	116
Statement of Cash Flows by business unit	79	11. Subsidiaries and Integration of retail business	90	Index	120
Statement of Accounting Policies	80	12. Revaluation reserves	92	Glossary	120
		13. Property, plant and equipment	94		
		14. Intangible assets	97		
		15. Inventories	99		
		16. Trade and other receivables	99		
		17. Prepaid expenses	99		
		18. Trade and other payables	99		
		19. Accrued expenses	100		
		20. Provisions	100		
		21. Borrowings	101		
		22. Financial assets and liabilities	103		
		23. Related parties	109		
		24. Commitments	110		
		25. Contingencies	111		
		26. Retirement benefit plans	111		
		27. Remuneration	111		
		28. Events occurring after balance date	111		

## HISTORICAL FINANCIAL SUMMARY AND KEY STATISTICS

AS AT 30 JUNE 2012

	2003	2004	2005*	2006	2007	2008	2009	2010	2011	2012
	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
<b>FINANCIAL PERFORMANCE</b>										
Operating revenue	163,627	165,240	166,628	167,899	168,983	167,345	184,629	198,116	373,107	441,950
Price adjustment	-	(15,711)	(10,000)	-	-	-	-	-	-	-
Operating expenses	137,628	133,470	137,713	144,070	159,196	165,763	170,427	189,002	361,273	436,998
Operating surplus before:	25,999	16,059	18,915	23,829	9,787	1,582	14,202	9,114	11,834	4,952
Loss on disposal and provision for redundant property, plant and equipment and other restructuring costs	(3,287)	(3,102)	(3,254)	(1,026)	(7,719)	(4,793)	(11,589)	(6,140)	(6,162)	(8,517)
Contributions towards cost of constructing property, plant and equipment **	-	-	-	610	3,790	1,428	259	1,111	-	-
Revaluation of derivative financial instruments	-	-	(2,673)	2,561	3,021	(3,222)	(16,599)	(20,483)	(13,567)	(60,618)
Decommissioning of oxidation ponds	(2,770)	-	-	-	-	-	-	-	-	-
Operating surplus/(deficit) before tax	19,942	12,957	12,988	25,974	8,879	(5,005)	(13,727)	(16,398)	(7,895)	(64,183)
Current tax	1,611	2,478	(25)	2,079	(28)	-	-	-	-	-
Deferred tax	10,516	8,508	4,303	7,909	3,639	(2,208)	(3,363)	11,311	4,438	(18,878)
Net surplus/(deficit) after tax	7,815	1,971	8,710	15,986	5,268	(2,797)	(10,364)	(27,709)	(12,333)	(45,305)
<b>FINANCIAL POSITION</b>										
<b>Non-current assets</b>										
Property, plant and equipment	1,569,273	1,571,546	1,585,453	1,959,687	1,977,280	2,025,034	2,357,369	2,413,113	7,688,196	7,730,309
Intangibles ***	-	-	-	13,539	18,429	18,844	16,375	14,374	30,229	39,554
Investments	14,425	15,714	17,456	-	-	-	-	-	-	-
Derivative financial instruments	-	-	-	-	-	5,579	12,220	5,284	12,285	23,609
Inventories	2,022	1,921	1,821	2,378	2,797	2,640	2,599	3,237	3,040	2,637
Prepaid expenses	-	-	-	-	-	-	-	-	-	24,033
	1,585,720	1,589,181	1,604,730	1,975,604	1,998,506	2,052,097	2,388,563	2,436,008	7,733,750	7,820,142
<b>Current assets</b>	18,823	19,823	18,121	33,535	35,491	19,414	114,101	34,782	87,586	78,744
<b>Total assets</b>	1,604,543	1,609,004	1,622,851	2,009,139	2,033,997	2,071,511	2,502,664	2,470,790	7,821,336	7,898,886
<b>Non-current liabilities</b>										
Borrowings	229,000	129,000	200,000	200,000	200,000	200,000	350,000	416,500	987,604	1,063,910
Deferred tax liability	31,167	39,675	256,090	377,656	347,502	342,348	420,666	402,049	848,828	829,950
Derivative financial instruments	-	-	-	-	-	4,460	27,725	40,298	59,110	133,336
Payables, provisions and accruals	10,864	9,420	972	926	1,194	880	966	1,053	10,492	10,304
	271,031	178,095	457,062	578,582	548,696	547,688	799,357	859,900	1,906,034	2,037,500
<b>Current liabilities</b>										
Bank overdraft	-	458	44	148	132	111	-	446	558	-
Borrowings	130,293	241,954	175,713	161,505	174,174	207,349	204,560	109,225	241,295	232,156
Payables, provisions, accruals and derivative financial instruments	29,590	25,835	29,760	23,149	26,179	41,219	47,796	48,606	92,054	92,921
	159,883	268,247	205,517	184,802	200,485	248,679	252,356	158,277	333,907	325,077
<b>Total liabilities</b>	430,914	446,342	662,579	763,384	749,181	796,367	1,051,713	1,018,177	2,239,941	2,362,577

## HISTORICAL FINANCIAL SUMMARY AND KEY STATISTICS (continued)

AS AT 30 JUNE 2012

	2003	2004	2005*	2006	2007	2008	2009	2010	2011	2012
	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
<b>Equity</b>										
Issued capital	260,693	260,693	260,693	260,693	260,693	260,693	260,693	260,693	260,693	260,693
Revaluation reserves	863,754	848,488	575,826	843,712	873,086	862,745	1,043,205	1,071,655	1,429,619	1,424,231
Retained earnings	49,182	53,481	123,753	141,350	151,037	151,706	147,053	120,265	111,972	72,274
Capital reserve	-	-	-	-	-	-	-	-	3,779,111	3,779,111
<b>Total equity</b>	<b>1,173,629</b>	<b>1,162,662</b>	<b>960,272</b>	<b>1,245,755</b>	<b>1,284,816</b>	<b>1,275,144</b>	<b>1,450,951</b>	<b>1,452,613</b>	<b>5,581,395</b>	<b>5,536,309</b>
<b>Total funds employed</b>	<b>1,604,543</b>	<b>1,609,004</b>	<b>1,622,851</b>	<b>2,009,139</b>	<b>2,033,997</b>	<b>2,071,511</b>	<b>2,502,664</b>	<b>2,470,790</b>	<b>7,821,336</b>	<b>7,898,886</b>

### CASH FLOW SUMMARY

Net cash flows – operating	60,131	54,669	65,627	66,777	70,370	59,208	81,297	74,624	176,035	163,394
Net cash flows – investing	(46,349)	(66,854)	(69,972)	(52,673)	(83,023)	(92,362)	(138,387)	(126,245)	(192,231)	(229,173)
Net cash flows – financing	(13,601)	11,661	4,759	(14,208)	12,669	33,175	57,411	50,965	16,116	67,167
Net change in cash flows	181	(524)	414	(104)	16	21	321	(656)	(80)	1,388
Bank/(overdraft) at start of year	(115)	66	(458)	(44)	(148)	(132)	(111)	210	(446)	(526)
Bank/(overdraft) at end of year	66	(458)	(44)	(148)	(132)	(111)	210	(446)	(526)	862

### KEY STATISTICS

Debt to capitalisation (book value)	23%	23%	27%	22%	23%	24%	28%	27%	18%	19%
Debt to capitalisation (historical cost)	53%	53%	48%	47%	48%	50%	58%	58%	23%	24%
Funds flow from operations to interest ratio	3.9	3.6	3.5	3.7	3.6	2.9	2.9	2.9	3.3	3.2
EBITDA total interest ratio	4.0	3.7	3.5	3.7	3.6	2.9	2.9	2.9	3.3	3.2
EBITDA interest expense ratio	4.2	3.9	3.8	3.8	3.7	3.4	3.9	3.5	3.5	3.5
Total liabilities to total assets	27%	28%	41%	38%	37%	38%	42%	41%	29%	30%
Secured liabilities to total assets	2%	2%	2%	0%	0%	0%	0%	0%	0%	0%
Return on average equity	0.8%	0.2%	0.8%	1.5%	0.4%	(0.2%)	(0.8%)	(2.0%)	(0.4%)	(0.8%)
Economic value added/ (deducted) (\$000)	(75,237)	(109,876)	(93,980)	(99,499)	(123,577)	(130,737)	(128,769)	(134,659)	(278,348)	(412,816)
Capital expenditure (\$000)	42,810	66,209	70,651	64,489	86,416	120,174	129,860	123,324	(191,943)	(234,670)
Number of employees	352	335	329	343	363	363	381	387	611	645

\* The company adopted NZ IFRS with effect from 1 July 2005 and has restated the comparative information for the year ended 30 June 2005 in accordance with NZ IFRS.

\*\* Contributions towards cost of constructing property, plant and equipment is included in operating revenue from 2011 financial year.

\*\*\* Intangibles have been disclosed separately from the June 2006 financial year onwards.

## FINANCIAL COMMENTARY

The financial result for the year was highlighted by an operating surplus from trading operations of \$5.0 million compared with a budgeted operating deficit of \$4.4 million.

The reported operating surplus was prior to the adjustment for the unfavourable revaluation of derivative instruments of \$60.6 million and the loss on disposal of fixed assets and other restructuring costs of \$8.5 million. The resulting net deficit after tax of \$45.3 million was compared with a budgeted net deficit of \$3.2 million. (2011 – Net deficit after tax of \$12.3 million).

### KEY POINTS

- Revenue was 2.6% below budget primarily due to the effect of lower water volumes and lower infrastructure growth charges.
- Total expenses including operating expenses, depreciation and interest expense were 4.6% lower than budget for the financial year.
- Under NZ IFRS, the company revalues its interest rate swaps and forward foreign exchange contracts to fair value. This revaluation resulted in a decrease in current year operating surplus from trading operations by \$60.6 million (2011 – decrease in operating surplus from trading operations by \$13.6 million).
- The company recorded a loss disposal of fixed assets of \$8.4 million being primarily the write-down of assets that were replaced during the year and some residual cleanup of assets inherited through integration. Other restructuring costs of \$0.1 million contribute to the total unbudgeted costs of \$8.5 million.
- On 19 September 2011, Standard & Poor's upgraded its corporate credit ratings on Watercare Services Limited. The long-term rating was raised to 'AA-' from 'A' and the short-term rating was raised to 'A-1+' from 'A-1'. As at 30 June 2012, the outlook on these ratings was stable. The credit ratings on Watercare debt guaranteed by Auckland Council remained unchanged at 'AA' long-term and 'A-1+' short-term.
- A \$125 million medium-term note issue was completed in two tranches, of \$75 million in October 2011 and \$50 million in December 2011. The notes carry a coupon interest rate of 5.685% and are due to mature on 26 October 2018. The proceeds were used to refinance existing debt and fund capital expenditure requirements over the remainder of 2011/12.
- No price adjustment was paid in the 2012 year (2011 – \$nil).
- On 1 November 2010 the company acquired the water and wastewater businesses conducted by Metrowater Limited, Manukau Water Limited, North Shore City Council, Waitakere City Council, Rodney District Council and Franklin District Council in accordance with the Local Government (Tamaki Makaurau Reorganisation) Act 2009, the Local Government (Auckland Council) Act 2009 and the Local Government (Auckland Transitional Provisions) Act 2010. The company has provided total water and wastewater services to the Auckland region since 1 November 2010.
- This financial commentary includes the budget for the 2012 year and notes on significant variances. Comparisons are also provided to last year being a period where Watercare provided retail water and wastewater services for eight months in the financial year, the period since integration on 1 November 2010. As a result, revenue and costs were higher in the 30 June 2012 financial year as Watercare has provided retail water and wastewater services for the full 12 months.

### STATEMENT OF COMPREHENSIVE INCOME

FOR THE YEAR ENDED 30 JUNE 2012

#### Total Comprehensive income

	2012	2012	2011	2013
	Actual	Budget	Actual	Budget
	\$000	\$000	\$000	\$000
Operating surplus (deficit) from trading operations	4,952	(4,415)	11,834	357
Loss on disposal and provision for redundant property, plant and equipment and other restructuring costs	(8,517)	–	(6,162)	–
Loss on revaluation of derivative financial instruments	(60,618)	–	(13,567)	–
Operating (deficit) surplus before tax	(64,183)	(4,415)	(7,895)	357
Deferred tax	18,878	1,236	(4,438)	(100)
<b>Net (deficit) after tax</b>	<b>(45,305)</b>	<b>(3,179)</b>	<b>(12,333)</b>	<b>257</b>
Asset revaluation, net of tax	–	–	361,873	–
<b>Total comprehensive income for the year, net of tax</b>	<b>(45,305)</b>	<b>(3,179)</b>	<b>349,540</b>	<b>257</b>

The operating surplus from trading of \$5.0 million was favourable compared with the budgeted operating deficit of \$4.4 million primarily due to favourable variances in interest expense, depreciation and operating expenses. These were partially offset by the unfavourable variance in revenue.

Total comprehensive income (deficit) for the year of (\$45.3 million) after tax, compared with budgeted comprehensive income (deficit) of (\$3.2 million) after tax, represents an unfavourable variance of \$42.1 million. This primarily reflects the negative revaluation of financial instruments of \$60.6 million and the loss on disposal of assets and other restructuring costs of \$8.5 million.

## FINANCIAL COMMENTARY (continued)

### Revenue

	2012	2012	2012	2011	2013
	Actual	Budget	Variance to Budget	Actual	Budget
	\$000	\$000		\$000	\$000
Water	129,543	137,676	(5.9%)	131,438	137,930
Wastewater	263,624	262,360	0.5%	203,773	271,540
Trade waste	12,462	12,510	(0.4%)	14,038	13,318
Other	36,321	41,206	(11.9%)	23,858	36,774
<b>Operating revenue</b>	<b>441,950</b>	<b>453,752</b>	<b>(2.6%)</b>	<b>373,107</b>	<b>459,563</b>

Water revenue was \$129.6 million for the year, 5.9% lower than the budget of \$137.7 million due to lower than expected water sales volumes as a result of the wet summer.

Wastewater revenue was \$263.6 million for the year, 0.5% higher than the budget of \$262.4 million.

Trade waste revenue was \$12.5 million for the year and was less than the budget by 0.4%.

Other revenue was \$36.3 million for the year and was 11.9% below budget primarily due to lower infrastructure growth charges as a result of less developer activity.

### Price adjustment

	2012	2012	2012	2011	2013
	Actual	Budget	Variance to Budget	Actual	Budget
	\$000	\$000		\$000	\$000
Water	-	-	-	-	-
Wastewater	-	-	-	-	-
Trade waste	-	-	-	-	-
	-	-	-	-	-

Price adjustments are unbudgeted discretionary payments. The Directors determine the amount, and the distribution between customer groups, after having regard to the financial position of the company and future expenditure requirements. The Directors decided that no price adjustment would be made for 2012 (2011 – \$Nil).

### Operating expenses

	2012	2012	2012	2011	2013
	Actual	Budget	Variance to Budget	Actual	Budget
	\$000	\$000		\$000	\$000
Water	71,542	75,441	5.2%	63,529	72,526
Wastewater	113,048	116,912	3.3%	93,011	123,862
<b>Total expenses</b>	<b>184,590</b>	<b>192,353</b>	<b>4.0%</b>	<b>156,540</b>	<b>196,387</b>

Operating expenses were \$7.8 million or 4.0% lower than budget for the year primarily due to savings in net labour, asset operating costs, professional services and general overheads. These favourable variances were partially offset by higher than budgeted expenditure in maintenance costs.

Operating expenses in the water business unit were \$3.9 million or 5.2% lower than budget. The savings were primarily due to lower chemicals and energy costs as a result of lower demand. Labour costs were lower than budget due to vacancies and reduced over time and callouts across the region. Additionally savings were achieved in professional services and overheads including lower travel and training costs. The savings were partially offset by higher than budgeted maintenance costs, in particular, reactive jobs in the retail network.

Operating expenses in the wastewater business unit were \$3.8 million or 3.3% lower than budget. The savings were primarily due to lower asset operating costs as a result of lower treatment costs of biosolids and savings on services at the Mangere Treatment Plant. Labour costs were lower than budget due primarily to vacancies and lower overtime. Additionally savings were achieved in professional services due to the rescheduling of planning studies. Savings in overheads included lower training, travel and subscriptions costs. The savings were partially offset by higher than budgeted maintenance costs including repairs to the reactor blowers and engines at the Mangere Treatment Plant.

## FINANCIAL COMMENTARY (continued)

### Depreciation and Amortisation

	2012	2012	2012	2011	2013
	Actual	Budget	Variance to Budget	Actual	Budget
	\$000	\$000		\$000	\$000
Water	80,070	82,730	3.2%	71,106	77,052
Wastewater	99,752	100,950	1.2%	72,520	100,662
	179,822	183,680	2.1%	143,626	177,715

Depreciation and amortisation for 2012 was 2.1% below budget primarily due to the actual impact of the asset revaluation of 30 June 2011 on depreciation being less than was estimated at the time of the budget preparation.

### Finance costs

	2012	2012	2012	2011	2013
	Actual	Budget	Variance to Budget	Actual	Budget
	\$000	\$000		\$000	\$000
<b>Water</b>					
Paid and payable	3,618	3,249	(11.4%)	27,899	7,700
Capitalised on asset construction	(2,990)	(3,022)	(1.1%)	(1,998)	(4,467)
	628	227	(176.7%)	25,901	3,233
<b>Wastewater</b>					
Paid and payable	75,587	85,753	11.9%	37,922	84,369
Capitalised on asset construction	(3,629)	(3,846)	(5.6%)	(2,716)	(2,499)
	71,958	81,907	12.1%	35,206	81,870
<b>Total</b>					
Paid and payable	79,205	89,002	11.0%	65,821	92,069
Capitalised on asset construction	(6,619)	(6,868)	(3.6%)	(4,714)	(6,966)
	72,586	82,134	11.6%	61,107	85,103

Total finance costs of \$72.6 million were 11.6% below budget. The lower interest costs were primarily due to lower interest rates being achieved than budgeted. The amount of interest being capitalised to capital projects of \$6.6 million was 3.6% below budget.

### Tax

	2012	2012	2012	2011	2013
	Actual	Budget	Variance to Budget	Actual	Budget
	\$000	\$000		\$000	\$000
Current tax	–	–	–	–	–
Deferred tax	18,878	(1,236)	N/A	4,438	100
	18,878	(1,236)	N/A	4,438	100

No tax was payable on the trading result for the year.

## FINANCIAL COMMENTARY (continued)

### STATEMENT OF FINANCIAL POSITION

AS AT 30 JUNE 2012

The company was in a strong financial position with net equity of \$5.5 billion at year-end. The net equity decreased by \$45.1 million from 30 June 2011 due mainly to the reported net deficit after tax for the year.

#### Property, plant and equipment

	2012	2012	2012 Variance to Budget	2011	2013
	Actual	Budget		Actual	Budget
	\$000	\$000		\$000	\$000
Water	3,259,783	3,234,411	0.8%	3,188,117	3,533,469
Wastewater	4,470,526	4,519,687	(1.1%)	4,500,079	4,743,700
	7,730,309	7,754,098	(0.3%)	7,688,196	8,277,169

The analysis by business group for the movements in property, plant and equipment for 2012 is:

	Water	Wastewater	Total
	\$000	\$000	\$000
Net additions, integration and other movements	149,222	65,410	214,632
Asset revaluation (impairment) (before tax)	(1,625)	(1,182)	(2,807)
Depreciation	(75,931)	(93,781)	(169,712)
	71,666	(29,553)	42,113

The increase for property, plant and equipment was a result of planned spend on capital projects during the financial year. Significant capital expenditure projects in the year included work on the new Hunua Number 4 trunk watermain, expansion of the Waikato Treatment Plant and the Northern Waitakere wastewater servicing project.

#### Intangible assets

	2012	2012	2012 Variance to Budget	2011	2013
	Actual	Budget		Actual	Budget
	\$000	\$000		\$000	\$000
Water	14,150	9,166	54.4%	14,207	13,060
Wastewater	25,404	16,457	54.4%	16,022	23,446
	39,554	25,623	54.4%	30,229	36,506

The increase in intangible assets during the year reflects the completion of the new information systems including the implementation of SAP.

#### Borrowings

	2012	2012	2012 Variance to Budget	2011	2013
	Actual	Budget		Actual	Budget
	\$000	\$000		\$000	\$000
	1,296,066	1,295,314	(0.1%)	1,228,899	1,385,704

Borrowings at year-end were 0.1% or \$0.7 million higher than budget. Borrowings include commercial paper of \$129.1 million, \$13.5 million drawn under a revolving credit facility, related party loans of \$476.8 million, medium term notes of \$526.6 million and a bank loan of \$150 million.

#### Deferred tax liability

	2012	2012	2012 Variance to Budget	2011	2013
	Actual	Budget		Actual	Budget
	\$000	\$000		\$000	\$000
	829,950	849,704	(2.3%)	848,828	960,521

The deferred tax liability primarily comprises temporary differences between the revalued property, plant and equipment and the values recognised for tax purposes plus differences in the company's depreciation rates and those permitted by the Inland Revenue Department. At 30 June 2012, deferred taxation was lower than budget, principally due to the deferred tax effect of the revaluation of derivative financial instruments during the year.

## FINANCIAL COMMENTARY (continued)

### STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 30 JUNE 2012

No price adjustment was paid to customers during the financial year to 30 June 2012. As such, all of the company's cash flow from operations was available for either capital expenditure or debt repayment. Borrowings increased as a result of the shortfall between operating cash flows and capital expenditure.

#### Net cash flows from operating activities

2012	2012	2012	2011	2013
Actual	Budget	Variance to Budget	Actual	Budget
\$000	\$000		\$000	\$000
163,394	182,237	(10.3%)	176,035	197,213

Net operating cash flows at \$163.4 million were 10.3% lower than budget for 2012. This was due to operating cashflows including the payment of \$23.9 million for the lease of land on Puketutu Island. This payment was budgeted for in the 2011 financial year capital expenditure budget. The lease has however, been classified as an operating lease under NZ IAS 17 and the \$23.9 million as a prepayment of an operating expense.

#### Net cash flows from investing activities

2012	2012	2012	2011	2013
Actual	Budget	Variance to Budget	Actual	Budget
\$000	\$000		\$000	\$000
(229,173)	(240,907)	4.9%	(192,231)	(292,766)

The net cash flow from investing activities was 4.9% lower than budget due to minor delays in some wastewater and operations capital expenditure projects.

#### Net cash flows from financing activities

2012	2012	2012	2011	2013
Actual	Budget	Variance to Budget	Actual	Budget
\$000	\$000		\$000	\$000
67,167	58,670	14.5%	16,116	95,554

The net cash flow from financing activities shows a net increase in borrowing in 2012 from the prior year. The increase in debt resulted from the higher level of capital expenditure relative to the operating cash flows.

The audited financial statements are set out on pages 74 to 111.

## RESPONSIBILITY FOR THE FINANCIAL STATEMENTS AND STATEMENT OF SERVICE PERFORMANCE

### FINANCIAL STATEMENTS

We have ensured that the financial statements fairly reflect the financial position of the company as at 30 June 2012 and its financial performance and cash flows for the year ended on that date.

We have ensured that the accounting policies used by the company accord with New Zealand Equivalents to International Financial Reporting Standards. This includes the early adoption of accounting standards issued by the New Zealand Institute of Chartered Accountants, to the extent that they do not conflict with an existing accounting standard and the information is available.

We believe proper accounting records have been kept, enabling the financial position of the company to be determined and that the financial statements fully comply with the Financial Reporting Act 1993.

We consider adequate steps have been taken to safeguard the assets of the company and to prevent and detect fraud and other irregularities.

### STATEMENT OF SERVICE PERFORMANCE

We are responsible for establishing a Statement of Corporate Intent, which sets targets and other measures by which the company's performance can be judged in relation to its objectives.

We consider the results reported in the statement of service performance fairly reflect the achievements for the year ended 30 June 2012.

We have pleasure in presenting the financial statements and the statement of service performance for Watercare Services Limited for the year ended 30 June 2012, which were approved and authorised for release on 23 August 2012.

### For and on behalf of management:



K M Ford  
Chief Executive



B T Monk  
Chief Financial Officer

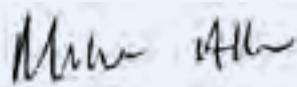
### For the Board:



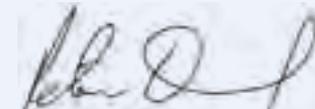
R B Keenan  
Chairman



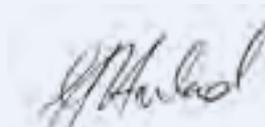
D J Clarke  
Deputy Chairman



M N Allen  
Director



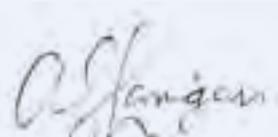
P S Drummond  
Director



C J Harland  
Director



S M Huria  
Director



A G Lanigan  
Director



J G Todd  
Director



## INDEPENDENT AUDITOR'S REPORT

### TO THE READERS OF WATERCARE SERVICES LIMITED AND GROUP'S FINANCIAL STATEMENTS AND STATEMENT OF SERVICE PERFORMANCE FOR THE YEAR ENDED 30 JUNE 2012

The Auditor-General is the auditor of Watercare Services Limited (the company) and group. The Auditor-General has appointed me, Jamie Schmidt, using the staff and resources of Deloitte, to carry out the audit of the financial statements and statement of service performance of the company and group on her behalf.

We have audited:

- the financial statements of the company and group on pages 74 to 111, that comprise the statements of financial position as at 30 June 2012, the statements of comprehensive income, statements of changes in equity and statements of cash flows for the year ended on that date and the notes to the financial statements that include accounting policies and other explanatory information; and
- the statement of service performance of the company and group on pages 113 to 115.

#### Opinion on the financial statements and the statement of service performance

In our opinion,

- the financial statements of the company and group on pages 74 to 111:
  - comply with generally accepted accounting practice in New Zealand;
  - give a true and fair view of the company and group's:
    - financial position as at 30 June 2012; and
    - financial performance and cash flows for the year ended on that date; and
- the statement of service performance of the company and group on pages 113 to 115:
  - complies with generally accepted accounting practice in New Zealand; and
  - gives a true and fair view of the company's service performance achievements measured against the performance targets adopted for the year ended 30 June 2012.

#### Opinion on other legal requirements

In accordance with the Financial Reporting Act 1993 we report that, in our opinion, proper accounting records have been kept by the company and group as far as appears from an examination of those records.

Our audit was completed on 23 August 2012. This is the date at which our opinion is expressed.

The basis of our opinion is explained below. In addition, we outline the responsibilities of the Board of Directors and our responsibilities, and explain our independence.

#### Basis of opinion

We carried out our audit in accordance with the Auditor-General's Auditing Standards, which incorporate the International Standards on Auditing (New Zealand). Those standards require that we comply with ethical requirements and plan and carry out our audit to obtain reasonable assurance about whether the financial statements and statement of service performance are free from material misstatement.

Material misstatements are differences or omissions of amounts and disclosures that would affect a reader's overall understanding of the financial statements and statement of service performance. If we had found material misstatements that were not corrected, we would have referred to them in our opinion.

An audit involves carrying out procedures to obtain audit evidence about the amounts and disclosures in the financial statements and statement of service performance. The procedures selected depend on our judgement, including our assessment of risks of material misstatement of the financial statements and statement of service performance whether due to fraud or error.

In making those risk assessments, we consider internal control relevant to the preparation of the company and group's financial statements and statement of service performance that give a true and fair view of the matters to which they relate.

We consider internal control in order to design audit procedures that are appropriate in the circumstances but not for the purpose of expressing an opinion on the effectiveness of the company and group's internal control.

An audit also involves evaluating:

- the appropriateness of accounting policies used and whether they have been consistently applied;
- the reasonableness of the significant accounting estimates and judgements made by the Board of Directors;
- the adequacy of all disclosures in the financial statements and statement of service performance; and
- the overall presentation of the financial statements and statement of service performance.

We did not examine every transaction, nor do we guarantee complete accuracy of the financial statements and statement of service performance. In accordance with the Financial Reporting Act 1993, we report that we have obtained all the information and explanations we have required. We believe we have obtained sufficient and appropriate audit evidence to provide a basis for our audit opinion.

### Responsibilities of the Board of Directors

The Board of Directors is responsible for preparing financial statements and a statement of service performance that:

- comply with generally accepted accounting practice in New Zealand;
- give a true and fair view of the company and group's financial position, financial performance and cash flows; and
- give a true and fair view of the company and group's service performance.

The Board of Directors is also responsible for such internal control as it determines is necessary to enable the preparation of financial statements and a statement of service performance that are free from material misstatement, whether due to fraud or error.

The Board of Directors' responsibilities arise from the Local Government (Auckland Transitional Provisions) Act 2010 and the Financial Reporting Act 1993.

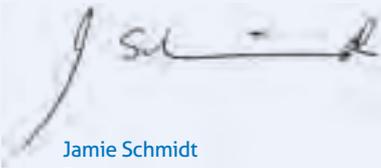
### Responsibilities of the Auditor

We are responsible for expressing an independent opinion on the financial statements and statement of service performance and reporting that opinion to you based on our audit. Our responsibility arises from section 15 of the Public Audit Act 2001 and section 22 of the Local Government (Auckland Transitional Provisions) Act 2010.

### Independence

When carrying out the audit, we followed the independence requirements of the Auditor-General, which incorporate the independence requirements of the New Zealand Institute of Chartered Accountants.

Other than the audit and the provision of tax services and review of financial information systems, which are compatible with those independence requirements, we have no relationship with or interests in the company or any of its subsidiaries.



**Jamie Schmidt**  
Deloitte

On behalf of the Auditor-General  
Auckland, New Zealand

### Matters relating to the electronic presentation of the audited financial statements and statement of service performance

This audit report relates to the financial statements and statement of service performance of Watercare Services Limited ("Watercare") for the year ended 30 June 2012 included on the Watercare website. Watercare's Board of Directors is responsible for the maintenance and integrity of Watercare's website. We have not been engaged to report on the integrity of Watercare's website. We accept no responsibility for any changes that may have occurred to the financial statements and statement of service performance since they were initially presented on the website.

The audit report refers only to the financial statements and statement of service performance named above. It does not provide an opinion on any other information which may have been hyperlinked to or from the financial statements and statement of service performance. If readers of this report are concerned with the inherent risks arising from electronic data communication they should refer to the published hard copy of the audited financial statements and statement of service performance and the related audit report dated 23 August 2012 to confirm the information included in the audited financial statements and statement of service performance presented on this website.

Legislation in New Zealand governing the preparation and dissemination of financial information may differ from legislation in other jurisdictions.

## STATEMENT OF COMPREHENSIVE INCOME

FOR THE YEAR ENDED 30 JUNE 2012

	Notes	2012		2011	
		Group and Company		Group and Company	
		\$000		\$000	
Revenue	Note 1, page 85	441,950		373,107	
<b>Total revenue</b>		<b>441,950</b>		<b>373,107</b>	
<b>Operating expenses</b>					
Asset operating costs		(73,523)		(56,070)	
Maintenance costs		(38,143)		(39,012)	
Employee benefit expenses		(38,948)		(27,659)	
Other expenses		(33,976)		(33,799)	
<b>Total operating expenses</b>	Note 3, page 86	<b>(184,590)</b>		<b>(156,540)</b>	
Depreciation and amortisation	Note 4, page 86	(179,822)		(143,626)	
Finance costs	Note 5, page 86	(72,586)		(61,107)	
<b>Total expenses</b>		<b>(436,998)</b>		<b>(361,273)</b>	
<b>Operating surplus from trading operations</b>		<b>4,952</b>		<b>11,834</b>	
Loss on disposal and provision for redundant property, plant and equipment and other restructuring costs		(8,517)		(6,162)	
Loss on revaluation of derivative financial instruments	Note 6, page 87	(60,618)		(13,567)	
<b>Operating deficit before tax</b>		<b>(64,183)</b>		<b>(7,895)</b>	
<b>Income tax benefit/(expense)</b>					
Deferred tax	Note 8, page 88	18,878		(4,438)	
<b>Income tax benefit/(expense)</b>		<b>18,878</b>		<b>(4,438)</b>	
<b>Net deficit for the year</b>		<b>(45,305)</b>		<b>(12,333)</b>	
<b>Other comprehensive income net of tax</b>					
Gain on revaluation of property, plant and equipment and adjustments	Note 12, page 92	–		361,873	
<b>Other comprehensive income for the year, net of tax</b>		<b>–</b>		<b>361,873</b>	
<b>Total comprehensive income for the year, net of tax</b>		<b>(45,305)</b>		<b>349,540</b>	

The financial statements should be read in conjunction with the accounting policies and notes on pages 80 to 111.

## STATEMENT OF FINANCIAL POSITION

AS AT 30 JUNE 2012

	Notes	2012		2011	
		Group and Company		Group and Company	
		\$000		\$000	
<b>ASSETS</b>					
<b>Current</b>					
Cash and cash equivalents		862	32		
Trade and other receivables	Note 16, page 99	71,590	79,508		
Prepaid expenses	Note 17, page 99	3,473	3,401		
Inventories	Note 15, page 99	2,793	4,092		
Derivative financial instruments	Note 22, page 103	26	553		
<b>Total current assets</b>		<b>78,744</b>	<b>87,586</b>		
<b>Non-current</b>					
Prepaid expenses	Note 17, page 99	24,033	–		
Inventories	Note 15, page 99	2,637	3,040		
Derivative financial instruments	Note 22, page 103	23,609	12,285		
Intangible assets	Note 14, page 97	39,554	30,229		
Property, plant and equipment	Note 13, page 95	7,730,309	7,688,196		
<b>Total non-current assets</b>		<b>7,820,142</b>	<b>7,733,750</b>		
<b>Total assets</b>		<b>7,898,886</b>	<b>7,821,336</b>		
<b>EQUITY &amp; LIABILITIES</b>					
<b>Current</b>					
Bank overdraft		–	558		
Trade and other payables	Note 18, page 99	24,484	16,157		
Accrued expenses	Note 19, page 100	61,834	67,927		
Provisions	Note 20, page 100	6,241	4,796		
Borrowings	Note 21, page 101	232,156	241,295		
Derivative financial instruments	Note 22, page 103	362	3,174		
<b>Total current liabilities</b>		<b>325,077</b>	<b>333,907</b>		
<b>Non-current</b>					
Accrued expenses	Note 19, page 100	8,840	9,100		
Provisions	Note 20, page 100	1,464	1,392		
Borrowings	Note 21, page 101	1,063,910	987,604		
Derivative financial instruments	Note 22, page 103	133,336	59,110		
Deferred tax liability	Note 9, page 89	829,950	848,828		
<b>Total non-current liabilities</b>		<b>2,037,500</b>	<b>1,906,034</b>		
<b>Total liabilities</b>		<b>2,362,577</b>	<b>2,239,941</b>		
<b>EQUITY ATTRIBUTABLE TO OWNERS OF THE PARENT</b>					
Retained earnings		72,274	111,972		
Revaluation reserves	Note 12, page 92	1,424,231	1,429,619		
Capital reserve	Note 11, page 91	3,779,111	3,779,111		
Issued capital	Note 10, page 89	260,693	260,693		
<b>Total equity</b>		<b>5,536,309</b>	<b>5,581,395</b>		
<b>Total equity and liabilities</b>		<b>7,898,886</b>	<b>7,821,336</b>		

The financial statements should be read in conjunction with the accounting policies and notes on pages 80 to 111.

## STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 30 JUNE 2012

	Notes	2012		2011	
		Group and Company		Group and Company	
		\$000		\$000	
<b>OPERATING ACTIVITIES</b>					
<b>Cash was provided from:</b>					
Receipts from customers		445,197		384,722	
Dividends received		91		34	
Interest received		753		1,041	
		446,041		385,797	
<b>Cash was applied to:</b>					
Employees and suppliers		(208,941)		(153,203)	
Finance costs paid		(73,706)		(56,559)	
		(282,647)		(209,762)	
<b>Net cash flows – operating activities</b>	Note 7, page 87	163,394		176,035	
<b>INVESTING ACTIVITIES</b>					
<b>Cash was provided from:</b>					
Cash acquired from Manukau Water Limited	Note 11, page 91	–		11,953	
Cash acquired from Watercare Harbour Clean-Up Trust	Note 11, page 90	220		–	
Sale of property, plant and equipment and intangibles		86		70	
		306		12,023	
<b>Cash was applied to:</b>					
Purchase and construction of property, plant and equipment and intangibles		(222,860)		(193,935)	
Interest capitalised on construction of property, plant and equipment and intangibles	Note 5, page 86	(6,619)		(4,714)	
Bank overdraft acquired from Metrowater Limited	Note 11, page 91	–		(5,605)	
		(229,479)		(204,254)	
<b>Net cash flows – investing activities</b>		(229,173)		(192,231)	
<b>FINANCING ACTIVITIES</b>					
<b>Cash was provided from:</b>					
Short-term deposits		–		15,000	
Proceeds from medium-term notes issue (net)		76,649		150,000	
Proceeds from bank term loan facility		50,000		–	
Commercial paper issued (net)		4,976		24,916	
Revolving credit facility (net)		2,000		–	
		133,625		189,916	
<b>Cash was applied to:</b>					
Revolving credit facility (net)		–		(5,000)	
Repay loan from Auckland Council – related party	Note 23, page 109	(66,458)		(168,800)	
		(66,458)		(173,800)	
<b>Net cash flows – financing activities</b>		67,167		16,116	
Net change in cash flows		1,388		(80)	
Cash and cash equivalents at the beginning of year		(526)		(446)	
<b>Cash and cash equivalents at the end of year</b>		862		(526)	
<b>Cash and cash equivalents comprises:</b>					
Bank balances		577		32	
Short term deposits maturing within three months		285		–	
Bank overdraft		–		(558)	
		862		(526)	

The financial statements should be read in conjunction with the accounting policies and notes on pages 80 to 111.

## STATEMENT OF CHANGES IN EQUITY

FOR THE YEAR ENDED 30 JUNE 2012

	Notes	2012				
		Group and Company				
		Issued capital	Revaluation reserves	Retained earnings	Capital reserve	Total
		\$000	\$000	\$000	\$000	\$000
Balance at 1 July 2011		260,693	1,429,619	111,972	3,779,111	5,581,395
<b>Comprehensive income</b>						
Net deficit for the year		-	-	(45,305)	-	(45,305)
<b>Other comprehensive income</b>						
Transfer to retained earnings on disposal of property, plant and equipment	Note 12, page 92	-	(5,388)	5,388	-	-
<b>Total comprehensive income for the year, net of tax</b>		-	(5,388)	(39,917)	-	(45,305)
<b>Transactions with owners</b>						
Watercare Harbour Clean-up Trust acquired control at the beginning of year	Note 11, page 90	-	-	219	-	219
<b>Total transactions with owners</b>		-	-	219	-	219
<b>Balance at 30 June 2012</b>		<b>260,693</b>	<b>1,424,231</b>	<b>72,274</b>	<b>3,779,111</b>	<b>5,536,309</b>

	Notes	2011				
		Group and Company				
		Issued capital	Revaluation reserves	Retained earnings	Capital reserve	Total
		\$000	\$000	\$000	\$000	\$000
Balance at 1 July 2010		260,693	1,071,655	120,265	-	1,452,613
<b>Comprehensive income</b>						
Net deficit for the year		-	-	(12,333)	-	(12,333)
<b>Other comprehensive income</b>						
Gain on revaluation of property, plant and equipment	Note 12, page 92	-	361,873	-	-	361,873
Transfer to retained earnings on disposal of property, plant and equipment	Note 12, page 92	-	(3,909)	3,909	-	-
<b>Total comprehensive income for the year, net of tax</b>		-	357,964	(8,424)	-	349,540
<b>Transactions with owners</b>						
Capital reserve on business integration		-	-	-	3,779,111	3,779,111
Metrowater Community Trust acquired on integration		-	-	131	-	131
<b>Total transactions with owners</b>	Note 11, page 92	-	-	131	3,779,111	3,779,242
<b>Balance at 30 June 2011</b>		<b>260,693</b>	<b>1,429,619</b>	<b>111,972</b>	<b>3,779,111</b>	<b>5,581,395</b>

The financial statements should be read in conjunction with the accounting policies and notes on pages 80 to 111.

## STATEMENT OF COMPREHENSIVE INCOME BY BUSINESS UNIT

FOR THE YEAR ENDED 30 JUNE 2012

	2012		2011		2011	
	Group and Company			Group and Company		
	Water	Wastewater	Total	Water	Wastewater	Total
	\$000	\$000	\$000	\$000	\$000	\$000
<b>Revenue</b>						
Water and wastewater	129,543	263,624	393,167	131,438	203,773	335,211
Trade waste	–	12,462	12,462	–	14,038	14,038
Other revenue	20,348	15,973	36,321	9,066	14,792	23,858
<b>Total revenue</b>	<b>149,891</b>	<b>292,059</b>	<b>441,950</b>	<b>140,504</b>	<b>232,603</b>	<b>373,107</b>
<b>Operating expenses</b>						
Asset operating costs	(26,534)	(46,989)	(73,523)	(19,577)	(36,493)	(56,070)
Maintenance costs	(19,485)	(18,658)	(38,143)	(18,361)	(20,651)	(39,012)
Employee benefit expenses	(13,708)	(25,240)	(38,948)	(12,386)	(15,273)	(27,659)
Other expenses	(11,815)	(22,161)	(33,976)	(13,205)	(20,594)	(33,799)
<b>Total operating expenses</b>	<b>(71,542)</b>	<b>(113,048)</b>	<b>(184,590)</b>	<b>(63,529)</b>	<b>(93,011)</b>	<b>(156,540)</b>
Depreciation and amortisation	(80,070)	(99,752)	(179,822)	(71,106)	(72,520)	(143,626)
Finance costs	(628)	(71,958)	(72,586)	(25,901)	(35,206)	(61,107)
<b>Total expenses</b>	<b>(152,240)</b>	<b>(284,758)</b>	<b>(436,998)</b>	<b>(160,536)</b>	<b>(200,737)</b>	<b>(361,273)</b>
<b>Operating (deficit)/surplus from trading operations</b>	<b>(2,349)</b>	<b>7,301</b>	<b>4,952</b>	<b>(20,032)</b>	<b>31,866</b>	<b>11,834</b>
Loss on disposal and provision for redundant property, plant and equipment and other restructuring costs	(4,808)	(3,709)	(8,517)	(3,215)	(2,947)	(6,162)
Loss on revaluation of derivative financial instruments	(2,070)	(58,548)	(60,618)	(5,191)	(8,376)	(13,567)
<b>Operating (deficit)/surplus before tax</b>	<b>(9,227)</b>	<b>(54,956)</b>	<b>(64,183)</b>	<b>(28,438)</b>	<b>20,543</b>	<b>(7,895)</b>
<b>Income tax benefit/(expense)</b>						
Deferred tax	2,714	16,164	18,878	(1,686)	(2,752)	(4,438)
<b>Income tax benefit/(expense)</b>	<b>2,714</b>	<b>16,164</b>	<b>18,878</b>	<b>(1,686)</b>	<b>(2,752)</b>	<b>(4,438)</b>
<b>Net (deficit)/surplus for the year</b>	<b>(6,513)</b>	<b>(38,792)</b>	<b>(45,305)</b>	<b>(30,124)</b>	<b>17,791</b>	<b>(12,333)</b>
<b>Other comprehensive income net of tax</b>						
Gain on revaluation and impairment of property, plant and equipment and adjustments	–	–	–	137,512	224,361	361,873
<b>Other comprehensive income for the year, net of tax</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>137,512</b>	<b>224,361</b>	<b>361,873</b>
<b>Total comprehensive income for the year, net of tax</b>	<b>(6,513)</b>	<b>(38,792)</b>	<b>(45,305)</b>	<b>107,388</b>	<b>242,152</b>	<b>349,540</b>

The financial statements should be read in conjunction with the accounting policies and notes on pages 80 to 111.

## STATEMENT OF FINANCIAL POSITION BY BUSINESS UNIT

AS AT 30 JUNE 2012

	2012			2011		
	Group and Company			Group and Company		
	Water	Wastewater	Total	Water	Wastewater	Total
	\$000	\$000	\$000	\$000	\$000	\$000
<b>ASSETS</b>						
<b>Current</b>						
Current assets	38,517	40,227	78,744	40,722	46,864	87,586
<b>Total current assets</b>	<b>38,517</b>	<b>40,227</b>	<b>78,744</b>	<b>40,722</b>	<b>46,864</b>	<b>87,586</b>
<b>Non-current</b>						
Prepaid expenses	25	24,008	24,033	–	–	–
Inventories	133	2,504	2,637	635	2,405	3,040
Derivative financial instruments	1,079	22,530	23,609	5,429	6,856	12,285
Intangibles	14,150	25,404	39,554	14,207	16,022	30,229
Property, plant and equipment	3,259,783	4,470,526	7,730,309	3,188,117	4,500,079	7,688,196
<b>Total non-current assets</b>	<b>3,275,170</b>	<b>4,544,972</b>	<b>7,820,142</b>	<b>3,208,388</b>	<b>4,525,362</b>	<b>7,733,750</b>
<b>Total assets</b>	<b>3,313,687</b>	<b>4,585,199</b>	<b>7,898,886</b>	<b>3,249,110</b>	<b>4,572,226</b>	<b>7,821,336</b>

## LIABILITIES

<b>Current</b>						
Current liabilities	47,927	277,150	325,077	143,791	190,116	333,907
<b>Total current liabilities</b>	<b>47,927</b>	<b>277,150</b>	<b>325,077</b>	<b>143,791</b>	<b>190,116</b>	<b>333,907</b>
<b>Non-current</b>						
Accrued expenses	4,226	4,614	8,840	4,368	4,732	9,100
Provisions	482	982	1,464	524	868	1,392
Borrowings	48,602	1,015,308	1,063,910	436,205	551,399	987,604
Derivative financial instruments	6,091	127,245	133,336	26,126	32,984	59,110
Deferred tax liability	273,457	556,493	829,950	319,452	529,376	848,828
<b>Total non-current liabilities</b>	<b>332,858</b>	<b>1,704,642</b>	<b>2,037,500</b>	<b>786,675</b>	<b>1,119,359</b>	<b>1,906,034</b>
<b>Total liabilities</b>	<b>380,785</b>	<b>1,981,792</b>	<b>2,362,577</b>	<b>930,466</b>	<b>1,309,475</b>	<b>2,239,941</b>
Equity attributable to owners of the parent	2,932,902	2,603,407	5,536,309	2,318,644	3,262,751	5,581,395
<b>Total equity and liabilities</b>	<b>3,313,687</b>	<b>4,585,199</b>	<b>7,898,886</b>	<b>3,249,110</b>	<b>4,572,226</b>	<b>7,821,336</b>

## STATEMENT OF CASH FLOWS BY BUSINESS UNIT

FOR THE YEAR ENDED 30 JUNE 2012

	2012			2011		
	Group and Company			Group and Company		
	Water	Wastewater	Total	Water	Wastewater	Total
	\$000	\$000	\$000	\$000	\$000	\$000
Net cash flows – operating activities	74,540	88,854	163,394	59,305	116,730	176,035
Net cash flows – investing activities	(120,501)	(108,672)	(229,173)	(79,978)	(112,253)	(192,231)
Net cash flows – financing activities	27,108	40,059	67,167	7,118	8,998	16,116
<b>Net change in cash flows</b>	<b>(18,853)</b>	<b>20,241</b>	<b>1,388</b>	<b>(13,555)</b>	<b>13,475</b>	<b>(80)</b>

The financial statements should be read in conjunction with the accounting policies and notes on pages 80 to 111.

## STATEMENT OF ACCOUNTING POLICIES

FOR THE YEAR ENDED 30 JUNE 2012

### REPORTING ENTITY

The financial statements are for Watercare Services Limited, a council organisation wholly owned by Auckland Council, as defined in the Local Government Act 2002 incorporated and domiciled in New Zealand. The consolidated financial statements of the group are for the economic entity of Watercare Services Limited and its subsidiaries. Separate financial statements of the parent are not presented in these financial statements as the subsidiary financial statements are immaterial to the consolidated group, as detailed in Note 11, page 90.

During the prior year, on 1 November 2010, as the result of the Auckland Council reorganisation, Watercare Services Limited integrated the water and wastewater businesses of Metrowater Limited, Manukau Water Limited, North Shore City Council, Waitakere City Council, Rodney District Council, Papakura District Council and Franklin District Council, in accordance with the Local Government (Tamaki Makaurau Reorganisation) Act 2009, the Local Government (Auckland Council) Act 2009 and the Local Government (Auckland Transitional Provisions) Act 2010. Consequently, Watercare Services Limited provides total water and wastewater services to the Auckland region (except Papakura).

The group's registered office and principal place of business is at 2 Nuffield Street, Newmarket, Auckland 1023.

### STATEMENT OF COMPLIANCE

Watercare Services Limited is a public benefit entity (PBE) as defined under the New Zealand Equivalents to International Financial Reporting Standards (NZ IFRS). The financial statements and accounting policies comply with the specific recognition, measurement and disclosure requirements of NZ IFRS in relation to PBEs and New Zealand Generally Accepted Accounting Practice (NZGAAP).

### STATUTORY BASE

Watercare Services Limited is a group registered under the Companies Act 1993 and is a reporting entity as defined by the Financial Reporting Act 1993. The financial statements have been prepared in accordance with the requirements of the Financial Reporting Act 1993, the Local Government Acts 1974 and 2002, Local Government (Auckland Transitional Provisions) Act 2010 and the Companies Act 1993.

### MEASUREMENT BASE

The financial statements have been prepared on the historical cost basis, modified by the revaluation of land and buildings, certain infrastructural assets and derivative instruments as described in specific accounting policies below.

### FUNCTIONAL AND PRESENTATION CURRENCY

The financial statements are prepared in New Zealand dollars and all values are rounded to the nearest thousand, unless otherwise stated.

### KEY MANAGEMENT DECISIONS

The key areas where management has exercised its judgement in the preparation of these financial statements are as explained below:

There are a number of assumptions and estimates used when performing depreciated replacement cost valuations of infrastructure assets. For example, estimates are made determining the remaining useful life over which an asset will be depreciated, replacement costs for assets and capitalised interest. In respect of estimated useful lives, if the estimated useful lives are not accurate this would lead to the annual depreciation charge being either higher or lower in the statement of comprehensive income. To minimise the estimation risk of asset useful lives the group continually assesses the condition of infrastructural assets and their remaining useful lives. Physical inspections and condition assessments are used by the group to ensure that the condition of major assets is understood and the carrying value of an asset reflects its actual condition. See Note 13, page 94 for additional information.

### SIGNIFICANT ACCOUNTING POLICIES

The following specific accounting policies that materially affect the measurement of comprehensive income, financial position and cash flows have been applied consistently to all periods presented in these financial statements.

#### 1. BUSINESS UNIT REPORTING

Business unit comprehensive income, financial position and cash flows are presented in the financial statements for water and wastewater services, reflecting the group's legislative requirements. Revenues and expenses are apportioned to each unit on a direct basis plus an allocation of non-specific and overhead costs proportional to each unit's actual revenues at year end. During the year, debt was reallocated between the business units to better reflect the returns expected from each unit and the incremental cost of capital. This rebalancing had resulted in an increase as at 1 July 2011 of \$100.3 million in current borrowings, an increase of \$410.4 million in non-current borrowings and a decrease of \$510.7 million in equity for the Wastewater activity with an equal and opposite impact for the Water activity. Accordingly, costs directly attributable to debt such as finance costs and loss on revaluation of derivative instruments have been allocated in proportion to the debt as at balance date in Wastewater and Water activities.

All operations are carried out within New Zealand. There are no material transactions between the two business units.

#### 2. BASIS OF CONSOLIDATION

The purchase method is used to prepare the consolidated financial statements, which involves adding together like items of assets, liabilities, equity, income and expenses on a line-by-line basis. All significant intragroup balances, transactions, revenues and expenses are eliminated on consolidation.

#### 3. INTEGRATION OF RETAIL BUSINESS

The group has adopted the public benefit entity exemption from NZ IFRS 3 available for local authority reorganisations where no consideration has been transferred. The group therefore, is not required to measure assets and liabilities at their fair value at acquisition date and no consideration was paid for the net assets acquired. During the prior year, the net assets acquired were recorded at the accounting book value of the previous local network operators (deemed cost) in the company's financial statements and where necessary, adjustments were made to the carrying value of the assets and liabilities being recognised in the company's opening balance sheet to achieve consistency in the accounting policies. The contribution value of the net assets has been recorded separately in the capital reserve. See Note 11, page 91 for additional information.

#### 4. GOODS AND SERVICES TAX (GST)

The statement of comprehensive income and the statement of financial position are stated excluding GST, with the exception of receivables and payables, which include GST. The net amount of GST recoverable from or payable to the Inland Revenue Department is included as part of receivables or payables in the statement of financial position.

## STATEMENT OF ACCOUNTING POLICIES (continued)

FOR THE YEAR ENDED 30 JUNE 2012

### SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### 5. OPERATING REVENUE

The group measures revenue at the fair value of the amounts received or receivable, net of returns, trade allowances, duties and taxes paid. It accounts for revenue for the major activities as follows:

##### Water and wastewater revenue

Water revenue comprises the amounts received and receivable, including estimated amounts of unread meters at balance date for water supplied to customers in the ordinary course of business. Wastewater revenue is a combination of fixed charge and a percentage of water used. Both are shown net of prompt payment discounts and leak remissions.

##### Provision of services

Sales of services are recognised at fair value of the amounts received or receivable as the services are rendered, or to reflect the percentage completion of the related services where rendered over time.

##### Interest income

Interest income is recognised using the effective interest method.

##### Dividend income

Dividend income is recognised on the date when the group's right to receive payment is established.

##### Development contributions, financial contributions and infrastructure growth charge

Development contributions, financial contributions and infrastructure growth charges received towards the construction of property, plant and equipment are recognised at the time an application is approved.

##### Vested assets revenue

Vested assets revenue is recognised when control over the assets is obtained.

#### 6. GRANT EXPENDITURE

The company provides funding to its subsidiaries in the form of grants, which is treated as expenditure in the company's books and as income in the subsidiaries books. On consolidation this expenditure is offset by the income in the subsidiaries books whilst the actual expenditure is recognised in the group accounts when the subsidiaries incur the expenditure.

#### 7. FINANCE COSTS

Finance costs directly attributable to the acquisition, construction or production of a qualifying asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of the cost of that asset. All other finance costs are expensed in the period they occur. Finance costs consist of interest and other costs that are incurred in connection with the borrowing of funds.

#### 8. BUSINESS INTEGRATION COSTS

Costs associated with planning the integration of the water and the wastewater businesses in the Auckland region were expensed in the period in which they were incurred, except for related capital projects.

#### 9. LEASES

The group leases certain property, plant and equipment where the lessor effectively retains substantially all the risks and benefits of ownership. Amounts payable under the terms of these leases are recognised as an expense spread evenly over the term of the lease.

#### 10. RESEARCH AND DEVELOPMENT

Research costs are expensed as incurred. Development expenditure on individual projects is capitalised and recognised as an asset when it meets the definition and criteria for capitalisation as an asset and it is probable that the group will receive future economic benefits from the asset. Assets which have finite lives are stated at cost less accumulated amortisation and are amortised on a straight-line basis over their useful lives.

#### 11. PROPERTY, PLANT AND EQUIPMENT

##### Classes of assets

Property, plant and equipment is allocated to classes, being:

- Land (including improvements)
- Buildings
- Pipelines
- Tanks, tunnels, roads and reservoirs
- Dams
- Machinery
- Motor vehicles
- Office equipment
- Work in progress

##### Initial recognition

The cost of purchased property, plant and equipment is the initial purchase price plus directly attributable costs of bringing the assets to the location and condition necessary for their intended use.

Constructed assets are initially recorded as work in progress at the cost of construction (including materials and direct labour), finance costs and other direct costs until the asset is ready for productive use. Finance costs incurred during the course of construction that are attributable to a project are capitalised, using the finance rate applicable to the funding. When the asset is ready for productive use the on-going operating and finance costs are recorded as expenses.

## STATEMENT OF ACCOUNTING POLICIES (continued)

FOR THE YEAR ENDED 30 JUNE 2012

### SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### 11. PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

##### Subsequent recognition

Land and buildings are carried at fair values that reflect current market values, which is the amount that would be expected from an orderly sale, determined by an independent registered valuer at least every three years.

Pipelines, tanks, tunnels, roads, reservoirs, dams and machinery are also carried at fair value, which is deemed to be depreciated replacement cost because the assets are of a specialised nature. The depreciated replacement costs are determined on the basis of an independent valuation prepared by external valuers at least every three years.

The revaluation process involves assessing the current replacement cost and remaining useful lives of the specialised property, plant and equipment.

Any property, plant and equipment that has been acquired after the most recent valuation is carried at cost less accumulated depreciation and impairment until the next revaluation.

Motor vehicles and office equipment are carried at cost less accumulated depreciation. Work in progress is carried at cost.

The changes in the value of each class of property, plant and equipment as a result of the revaluations are recorded in other comprehensive income and accumulated in a revaluation reserve. The group maintains a revaluation reserve for each class of assets. Where cumulative decreases exceed cumulative increases in the value of a class of assets, the net amount is recognised as an expense in determining the surplus or deficit for the year. Any revaluation increase is credited to the asset class revaluation reserve, except to the extent that it reverses a revaluation decrease for the same asset previously charged as an expense in determining the surplus or deficit for the year. Any accumulated depreciation at the date of the revaluation is transferred to the gross carrying amount of the asset and the asset cost is restated to the revalued amount.

##### Impairment

Asset carrying values are reviewed for impairment whenever events or changes in circumstances indicate the carrying amount may not be recoverable. An impairment loss is recognised if the estimated recoverable amount of an asset is less than its carrying amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For revalued assets, value in use is the depreciated replacement cost for an asset, where the future economic benefits of the asset are not primarily dependent on the asset's ability to generate net cash inflows, and where the entity would, if deprived of the asset, replace its remaining future economic benefits. The value in use for cash-generating assets is the present value of expected future cash flows. If an asset's carrying amount exceeds its recoverable amount, the asset is impaired and the carrying amount is written down to the recoverable amount.

For revalued assets, the impairment loss is recognised in other comprehensive income to the extent that the impairment loss does not exceed the amount in the revaluation surplus for that same class of asset. The reversal of an impairment loss on a revalued asset is credited to the revaluation reserve. However, to the extent that an impairment loss on the same class of asset was previously recognised within surplus or deficit, a reversal of that impairment loss is also recognised within surplus or deficit. For assets not carried at a revalued amount the total impairment loss and the reversal of an impairment loss (for assets other than goodwill) is recognised in the surplus or deficit.

##### Depreciation

Depreciation is provided on a straight-line basis on all property, plant and equipment, other than freehold land, at rates calculated to allocate their cost or revalued amounts over their estimated useful lives. Assets are depreciated to a nil residual value.

Asset class	for 2012			2012	2011
	Range of useful lives in years			Average useful life in years	
Buildings	10	to	109	62	65
Pipelines	2	to	399	109	113
Tanks, tunnels, roads and reservoirs	3	to	200	79	79
Dams	3	to	200	185	189
Machinery	1	to	200	49	44
Motor vehicles	1	to	8	6	4
Office equipment	1	to	20	7	5

#### 12. INTANGIBLE ASSETS

Computer software assets and network models are recorded at cost less accumulated amortisation and accumulated impairment losses. Amortisation is charged on a straight-line basis over their estimated useful lives.

Easements are recognised at cost, being the costs directly attributable in bringing the asset to its intended use. Easements have an indefinite useful life and are not amortised, but are instead tested for impairment annually.

Resource Management Act consents are recorded at cost less accumulated amortisation and accumulated impairment losses. Amortisation is charged on a straight-line basis, over the term of the consent.

Intangible assets' carrying values are reviewed at the end of each year to determine whether there is any indication that those assets have suffered an impairment loss. If any impairment loss has occurred, the carrying value of the asset is adjusted and the loss recognised in determining the surplus or deficit for the year.

Asset class	for 2012			2012	2011
	Range of useful lives in years			Average useful life in years	
Network models	1	to	4	4	4
Computer software	1	to	10	5	7
Resource consents	1	to	39	30	33

## STATEMENT OF ACCOUNTING POLICIES (continued)

FOR THE YEAR ENDED 30 JUNE 2012

### SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### 13. INCOME

##### Current tax

Current tax is calculated by reference to the amount of income taxes payable or recoverable in respect of the taxable profit or loss for the year. Current tax for current and prior years is recognised as a liability (or asset) to the extent it is unpaid (or refundable).

##### Deferred tax

Deferred tax is accounted for using the comprehensive balance sheet liability method in respect of temporary differences arising from differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax base of those items.

In principle, deferred tax liabilities are recognised for all temporary differences. Deferred tax assets are recognised to the extent that it is probable that sufficient taxable amounts will be available against which deductible temporary differences or unused tax losses and tax offsets can be utilised.

Current and deferred tax assets and liabilities are measured at the tax rates that are expected to apply to year(s) when the asset and liability giving rise to them are realised or settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the reporting date.

#### 14. INVENTORIES

Inventories comprise consumables, spare parts and treated water.

Consumables are recorded at the lower of cost (determined on a weighted average basis) and net realisable value.

Spare parts are recorded at cost less an adjustment for the reduction in economic benefits due to obsolescence. The cost of spare parts is recorded as an expense when used for repairs and maintenance on existing plant and equipment, or recorded as part of the cost of the new asset if used in the construction of new property, plant and equipment.

Treated water in the network and reservoirs is recorded at the lower of cost and net realisable value.

#### 15. PROVISIONS

The group provides for the cost of employees' entitlements to annual leave, sick leave and gratuities under the terms of their employment contracts. These amounts are expected to be settled within one year and are therefore recorded in current provisions.

The group provides for the liability for employees' long service leave under the terms of their employment contracts. The liability is calculated as the present value of the expected future payments after allowing for wage and salary increases, the rate of staff turnover and term of service with the group. Long service leave is recorded in current and non-current provisions. The amount recorded in non-current provisions represents the portion which is due for payment beyond one year from the reporting date.

Other provisions are recognised when the group has a present obligation as a result of a past event and it is probable that there is a future outflow of resources and the amount of the provision can be reliably measured.

The amount recorded as a provision is the best estimate of the consideration required to settle the obligation at the end of each year.

#### 16. CONTRACT RETENTIONS

Certain construction contracts entitle the group to retain specified amounts to ensure the performance of contract obligations. These retentions are recorded as a liability, and either used to remedy contract performance or paid to the contractor at the end of the retention period.

#### 17. FOREIGN CURRENCIES

The cost of assets purchased with foreign currencies is calculated using the exchange rate on the date of purchase. Any difference between this cost and the amount later required to settle the transaction is recognised as a foreign exchange gain or loss.

Operating expenses in foreign currencies are converted at the rate of exchange on the date of the transaction.

#### 18. FINANCIAL INSTRUMENTS

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument in another. As such, the group recognises all its financial instruments as soon as it becomes a party to the contractual provisions of the financial instrument.

At each reporting date the group includes in its statement of financial position a range of financial assets that include cash and short-term deposits, trade and other receivables, and derivative instruments. Similarly it also reflects in its statement of financial position a number of financial liabilities that include bank overdrafts, trade and other payables, borrowings and derivative instruments.

A derivative is a financial instrument or other contract that satisfies all of the following characteristics: its value changes in response to the change in a specified variable such as an interest rate, financial instrument price, commodity price, foreign exchange rate, index of prices or rates, credit rating or credit index; it requires no initial investment or an initial investment that is smaller than would be required for other types of similar contracts and it will be settled at some future date.

##### Sourcing fair values

For financial instruments that are traded in active markets, quoted market prices are used as a measure of fair value. Where quoted market prices do not exist, fair values are estimated using present value or other market-accepted valuation techniques, using methods and assumptions that are based on market conditions and risks existing at balance date.

##### Recognition and measurement of financial assets

Financial assets are initially measured at fair value and for the purpose of subsequent measurement, the group has categorised financial assets into the following categories. Each category determines the process of subsequent measurement and how the resulting surplus or deficit should be reflected in the statement of comprehensive income. The group does not currently have financial assets in the held-to-maturity and available-for-sale categories.

##### Loans and receivables

The group's cash and cash equivalents and trade and other receivables fall into this category of financial instruments. These are initially recorded at their fair value plus transaction costs because they have fixed or determinable payments that are not quoted in an active market. Fair value is estimated as the present value of future cash flows.

## STATEMENT OF ACCOUNTING POLICIES (continued)

FOR THE YEAR ENDED 30 JUNE 2012

### SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### 18. FINANCIAL INSTRUMENTS (CONTINUED)

##### Loans and receivables (continued)

After initial recognition, they are recorded at amortised cost using the effective interest method, less provision for impairment. The amount of impairment loss is the difference between the assets' carrying amount and the present value of estimated future cash flows, discounted at the original effective interest rate. The amount of the impairment loss is recognised in determining the surplus or deficit for the year.

The collection of trade receivables is reviewed on an on-going basis and debts known to be uncollectible are written off. When there is objective evidence that the group will not be able to collect all amounts due according to the original terms of the receivables, a provision is made for doubtful receivables to recognise impairment in the carrying value of receivables at balance date. This amount provided is recorded in determining surplus or deficit.

##### Financial assets at fair value through profit or loss

All derivative financial instruments fall into this category, except for those designated as, and effective as, hedging instruments, for which the hedge accounting requirements apply. The group does not apply hedge accounting.

Financial assets carried at fair value through profit or loss are initially recorded at fair value.

Financial assets can be classified as at fair value through profit or loss only if they are either classified as held for trading or upon initial recognition they are designated as at fair value through profit and loss. The group does not currently have any financial assets in the categories of held for trading or designated upon initial recognition as at fair value through profit or loss.

##### Recognition and measurement of financial liabilities

Financial liabilities are initially recorded at their fair value plus transaction costs.

Financial liabilities are recorded subsequently at amortised cost using the effective interest method, except for financial liabilities held for trading or designated at fair value through profit or loss. Those liabilities are recorded subsequently at fair value with gains or losses recognised in surplus or deficit.

Trade and other payables represent liabilities for goods and services provided to the group prior to the end of the financial year which are unpaid. The amounts are unsecured and are usually paid within 30 days of recognition.

The group does not currently have any financial liabilities in the categories of held for trading or designated at fair value through profit or loss.

Borrowings are recorded at fair value, net of transaction costs.

Borrowings are subsequently measured at amortised cost using the effective interest method, with interest expense recognised on an effective interest basis. Fees and expenses for establishing new borrowings are amortised over the term of those borrowings using the effective interest method. Accrued interest is presented separately within accruals.

Borrowings are classified as current liabilities unless the group has an unconditional right to defer settlement of the liability for at least 12 months after the reporting date.

##### Derivative financial instruments

Derivative instruments are used by the group to manage its exposures to interest rate and foreign currency risks.

Derivative financial instruments are recorded at fair value in the statement of financial position and fair value changes are accounted for through surplus or deficit.

##### Derecognition of financial instruments

Financial assets are derecognised only when the contractual rights to the cash flows from the financial asset have expired, or when the financial asset and all substantial risks and rewards associated with it have been transferred.

Financial liabilities are derecognised when they have either been extinguished, discharged, cancelled or have expired.

#### 19. STATEMENT OF CASH FLOWS

For the purpose of the statement of cash flows, cash and cash equivalents include cash on hand net of outstanding bank overdrafts. The following terms are used in the statement of cash flows:

- "Operating activities" are amounts received for the supply of services by the group, and payments made to employees and suppliers necessary to support those services, including finance costs. Operating activities also include any transactions or events that are not investing or financing activities;
- "Investing activities" are amounts paid or received for the acquisition and disposal of property, plant and equipment and other investments not included in cash equivalents; and
- "Financing activities" are the receipt and repayment of the principal on borrowings, and contributions from, and distributions to, shareholders.

#### 20. INSURANCE

Any uninsured loss is recorded in determining the surplus or deficit for the year in which the loss is incurred. Insurance recoveries are recorded only when there is virtual certainty of receipt.

#### 21. ACCOUNTING STANDARDS AND INTERPRETATIONS

The External Reporting Board (XRB) is currently in the process of establishing a new Accounting Standards Framework based on a multi-sector, reporting tiers approach. The new accounting standards framework will consist of two sets of accounting standards, one to be applied by entities with a for-profit objective and the other to be applied by public benefit entities. In the interim, all new New Zealand equivalents to International Financial Reporting Standards (NZ IFRSs) and amendments to existing NZ IFRSs approved in and subsequent to, June 2011 would be applicable to profit-oriented entities only. This means that the financial reporting requirements for public benefit entities (PBEs) are frozen for the short-term. Consequently, new or amended NZ IFRS released during the year are not applicable to public benefit entities and hence no disclosure has been made.

##### CHANGES IN ACCOUNTING POLICIES

There have been no changes in accounting policies during the year.

## NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 30 JUNE 2012

### 1. REVENUE

The water and wastewater revenue represents the amounts invoiced to customers and the accrual of unbilled water and wastewater revenue. This revenue excludes any price adjustment (refer Note 2).

	2012	2011
	Group and Company	Group and Company
	\$000	\$000
<b>Revenue from sale of goods</b>		
Retail and bulk water	129,543	131,438
<b>Revenue from rendering of services</b>		
Wastewater revenue	263,624	203,773
Trade waste revenue	12,462	14,038
<b>Total water and wastewater revenue</b>	<b>405,629</b>	<b>349,249</b>
Water and wastewater revenue is shown net of leak remissions and prompt payment discount (PPD). Below is a breakdown of leak remission and PPD:		
Water and wastewater revenue	398,060	346,358
Leak remission – water	(1,968)	(689)
Leak remission – wastewater	(2,396)	(994)
Prompt payment discount – water	(356)	(4,031)
Prompt payment discount – wastewater	(173)	(5,433)
<b>Water and wastewater revenue net of remissions and PPD</b>	<b>393,167</b>	<b>335,211</b>
Trade waste revenue	12,462	14,038
<b>Total water and wastewater revenue</b>	<b>405,629</b>	<b>349,249</b>
<b>Other revenue</b>		
Infrastructure growth charge	14,012	7,374
Developer and financial contributions	3,389	3,945
New meters and service connections	4,667	2,690
Vested assets revenue	816	–
Other revenue	12,587	9,011
Dividend income	97	34
Interest income	753	804
<b>Total other revenue</b>	<b>36,321</b>	<b>23,858</b>
<b>Total revenue</b>	<b>441,950</b>	<b>373,107</b>

### 2. PRICE ADJUSTMENT

Section 57(1)(a) of the Local Government (Auckland Council) Act 2009 states that the company must manage its operations efficiently with a view to keeping the overall costs of water supply and wastewater services to its customers (collectively) at the minimum levels consistent with the effective conduct of its undertakings and the maintenance of the long-term integrity of its assets.

Further, Section 18(j) of the Local Government (Auckland Transitional Provisions) Act 2010 stipulates that until the year ended 30 June 2012, the company must promptly decide, for any year in which a surplus arises, whether or not to return the surplus to its customers; and if it is to return the surplus, decide on and implement the method by which the surplus may be returned (for example, by way of rebate, discount, or adjustment of charges calculated by reference to prior or future charges to its customers).

Pursuant to this section the group decided that no price adjustment would be paid for the year ended 30 June 2012 (2011: nil).

## NOTES TO THE FINANCIAL STATEMENTS (continued)

FOR THE YEAR ENDED 30 JUNE 2012

### 3. OPERATING EXPENSES

	Notes	2012	2011
		Group and Company	Group and Company
		\$000	\$000
<b>Operating expenses include:</b>			
Auditors' remuneration	– annual audit of the financial statements	508	470
	– audit fee relating to integration of retail business	–	140
	– other services provided	19	208
Directors' fees	Note 27, page 111	484	560
Environmentally significant costs – chemicals		10,360	9,329
	– energy	16,556	13,544
Cost of consumables and spare parts consumed		3,209	3,184
(Decrease)/increase in provision for obsolescence of inventory		(234)	251
Operating leases and rent		4,245	3,010
Increase in provision for doubtful debts		77	1,313
Bad debts written off		612	30
Salaries and wages	– paid to employees	53,763	46,480
	– capitalised on construction of property, plant and equipment or recorded within asset operating costs and maintenance costs	(16,748)	(20,598)
	– included in employee benefit expenses	37,015	25,882

Auditors' remuneration for other assurance services included the review of financial information systems and assistance on taxation matters. Prior year other services included the review of financial and information systems.

### 4. DEPRECIATION AND AMORTISATION

	2012	2011
	Group and Company	Group and Company
	\$000	\$000
Buildings	3,621	2,720
Pipelines	109,326	85,941
Tanks, tunnels, roads and reservoirs	10,334	12,984
Dams	1,823	1,910
Machinery	42,717	31,740
Motor vehicles	341	334
Office equipment	1,550	1,447
Network models	1,252	1,109
Computer software	8,080	4,693
Resource consents	778	748
<b>Total depreciation and amortisation</b>	<b>179,822</b>	<b>143,626</b>

### 5. FINANCE COSTS

	2012	2011
	Group and Company	Group and Company
	\$000	\$000
Interest on bank overdraft and borrowings, paid and payable	79,206	65,821
Capitalised interest on construction of property, plant and equipment (2012: 6.60% , 2011: 6.79%)	(6,619)	(4,714)
<b>Net finance costs</b>	<b>72,586</b>	<b>61,107</b>

## NOTES TO THE FINANCIAL STATEMENTS (continued)

FOR THE YEAR ENDED 30 JUNE 2012

### 6. REVALUATION OF DERIVATIVE FINANCIAL INSTRUMENTS

	2012		2011	
	Group and Company		Group and Company	
	\$000		\$000	
Interest rate swaps contracts loss	61,434		12,593	
Forward foreign exchange contracts (gain)/loss	(816)		974	
<b>Net revaluation loss</b>	<b>60,618</b>		<b>13,567</b>	

### 7. OPERATING CASH FLOWS

	2012		2011	
	Group and Company		Group and Company	
	\$000		\$000	
<b>Reconciliation of net deficit after tax to net cash flows from operating activities</b>				
Net deficit for the year	(45,305)		(12,333)	
<b>Non-cash and non-operating items:</b>				
Depreciation and amortisation	179,822		143,626	
Redundant assets written off and gain or loss on disposal	8,465		2,556	
Vested assets revenue	(816)		–	
Contributions towards cost of constructing property, plant and equipment	(3,389)		(3,945)	
Deferred tax	(18,878)		4,438	
<b>Movements in working capital:</b>				
<b>(Increase)/decrease in assets:</b>				
Inventories	1,703		(1,556)	
Trade and other receivables	7,918		16,060	
Derivative financial instruments – asset	(10,797)		(7,393)	
Prepaid expenses	(24,105)		258	
<b>Increase/(decrease) in liabilities:</b>				
Trade and other payables and accruals	(3,779)		15,860	
Derivative financial instruments – liability	71,414		20,960	
Payables relating to investing activities	–		574	
Provisions	1,141		(3,070)	
<b>Net cash flows from operating activities</b>	<b>163,394</b>		<b>176,035</b>	

## NOTES TO THE FINANCIAL STATEMENTS (continued)

FOR THE YEAR ENDED 30 JUNE 2012

### 8. INCOME TAX

	2012	2011
	Group and Company	Group and Company
	\$000	\$000
Operating deficit before tax	(64,183)	(7,895)
Income tax calculated at current rate of 28% (2011: 30%)	(17,971)	(2,368)
Dividend and other income exempt from taxation	(242)	(2)
Non deductible expenses	99	377
Imputation credits on dividends received	(38)	(14)
Prior year and other adjustments	(726)	(551)
<b>Tax effect of non-deductible items and prior period adjustments</b>	<b>(907)</b>	<b>(190)</b>
Tax depreciation on buildings acquired on integration being non-deductible from 1 July 2011	–	6,064
Deferred tax as a result of reducing the corporate tax rate from 30% to 28% from 1 July 2011	–	932
<b>Tax effect of non-recurring items</b>	<b>–</b>	<b>6,996</b>
<b>Income tax (benefit)/expense</b>	<b>(18,878)</b>	<b>4,438</b>
Represented by:		
Deferred tax	(18,878)	4,438
<b>Income tax (benefit)/expense</b>	<b>(18,878)</b>	<b>4,438</b>

### IMPUTATION CREDITS

	2012	2011
	Group and Company	Group and Company
	\$000	\$000
<b>Total imputation credits</b>	<b>30,134</b>	<b>30,096</b>

The imputation credit account is a memorandum account and does not form part of the statement of financial position.

## NOTES TO THE FINANCIAL STATEMENTS (continued)

FOR THE YEAR ENDED 30 JUNE 2012

### 9. DEFERRED TAX LIABILITY

	2012	2011
	Group and Company	Group and Company
	\$000	\$000
<b>Balance at 1 July 2011</b>	848,828	402,049
Deferred tax arising on integration recorded in capital reserve	–	301,613
Deferred tax recognised in other comprehensive income – resulting from the revaluation of property, plant and equipment	–	140,728
Deferred tax recognised in other comprehensive income, resulting from transfer to retained earnings relating to disposal of property, plant and equipment	2,095	1,520
Deferred tax recognised in other comprehensive income, resulting from transfer from revaluation reserve relating to disposal of property, plant and equipment	(2,095)	(1,520)
Deferred tax recognised in the deficit for the year	(18,878)	(2,558)
Tax depreciation on buildings acquired on integration being non-deductible from 1 July 2011	–	6,064
Deferred tax on tax losses and property, plant and equipment as a result of the reduction of the corporate tax rate from 30% to 28% from 1 July 2011 recognised in the deficit for the year	–	932
<b>Balance at 30 June 2012</b>	<b>829,950</b>	<b>848,828</b>
The balance relates to:		
Depreciation temporary differences	1,002,921	967,457
Provisions and accrued expenses temporary differences	(31,515)	(15,652)
Tax losses	(141,456)	(102,977)
<b>Total deferred tax liability</b>	<b>829,950</b>	<b>848,828</b>

The group's subsidiary Watercare Harbour Clean-Up Trust was exempt from tax and the group's other subsidiaries Auckland City Water Limited and Te Motu A Hiaroa (Puketutu Island) Park Trust were both non-trading entities. Metrowater Community Trust, a subsidiary of Watercare was also exempt from tax and it was wound up during December 2011.

The depreciation temporary differences for property, plant and equipment arose because the carrying value of property, plant and equipment was higher for accounting purposes than for taxation purposes, for example due to:

- The revaluation of certain assets; and
- The group's depreciation rates being lower than those permitted by tax legislation.

The provisions and accrued expenses temporary differences principally related to the mark-to-market revaluation of financial instruments. These expenses were recognised for accounting purposes but cannot be deducted for tax purposes until the amounts become payable.

During the prior year, under Section 83 of the Local Government (Auckland Transitional Provisions) Act 2010 the company integrated the closing tax position of Metrowater Limited and Manukau Water Limited. Additionally, the closing accounting book value for all assets inherited from the Councils was legislated to be the opening tax book value of the company at 1 November 2010.

### 10. ISSUED CAPITAL

The total number of authorised and issued shares at balance date was 260,693,164 (2011: 260,693,164) ordinary shares of \$1 each. All ordinary issued shares were fully paid and carry equal voting rights to:

- one vote on a poll at a meeting of the company on any resolution; and
- an equal share in the distribution of the surplus assets of the company.

Under Section 57(1)(b) of the Local Government (Auckland Council) Act 2009 the company must not pay any dividend or distribute any surplus in any way, directly or indirectly to its shareholder. The capital management policy of the group is detailed in Note 22, page 109.

## NOTES TO THE FINANCIAL STATEMENTS (continued)

FOR THE YEAR ENDED 30 JUNE 2012

### 11. SUBSIDIARIES AND INTEGRATION OF RETAIL BUSINESS

#### SUBSIDIARIES

The group disclosures in these financial statements represent the consolidated numbers of Watercare Services Limited (company) and its subsidiaries. The net assets at balance date of each of the company's subsidiaries are immaterial to the consolidated financial position of the group. As at the balance date, the details of the company's subsidiaries, net assets, revenue and net surplus or deficit for each subsidiary after inter-entity eliminations are as follows:

#### Water Utility Consumer Assistance Trust

The Water Utility Consumer Assistance Trust was formed in October 2011 and is a charitable trust. Its principal activity is to assist eligible residential customers of the company who are unable to pay their water and wastewater charges by approving a payment arrangement which may include recommending to Watercare a write-off of part or the entire amount owed. Watercare has the power to appoint two out of five of the Trustees on the Trust board. The Trust is fully funded by Watercare. The net assets of Water Utility Consumer Assistance Trust at balance date comprise a cash and cash equivalent balance of \$9,712 (2011: \$nil) and accrued expenses of \$5,179 (2011: \$nil). The Trust recorded revenue of \$145 and a net surplus of \$4,533 for the year (2011: \$nil).

#### Watercare Harbour Clean-Up Trust

The Watercare Harbour Clean-Up Trust was set up during December 2002 by several local authorities as The Waitemata Harbour Clean-Up Trust and is a charitable trust. Its principal activity is to promote and monitor the cleaning up of Auckland's Waitemata harbour with a view to preserving its natural beauty for the benefit and enjoyment of the public. During 2010/ 2011, Watercare became the primary funder of this Trust and at 30 June 2012 two of the four Trustees on the board were current Watercare employees. The name of the Trust was changed to Watercare Harbour Clean-Up Trust during December 2011. The net assets acquired from the Trust as at 1 July 2011 comprise cash and cash equivalents of \$219,572 and payables of \$727. The net assets of the Trust at balance date comprise a cash and cash equivalents balance of \$295,992 (2011: \$nil) and accrued expenses of \$25,730 (2011: \$nil). The Trust recorded revenue of \$48,205 and a net surplus of \$51,418 for the year (2011: \$nil).

#### Metrowater Community Trust

The Metrowater Community Trust was formed in February 2001 to assist low income families and individuals who cannot afford to pay their water and wastewater bills and individuals who have special needs in relation to water use. The Metrowater Community Trust was wound up during December 2011 and all liabilities were settled and assets were distributed to the Water Utility Consumer Assistance Trust. At the date of winding up the net assets of Metrowater Community Trust were \$nil (2011: cash balance of \$32,084 and accrued expenses of \$15,206). The Metrowater Community Trust recorded revenue of \$143 and a net deficit of \$16,900 for the year (2011: revenue of \$nil and a net deficit of \$114,643).

#### Auckland City Water Limited

Auckland City Water Limited is 100% owned by Watercare and it is non-trading company. The net assets of Auckland City Water Limited at balance date comprise \$nil (2011: \$nil).

#### Te Motu A Hiaroa (Puketutu Island) Park Trust

The objective of the Te Motu A Hiaroa (Puketutu Island) Park Trust is to make Puketutu Island available as a public park, thereby providing a significant addition to the open space, amenity and recreational assets for Auckland's population. The Trust is a 100% subsidiary of Watercare and was non-trading during the year.

The total net assets of all the above subsidiaries included in the consolidated financial position of the group are \$274,795 (2011: \$16,878), comprising cash and cash equivalents balance of \$305,704 (2011: \$32,084) and accrued expenses of \$30,909 (2011: \$15,206).

#### INTEGRATION OF RETAIL BUSINESS

During the prior year, as at 1 November 2010, the retail water and wastewater businesses in the Auckland region were integrated as below into the company as part of the Auckland local body reorganisation:

Business integrated	Principal activity
Metrowater Limited	Retail water and wastewater services
Manukau Water Limited	Retail water and wastewater services
North Shore City Council	Retail water and wastewater services
Waitakere City Council	Retail water and wastewater services
Rodney District Council	Retail water and wastewater services
Franklin District Council	Retail water and wastewater services
Papakura District Council	Retail water and wastewater services
Auckland City Council	Retail water and wastewater services
Subsidiaries acquired	Principal activity
Metrowater Community Trust	Assists water users (low income or special water usage needs)
Auckland City Water Limited	Non-trading company

## NOTES TO THE FINANCIAL STATEMENTS (continued)

FOR THE YEAR ENDED 30 JUNE 2012

## 11. SUBSIDIARIES AND INTEGRATION OF RETAIL BUSINESS (CONTINUED)

## INTEGRATION OF RETAIL BUSINESS (CONTINUED)

BUSINESSES INTEGRATED	MetroWater Limited	Manukau Water Limited	North Shore City Council	Waitakere City Council	Rodney District Council	Franklin District Council	Auckland City Council	Papakura District Council	Auckland Regional Council	Adjustments	Total	
	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	
<b>Current assets</b>												
Cash and bank balances	-	11,953	-	-	-	-	-	-	-	-	-	11,953
Trade and other receivables	32,604	32,946	9,485	9,409	7,251	729	-	-	-	-	-	92,424
Inventories	-	-	72	-	-	-	-	-	-	-	-	72
<b>Non-current assets</b>												
Property, plant and equipment	1,386,590	1,019,143	1,204,462	482,515	323,940	154,985	70,418	84,111	-	8,799	-	4,734,963
Intangible assets	4,541	2,368	459	-	-	-	-	-	-	-	-	7,368
<b>Current liabilities</b>												
Bank overdraft	(5,605)	-	-	-	-	-	-	-	-	-	-	(5,605)
Trade and other payables	(17,636)	(11,869)	(1,293)	(1,382)	(305)	(61)	-	(9,534)	-	-	-	(42,080)
Retentions	(660)	(495)	(2,494)	(213)	(247)	(263)	-	-	-	-	-	(4,372)
Employee benefit liabilities	(776)	(351)	(524)	(208)	(64)	(18)	-	-	-	-	-	(1,941)
<b>Non-current liabilities</b>												
Borrowings	(215,000)	(134,368)	(95,489)	(145,428)	(63,015)	(21,977)	(22,436)	(8,297)	(6,048)	-	-	(712,058)
Deferred tax liability	(279,537)	(19,612)	-	-	-	-	-	-	-	(2,464)	-	(301,613)
<b>Net assets integrated</b>	<b>904,521</b>	<b>899,715</b>	<b>1,114,678</b>	<b>344,693</b>	<b>267,560</b>	<b>133,395</b>	<b>47,982</b>	<b>66,280</b>	<b>(6,048)</b>	<b>6,335</b>	<b>-</b>	<b>3,779,111</b>
<b>Capital reserve</b>	<b>(904,521)</b>	<b>(899,715)</b>	<b>(1,114,678)</b>	<b>(344,693)</b>	<b>(267,560)</b>	<b>(133,395)</b>	<b>(47,982)</b>	<b>(66,280)</b>	<b>6,048</b>	<b>(6,335)</b>	<b>-</b>	<b>(3,779,111)</b>

Adjustments for accounting policy differences:

- The net assets of the integrated companies were transferred into the financial statements of the company at net book value and subsequently adjusted for differences in accounting policies as explained below. See accounting policy 3 on integration of retail business.
- The company's policy is to capitalise finance costs incurred during the course of construction that are attributable to a project using the finance rate applicable to the funding. To achieve consistency between the company's policy and the integrated businesses, finance costs attributable to the integrated property, plant and equipment were estimated using the depreciated replacement cost method and capitalised as at 1 November 2010. This resulted in an increase of \$8.8 million to property, plant and equipment with an increase to deferred tax liability of \$2.5 million and a net increase of \$6.3 million to capital reserve as shown under adjustments above.

There were no other adjustments made to achieve consistency in accounting policies.

## NOTES TO THE FINANCIAL STATEMENTS (continued)

FOR THE YEAR ENDED 30 JUNE 2012

### 11. SUBSIDIARIES AND INTEGRATION OF RETAIL BUSINESS (CONTINUED)

#### INTEGRATION OF RETAIL BUSINESS (CONTINUED)

##### Summary of assets and liabilities acquired

The group acquired two subsidiaries, Metrowater Community Trust and Auckland City Water Limited (non-trading company) as part of the Auckland local body reorganisation. The net assets acquired from the subsidiaries as at 1 November 2010 were as shown below:

SUBSIDIARIES ACQUIRED	Metrowater Community Trust	Auckland City Water Limited	Total
	\$000	\$000	\$000
<b>Current assets</b>			
Cash and bank balances	51	–	51
Trade and other receivables	90	–	90
<b>Current liabilities</b>			
Trade and other payables	(10)	–	(10)
<b>Net assets acquired</b>	<b>131</b>	<b>–</b>	<b>131</b>

### 12. REVALUATION RESERVES

	2012	2011
	Group and Company \$000	Group and Company \$000
Balances at beginning of year	1,429,619	1,071,655
Revaluation – net of deferred tax	–	361,873
Transferred to retained earnings on disposal of property, plant and equipment – net of tax	(5,388)	(3,909)
<b>Total revaluation reserves</b>	<b>1,424,231</b>	<b>1,429,619</b>
<b>Comprising:</b>		
Land	48,517	48,517
Buildings	31,953	31,953
Pipelines	837,391	844,715
Tanks, tunnels, roads and reservoirs	281,782	281,705
Dams	79,171	79,171
Machinery	145,417	143,558
<b>Total revaluation reserves</b>	<b>1,424,231</b>	<b>1,429,619</b>
<b>Analysis:</b>		
<b>Land</b>		
Balances at beginning of year	48,517	47,163
Revaluation	–	1,354
<b>Total land revaluation reserves</b>	<b>48,517</b>	<b>48,517</b>
<b>Buildings</b>		
Balances at beginning of year	31,953	33,319
Revaluation	–	(1,080)
Transferred to retained earnings on disposal of property, plant and equipment – net of tax	–	(286)
<b>Total buildings revaluation reserves</b>	<b>31,953</b>	<b>31,953</b>

**NOTES TO THE FINANCIAL STATEMENTS** (continued)

FOR THE YEAR ENDED 30 JUNE 2012

**12. REVALUATION RESERVES** (CONTINUED)

	2012	2011
	Group and Company	Group and Company
	\$000	\$000
<b>Pipelines</b>		
Balances at beginning of year	844,715	569,176
Revaluation	–	277,625
Transferred to retained earnings on disposal of property, plant and equipment – net of tax	(7,324)	(2,086)
<b>Total pipelines revaluation reserves</b>	<b>837,391</b>	<b>844,715</b>
<b>Tanks, tunnels, roads and reservoirs</b>		
Balances at beginning of year	281,705	266,364
Revaluation	–	13,556
Transferred to retained earnings on disposal of property, plant and equipment – net of tax	77	1,785
<b>Total tanks, tunnels, roads and reservoirs revaluation reserves</b>	<b>281,782</b>	<b>281,705</b>
<b>Dams</b>		
Balances at beginning of year	79,171	69,940
Revaluation	–	9,235
Transferred to retained earnings on disposal of property, plant and equipment – net of tax	–	(4)
<b>Total dams revaluation reserves</b>	<b>79,171</b>	<b>79,171</b>
<b>Machinery</b>		
Balances at beginning of year	143,558	85,693
Revaluation	–	61,183
Transferred to retained earnings on disposal of property, plant and equipment – net of tax	1,859	(3,318)
<b>Total machinery revaluation reserves</b>	<b>145,417</b>	<b>143,558</b>

The revaluation reserve arises on the revaluation of property, plant and equipment. Where revalued property, plant and equipment was sold, the portion of the revaluation reserve that relates to that asset was effectively realised and transferred directly to retained earnings.

## NOTES TO THE FINANCIAL STATEMENTS (continued)

FOR THE YEAR ENDED 30 JUNE 2012

## 13. PROPERTY, PLANT AND EQUIPMENT

## Property, plant and equipment – movement in gross carrying value

	2011		2012				
	Group and Company						
	Opening value	Additions	Disposals	Depreciation	Impairment	Reclassification	Closing value
	\$000	\$000	\$000	\$000	\$000	\$000	\$000
Land	119,339	4,879	–	–	–	29	124,247
Buildings	113,352	2,905	–	–	–	301	116,558
Pipelines	5,477,954	104,430	(3,841)	–	(2,871)	4,256	5,579,928
Tanks, tunnels, roads and reservoirs	680,072	1,397	(16)	–	–	(27,777)	653,676
Dams	210,475	546	–	–	–	(5,189)	205,832
Machinery	795,384	61,602	(2,507)	–	(16)	28,010	882,473
Motor vehicles	4,182	737	(20)	–	–	–	4,899
Office equipment	13,004	72	–	–	–	241	13,317
	7,413,762	176,568	(6,384)	–	(2,887)	(129)	7,580,930
Work in progress	288,288	43,942	–	–	–	–	332,230
<b>Gross carrying value</b>	<b>7,702,050</b>	<b>220,510</b>	<b>(6,384)</b>	<b>–</b>	<b>(2,887)</b>	<b>(129)</b>	<b>7,913,160</b>

## Property, plant and equipment – movement in accumulated depreciation

	2011		2012				
	Group and Company						
	Opening value	Additions	Disposals	Depreciation	Impairment	Reclassification	Closing value
	\$000	\$000	\$000	\$000	\$000	\$000	\$000
Buildings	(99)	–	–	(3,621)	–	–	(3,720)
Pipelines	(2,716)	–	505	(109,326)	79	(9)	(111,467)
Tanks, tunnels, roads and reservoirs	(56)	–	1	(10,334)	–	–	(10,389)
Dams	(71)	–	–	(1,823)	–	–	(1,894)
Machinery	(535)	–	116	(42,717)	–	(14)	(43,150)
Motor vehicles	(3,414)	–	14	(341)	–	–	(3,741)
Office equipment	(6,963)	–	–	(1,550)	–	23	(8,490)
<b>Accumulated depreciation</b>	<b>(13,854)</b>	<b>–</b>	<b>636</b>	<b>(169,712)</b>	<b>79</b>	<b>–</b>	<b>(182,851)</b>

## NOTES TO THE FINANCIAL STATEMENTS (continued)

FOR THE YEAR ENDED 30 JUNE 2012

### 13. PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

#### Property, plant and equipment – movement in net book values including revaluation

	2011		2012					Closing value \$000
	Group and Company							
	Opening value \$000	Additions \$000	Disposals \$000	Depreciation \$000	Impairment \$000	Reclassification \$000		
Land	119,339	4,879	–	–	–	29	124,247	
Buildings	113,253	2,905	–	(3,621)	–	301	112,838	
Pipelines	5,475,238	104,430	(3,336)	(109,326)	(2,792)	4,247	5,468,461	
Tanks, tunnels, roads and reservoirs	680,016	1,397	(15)	(10,334)	–	(27,777)	643,287	
Dams	210,404	546	–	(1,823)	–	(5,189)	203,938	
Machinery	794,849	61,602	(2,391)	(42,717)	(16)	27,996	839,323	
Motor vehicles	768	737	(6)	(341)	–	–	1,158	
Office equipment	6,041	72	–	(1,550)	–	264	4,827	
	7,399,908	176,568	(5,748)	(169,712)	(2,808)	(129)	7,398,079	
Work in progress	288,288	43,942	–	–	–	–	332,230	
<b>Net book value</b>	<b>7,688,196</b>	<b>220,510</b>	<b>(5,748)</b>	<b>(169,712)</b>	<b>(2,808)</b>	<b>(129)</b>	<b>7,730,309</b>	

The reclassification of assets between categories results from the on-going project to improve asset data quality. The predominant reason for reclassification was to split broadly categorised assets into their component assets. It was not practical to reclassify the prior year comparatives, due to the size of the asset register.

#### PROPERTY, PLANT AND EQUIPMENT – COMPARATIVES

#### Property, plant and equipment – movement in gross carrying value

	2010		2011					Closing value \$000
	Company	1 November	Group and Company					
	Opening value \$000	Integrated \$000	Additions \$000	Disposals \$000	Depreciation \$000	Revaluation \$000	Reclassification \$000	
Land	75,162	41,133	83	(288)	–	1,880	1,369	119,339
Buildings	99,367	17,145	3,016	(71)	–	(6,396)	291	113,352
Pipelines	887,353	4,253,327	61,123	(2,889)	–	279,026	14	5,477,954
Tanks, tunnels, roads and reservoirs	625,932	48,359	9,266	(1,189)	–	(3,760)	1,464	680,072
Dams	190,850	1,880	8,505	–	–	9,240	–	210,475
Machinery	439,819	307,895	26,936	(1,485)	–	23,853	(1,634)	795,384
Motor vehicles	4,358	272	45	(493)	–	–	–	4,182
Office equipment	9,965	1,519	3,365	(313)	–	–	(1,532)	13,004
	2,332,806	4,671,530	112,339	(6,728)	–	303,843	(28)	7,413,762
Work in progress	160,441	63,432	64,415	–	–	–	–	288,288
<b>Gross carrying value</b>	<b>2,493,247</b>	<b>4,734,962</b>	<b>176,754</b>	<b>(6,728)</b>	<b>–</b>	<b>303,843</b>	<b>(28)</b>	<b>7,702,050</b>

## NOTES TO THE FINANCIAL STATEMENTS (continued)

FOR THE YEAR ENDED 30 JUNE 2012

## 13. PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

## PROPERTY, PLANT AND EQUIPMENT – COMPARATIVES (CONTINUED)

## Property, plant and equipment – movement in accumulated depreciation

	2010		2011					
	Company	1 November	Group and Company					
	Opening value	Integrated	Additions	Disposals	Depreciation	Revaluation	Reclassification	Closing value
	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
Buildings	(2,303)	–	–	71	(2,720)	4,896	(43)	(99)
Pipelines	(24,955)	–	–	1,614	(85,941)	106,563	3	(2,716)
Tanks, tunnels, roads and reservoirs	(10,779)	–	–	1,189	(12,984)	22,585	(67)	(56)
Dams	(1,749)	–	–	–	(1,910)	3,588	–	(71)
Machinery	(29,762)	–	–	921	(31,740)	61,125	(1,079)	(535)
Motor vehicles	(3,572)	–	–	492	(334)	–	–	(3,414)
Office equipment	(7,014)	–	–	312	(1,447)	–	1,186	(6,963)
<b>Accumulated depreciation</b>	<b>(80,134)</b>	<b>–</b>	<b>–</b>	<b>4,599</b>	<b>(137,076)</b>	<b>198,757</b>	<b>–</b>	<b>(13,854)</b>

## Property, plant and equipment – movement in net book values including revaluation

	2010		2011					
	Company	1 November	Group and Company					
	Opening value	Integrated	Additions	Disposals	Depreciation	Revaluation	Reclassification	Closing value
	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
Land	75,162	41,133	83	(288)	–	1,880	1,369	119,339
Buildings	97,064	17,145	3,016	–	(2,720)	(1,500)	248	113,253
Pipelines	862,398	4,253,327	61,123	(1,275)	(85,941)	385,589	17	5,475,238
Tanks, tunnels, roads and reservoirs	615,153	48,359	9,266	–	(12,984)	18,825	1,397	680,016
Dams	189,101	1,880	8,505	–	(1,910)	12,828	–	210,404
Machinery	410,057	307,895	26,936	(564)	(31,740)	84,978	(2,713)	794,849
Motor vehicles	786	272	45	(1)	(334)	–	–	768
Office equipment	2,951	1,519	3,365	(1)	(1,447)	–	(346)	6,041
	2,252,672	4,671,530	112,339	(2,129)	(137,076)	502,600	(28)	7,399,908
Work in progress	160,441	63,432	64,415	–	–	–	–	288,288
<b>Net book value</b>	<b>2,413,113</b>	<b>4,734,962</b>	<b>176,754</b>	<b>(2,129)</b>	<b>(137,076)</b>	<b>502,600</b>	<b>(28)</b>	<b>7,688,196</b>

All assets subject to valuation are independently valued at least every three years. The most recent valuation was completed at 30 June 2011. ANA Group completed the valuation in association with Beca Valuations Limited (Beca) who completed a peer review of the work. The assumptions used in determining the depreciated replacement cost of pipelines, tanks, roads, tunnels, reservoirs, dams and machinery were that:

- construction costs based on recent contract-based construction work and the unit rates reflect the costs of replacing assets;
- the useful lives of assets are calculated as the lesser of their physical life or the point where the asset is to be replaced for economic reasons;
- the capital price goods index (CPGI) was used where indexation is appropriate. At the time of valuation the CPGI was available to the March 2011 quarter; and
- capitalised interest was applied to qualifying asset types in accordance with the estimated construction period and applicable cost of debt.

Beca completed the valuation of land and buildings. The land valuation was based on relevant market prices and buildings were valued using the depreciated replacement cost.

The Local Government Acts 1974 and 2002 restrict the business activities of the group and effectively prevent selling of key assets. Many of the assets are specialised in nature, reflecting the activities of the group. As there is no active market for such assets and the income from them is not determined by the market, property, plant and equipment, other than land, buildings, motor vehicles and office equipment, are revalued to depreciated replacement cost, which reflects their deemed fair values.

Each year, other than in the years in which the assets are revalued, the group assesses whether there was any material change in the value of property, plant and equipment. The movement in asset values between June 2011 and June 2012 was assessed using indices deemed suitable by the registered valuer ANA Group and Beca. The increase in asset value of 1.5% was not considered material by management and accordingly the assets were not revalued at 30 June 2012.

## NOTES TO THE FINANCIAL STATEMENTS (continued)

FOR THE YEAR ENDED 30 JUNE 2012

### 13. PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

	2012		2011	
	Group and Company		Group and Company	
	\$000	\$000	\$000	\$000
<b>WORK IN PROGRESS RELATES TO THE FOLLOWING PROJECTS:</b>				
Water treatment plants	58,795		17,884	
Wastewater treatment plant	21,880		43,857	
Wastewater pump stations and sewers	117,229		116,519	
Watermains, pump stations and reservoirs	95,076		73,837	
Dams and raw water transmission pipelines	7,727		8,205	
Other	31,523		27,986	
<b>Total work in progress</b>	<b>332,230</b>		<b>288,288</b>	

### 14. INTANGIBLE ASSETS

#### Intangibles – movement in gross carrying value

	2011		2012			
	Group and Company					
	Opening value	Additions	Disposals	Amortisation	Reclassification	Closing value
	\$000	\$000	\$000	\$000	\$000	\$000
Network models	5,974	–	–	–	(294)	5,680
Computer software	28,456	13,186	–	–	455	42,097
Resource consents	18,400	6,106	–	–	(32)	24,474
Easements	484	14	–	–	–	498
<b>Gross carrying value</b>	<b>53,314</b>	<b>19,306</b>	<b>–</b>	<b>–</b>	<b>129</b>	<b>72,749</b>

#### Intangibles – movement in accumulated amortisation

	2011		2012			
	Group and Company					
	Opening value	Additions	Disposals	Amortisation	Reclassification	Closing value
	\$000	\$000	\$000	\$000	\$000	\$000
Network models	(2,361)	–	–	(1,252)	(103)	(3,716)
Computer software	(15,884)	–	–	(8,080)	105	(23,859)
Resource consents	(4,840)	–	–	(778)	(2)	(5,620)
<b>Accumulated amortisation</b>	<b>(23,085)</b>	<b>–</b>	<b>–</b>	<b>(10,110)</b>	<b>–</b>	<b>(33,195)</b>

#### Intangibles – movement in net book values

	2011		2012			
	Group and Company					
	Opening value	Additions	Disposals	Amortisation	Reclassification	Closing value
	\$000	\$000	\$000	\$000	\$000	\$000
Network models	3,613	–	–	(1,252)	(397)	1,964
Computer software	12,572	13,186	–	(8,080)	560	18,238
Resource consents	13,560	6,106	–	(778)	(34)	18,854
Easements	484	14	–	–	–	498
<b>Net book value</b>	<b>30,229</b>	<b>19,306</b>	<b>–</b>	<b>(10,110)</b>	<b>129</b>	<b>39,554</b>

## NOTES TO THE FINANCIAL STATEMENTS (continued)

FOR THE YEAR ENDED 30 JUNE 2012

## 14. INTANGIBLE ASSETS (CONTINUED)

## INTANGIBLE ASSETS – COMPARATIVES

## Intangibles – movement in gross carrying value

	2010		2011				Closing value \$000
	Company	1 November	Group and Company				
	Opening value \$000	Integration \$000	Additions \$000	Disposals \$000	Amortisation \$000	Reclassifications \$000	
Network models	3,301	3,346	–	(673)	–	–	5,974
Computer software	13,960	258	14,994	(784)	–	28	28,456
Resource consents	14,619	3,764	17	–	–	–	18,400
Easements	484	–	–	–	–	–	484
<b>Gross carrying value</b>	<b>32,364</b>	<b>7,368</b>	<b>15,011</b>	<b>(1,457)</b>	<b>–</b>	<b>28</b>	<b>53,314</b>

## Intangibles – movement in accumulated amortisation

	2010		2011				Closing value \$000
	Company	1 November	Group and Company				
	Opening value \$000	Integration \$000	Additions \$000	Disposals \$000	Amortisation \$000	Reclassifications \$000	
Network models	(2,137)	–	–	885	(1,109)	–	(2,361)
Computer software	(11,761)	–	–	570	(4,693)	–	(15,884)
Resource consents	(4,092)	–	–	–	(748)	–	(4,840)
<b>Accumulated amortisation</b>	<b>(17,990)</b>	<b>–</b>	<b>–</b>	<b>1,455</b>	<b>(6,550)</b>	<b>–</b>	<b>(23,085)</b>

## Intangibles – movement in net book values

	2010		2011				Closing value \$000
	Company	1 November	Group and Company				
	Opening value \$000	Integration \$000	Additions \$000	Disposals \$000	Amortisation \$000	Reclassifications \$000	
Network models	1,164	3,346	–	212	(1,109)	–	3,613
Computer software	2,199	258	14,994	(214)	(4,693)	28	12,572
Resource consents	10,527	3,764	17	–	(748)	–	13,560
Easements	484	–	–	–	–	–	484
<b>Net book value</b>	<b>14,374</b>	<b>7,368</b>	<b>15,011</b>	<b>(2)</b>	<b>(6,550)</b>	<b>28</b>	<b>30,229</b>

## NOTES TO THE FINANCIAL STATEMENTS (continued)

FOR THE YEAR ENDED 30 JUNE 2012

### 15. INVENTORIES

	2012		2011	
	Group and Company		Group and Company	
	\$000		\$000	
Spare parts at cost	3,768	4,530		
Consumables at cost	2,503	2,011		
Treated water at cost	679	710		
Work in progress	–	838		
Project stock	248	1,045		
Provision for obsolescence	(1,768)	(2,002)		
<b>Total inventory</b>	<b>5,430</b>	<b>7,132</b>		
<b>Represented as:</b>				
Current inventory	2,793	4,092		
Non-current inventory	2,637	3,040		
<b>Total inventory</b>	<b>5,430</b>	<b>7,132</b>		

### 16. TRADE AND OTHER RECEIVABLES

	2012		2011	
	Group and Company		Group and Company	
	\$000		\$000	
<b>Current</b>				
Trade receivables – related parties	1,445	2,985		
Trade receivables – other	33,698	38,124		
Provision for doubtful debts	(3,205)	(3,128)		
	31,938	37,981		
Other receivables	2,780	1,380		
Unbilled revenue accrual	36,872	40,147		
<b>Total trade and other receivables</b>	<b>71,590</b>	<b>79,508</b>		

### 17. PREPAID EXPENSES

During the year, an amount of \$23.9 million was paid to Kelliher Charitable Trust towards lease of land at Puketutu Island for disposal of biosolids by Watercare. The lease is for a period of 55 years with one right of renewal of 15 years. At balance date, the unamortised amount was \$23.5 million of which \$0.4 million was included within current prepaid expenses and \$23.1 million within non-current prepaid expenses.

### 18. TRADE AND OTHER PAYABLES

	2012		2011	
	Group and Company		Group and Company	
	\$000		\$000	
<b>Current</b>				
Contract retentions	8,707	11,045		
Trade creditors – other	15,161	3,794		
Trade creditors – related parties	327	1,201		
Other payables	289	117		
<b>Total trade and other payables</b>	<b>24,484</b>	<b>16,157</b>		

## NOTES TO THE FINANCIAL STATEMENTS (continued)

FOR THE YEAR ENDED 30 JUNE 2012

### 19. ACCRUED EXPENSES

	2012	2011
	Group and Company	Group and Company
	\$000	\$000
<b>Current</b>		
Capital work in progress accruals	29,235	21,146
Interest payable	11,497	11,013
Income received in advance	5,916	4,896
Operating costs accruals	15,186	30,872
<b>Total current accrued expenses</b>	<b>61,834</b>	<b>67,927</b>
<b>Non-current</b>		
Income received in advance	8,840	9,100
<b>Total non-current accrued expenses</b>	<b>8,840</b>	<b>9,100</b>
<b>Total accrued expenses</b>	<b>70,674</b>	<b>77,027</b>

Income received in advance includes \$9.1 million (2011: \$9.4 million) relating to the amount received in accordance with the franchise fee agreement between the network operator United Water International Pty Limited (United Water) and Papakura District Council (integrated into the company on 1 November 2010). The franchise agreement grants the operator, the right to use the fixed utility systems owned by the group for the provision of water and wastewater services within the Papakura district. Under the franchise agreement United Water is responsible for upgrading and maintaining the network so that at the end of the contract period, the network shall be in a better overall condition than the condition at the time the contract was commenced. The \$13m fee received at the commencement of the agreement covers the right to use the assets for a 50-year period and is recognised as revenue evenly over the term of the agreement.

### 20. PROVISIONS

	2012	2011
	Group and Company	Group and Company
	\$000	\$000
<b>Current</b>		
Employee entitlements	5,019	3,790
Decommissioning costs	1,222	847
Other provisions	–	159
<b>Total current provisions</b>	<b>6,241</b>	<b>4,796</b>
<b>Non-current</b>		
Employee entitlements	1,464	1,392
<b>Total non-current provisions</b>	<b>1,464</b>	<b>1,392</b>
<b>Total provisions</b>	<b>7,705</b>	<b>6,188</b>

	Employee entitlements	Decommissioning costs	Other provisions	Total
	\$000	\$000	\$000	\$000
Balance at 1 July 2011	5,182	847	159	6,188
Additions during the year	5,556	1,912	–	7,468
Reductions resulting from payments	(4,255)	(1,537)	(159)	(5,951)
<b>Balance at 30 June 2012</b>	<b>6,483</b>	<b>1,222</b>	<b>–</b>	<b>7,705</b>

## NOTES TO THE FINANCIAL STATEMENTS (continued)

FOR THE YEAR ENDED 30 JUNE 2012

### 21. BORROWINGS

	2012	2011
	Group and Company	Group and Company
	\$000	\$000
<b>Current</b>		
Related party term loan (unsecured)	89,312	67,154
Medium-term notes (unsecured)	227	50,000
Commercial paper (unsecured)	129,117	124,141
Bank loan (unsecured)	13,500	–
<b>Total current borrowings</b>	<b>232,156</b>	<b>241,295</b>
<b>Non-current</b>		
Related party term loan (unsecured)	387,488	476,104
Medium-term notes (unsecured)	526,422	400,000
Term loan (unsecured)	150,000	100,000
Bank loan (unsecured)	–	11,500
<b>Total non-current borrowings</b>	<b>1,063,910</b>	<b>987,604</b>
<b>Repayment schedule:</b>		
<b>Related party term loan (unsecured)</b>		
Less than one year	89,312	67,154
One to two years	78,754	89,798
Two to three years	136,394	79,128
Three to four years	18,918	136,275
Beyond four years	153,422	170,903
<b>Medium-term notes</b>		
Less than one year	227	50,000
One to two years	220,239	–
Two to three years	150,251	220,000
Three to four years	30,264	150,000
Beyond four years	125,668	30,000
<b>Term loan</b>		
Beyond four years	150,000	100,000
<b>Bank loan</b>		
Less than one year	13,500	–
One to two years	–	11,500
<b>Commercial paper</b>		
Current	129,117	124,141
<b>Total borrowings</b>	<b>1,296,066</b>	<b>1,228,899</b>

## NOTES TO THE FINANCIAL STATEMENTS (continued)

FOR THE YEAR ENDED 30 JUNE 2012

## 21. BORROWINGS (CONTINUED)

	2012	2011
	Group and Company	Group and Company
INTEREST RATES AT BALANCE DATE:	%	%
<b>Related party term loan</b>		
Average	6.24	5.13
Average including interest rate swaps	6.80	5.78
<b>Medium-term notes</b>		
Average	5.99	6.23
Average including interest rate swaps	5.59	5.98
<b>Term loan</b>		
Average	4.07	3.51
Average including interest rate swaps	7.10	6.85
<b>Bank loan</b>		
Average	3.55	3.61
Average including interest rate swaps	3.55	3.61
<b>Commercial paper</b>		
Average	2.80	2.76
Average including interest rate swaps	5.02	6.08
<b>Total debt</b>		
Average	5.52	5.15
Average including interest rate swaps	6.13	5.95

Lenders under the bank loans and holders of medium-term notes and short-term commercial paper, receive the benefit of the negative pledge undertaking from the group. This undertaking limits the extent to which the group can give security to lenders and requires the group to ensure that the following financial ratios are achieved at all times;

- Total liabilities do not exceed 60 per cent of total tangible assets;
- Total liabilities plus total contingent liabilities do not exceed 65 per cent of total tangible assets;
- Shareholders' funds are not less than \$500 million;
- Earnings before interest, tax, depreciation and amortisation is greater than 1.75 times interest expense;
- Total tangible assets of the group are to be greater than 90 per cent of total tangible assets of the borrowing group.

The group complied with these financial covenant ratios during the years ended 30 June 2012 and 30 June 2011.

The group has an agreement with Auckland Council under which Auckland Council guarantees repayment of certain of the group's borrowings and obligations under interest rate swap agreements.

The group has the following undrawn committed facilities available:

	2012	2011
	Group and Company	Group and Company
	\$000	\$000
Bank overdraft facilities, expires on cancellation	5,100	4,542
Term loan facility, expires October 2016	–	50,000
Revolving advances, expires May 2013 (2011: expires May 2013)	61,500	63,500
Commercial paper standby facility expires July 2012 (2011: expires July 2012)	200,000	200,000
<b>Total undrawn committed facilities</b>	<b>266,600</b>	<b>318,042</b>

Commercial paper held by the group is represented by multiple issues that spread interest rate and maturity risk. As each issue matures the group replaces it with a new issue, if required. The provider of the commercial paper standby facility acts as a lender of last resort, should the group be unable to issue new commercial paper when it matures. The group's treasury risk management policy requires standby facilities to be maintained to meet 50% of outstanding commercial paper and other uncommitted short-term debt repayable within 60 days. The group complied with its treasury risk management policy during the years ended 30 June 2012 and 30 June 2011.

Watercare's treasury policy requires that facilities due to expire are replaced six months prior to the maturity date of the existing facilities. In accordance with the treasury policy, Watercare established, effective 1 July 2012 a replacement commercial paper standby facility of \$200 million with \$100 million maturing in July 2015 and the other \$100 million maturing in July 2017.

## NOTES TO THE FINANCIAL STATEMENTS (continued)

FOR THE YEAR ENDED 30 JUNE 2012

### 22. FINANCIAL ASSETS AND LIABILITIES

#### Categories of financial assets and liabilities

The carrying amounts presented in the statement of financial position relate to the following categories of assets and liabilities:

	2012		2011	
	Group and Company		Group and Company	
	Carrying amount	Fair value	Carrying amount	Fair value
	\$000	\$000	\$000	\$000
<b>FINANCIAL ASSETS – CURRENT</b>				
<b>Loans and receivables</b>				
Cash and cash equivalents	862	862	32	32
Trade and other receivables	71,590	71,590	79,508	79,508
<b>Fair value through profit or loss</b>				
Derivative financial instruments	26	26	553	553
<b>FINANCIAL ASSETS – NON CURRENT</b>				
<b>Fair value through profit or loss</b>				
Derivative financial instruments	23,609	23,609	12,285	12,285
	<b>96,087</b>	<b>96,087</b>	<b>92,378</b>	<b>92,378</b>
<b>FINANCIAL LIABILITIES – CURRENT</b>				
<b>Amortised cost</b>				
Trade and other payables	24,484	24,484	16,157	16,157
Accrued expenses*	55,918	55,918	63,031	63,031
Bank overdraft (unsecured)	–	–	558	558
Medium-term notes (unsecured)	227	227	50,000	51,244
Related party term loan (unsecured)	89,312	90,223	67,154	67,770
Commercial paper (unsecured)	129,117	129,555	124,141	124,450
Bank loan (unsecured)	13,500	13,507	–	–
<b>Fair value through profit or loss</b>				
Derivative financial instruments	362	362	3,174	3,174
<b>FINANCIAL LIABILITIES – NON CURRENT</b>				
<b>Amortised cost</b>				
Medium-term notes (unsecured)	526,422	559,654	400,000	423,156
Term loan (unsecured)	150,000	150,777	100,000	100,369
Bank loan (unsecured)	–	–	11,500	11,500
Related party term loan (unsecured)	387,488	391,579	476,104	481,084
<b>Fair value through profit or loss</b>				
Derivative financial instruments	133,336	133,336	59,110	59,110
	<b>1,510,166</b>	<b>1,549,622</b>	<b>1,370,929</b>	<b>1,401,603</b>

\* Excludes current and non-current income received in advance of \$14.8 million (2011: \$14 million) as it was not categorised as a financial liability, refer Note 19 page 100.

The calculation of fair values for each category of financial assets and financial liabilities is explained below. The methods and valuation techniques used for the purpose of measuring fair value are unchanged compared to the previous reporting period. No reclassification of financial assets was made during the years ended 30 June 2012 or 30 June 2011.

## NOTES TO THE FINANCIAL STATEMENTS (continued)

FOR THE YEAR ENDED 30 JUNE 2012

### 22. FINANCIAL ASSETS AND LIABILITIES (CONTINUED)

#### Loans and receivables

Due to their relatively short-term nature, the carrying amount of trade receivables was considered a reasonable approximation of fair value.

#### Amortised cost

Due to their relatively short-term nature, the carrying amount of trade payables was considered a reasonable approximation of fair value.

The fair value of loans and borrowings was calculated based on the present value of contractual principal and interest cash flows, discounted at the market rate of interest in the reporting period.

#### Fair value through profit and loss

Interest rate swaps were measured at the present value of future cash flows estimated and discounted based on the applicable yield curves derived from quoted interest rates. Forward foreign exchange contracts were measured using observable market forward exchange rates.

#### Fair value hierarchy

The fair value hierarchy groups financial assets and liabilities into three levels as explained below based on the significance of inputs used in measuring the fair value of the financial assets and liabilities.

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities;

Level 2: Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and

Level 3: Inputs for the asset or liability that are not based on observable market data (unobservable inputs).

The level in which the financial asset or liability was classified was determined based on the lowest level of significant input to the fair value measurement.

The only financial assets and financial liabilities that were measured at fair value in the statement of financial position were derivative financial instruments. The valuation for derivative financial instruments was based on level 2 fair value hierarchy. The derivative financial instruments that the group held at balance date comprised interest rate swaps and forward foreign exchange contracts.

Fair values at balance date were assessed using a range of market interest rates between 2.69% and 4.04% (2011: 2.68% and 5.35 %), derived from the interest rate swap curve.

There were no transfers between levels 1, 2 and 3 during the year ended 30 June 2012.

#### Financial instrument risks

##### Risk management objectives and policies

The group's management monitors and manages the financial risks relating to the operations of the group through internal risk reports which analyse exposures by degree and magnitude of risks. The main types of risks are market risk, credit risk and liquidity risk.

The group seeks to manage the effects of these risks by using derivative financial instruments to minimise these risk exposures. The use of financial derivatives was governed by the group's policies approved by the Board of Directors, which provide written principles on interest rate risk, credit risk, the use of derivative and non-derivative financial instruments, and the investment of excess liquidity. Compliance with policies and exposure limits was reviewed by the Board of Directors on a regular basis.

##### Market risk

The group was exposed to market risk through its use of financial instruments and specifically to interest rate, foreign currency and certain other price risks. The group managed its market risk by regularly assessing the impact of changes in the market interest rates and foreign currency rates on the group's portfolio.

##### Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The group is exposed to interest rate risk when it borrows funds at floating interest rates. The risk was managed by the group through monitoring market interest rates and reviewing the impact of these on interest rate exposure.

The group's borrowings comprise of both fixed rates and floating rates of interest. It is group policy to ensure that a proportion of interest rate exposure is maintained on a fixed-rate basis. To achieve this, the group enters into contracts that allow some of its floating interest rate exposure to be swapped from floating to fixed, and vice versa. The contracts are called interest rate swaps and interest rate options.

The group's exposure to market interest rates relates primarily to the group's debt obligations which are disclosed in Note 21, page 102.

The group regularly analyses its interest rate exposure. Within this analysis, consideration is given to potential renewals of existing positions, alternative financing, alternative protective positions and the mix of fixed and variable interest rates.

## NOTES TO THE FINANCIAL STATEMENTS (continued)

FOR THE YEAR ENDED 30 JUNE 2012

### 22. FINANCIAL ASSETS AND LIABILITIES (CONTINUED)

The notional principal, contract amounts of agreements and fixed interest rates in place, at balance date, to manage interest rate risk were as follows:

	2012		2011	
	Group and Company		Group and Company	
	Fixed interest rate	Notional amount	Fixed interest rate	Notional amount
INTEREST RATE SWAPS	%	\$000	%	\$000
Receivable maturities (fixed to floating):				
Within one year	–	–	6.86%	50,000
One to two years	5.26%	170,000	–	–
Two to three years	5.74%	150,000	5.26%	170,000
Three to four years	5.10%	30,000	5.74%	150,000
Four to five years	–	–	5.10%	30,000
Beyond five years	5.69%	125,000	–	–
Payable maturities (floating to fixed):				
Within one year	6.84%	45,000	5.48%	125,000
One to two years	2.85%	20,000	–	–
Two to three years	6.25%	15,000	–	–
Three to four years	4.51%	100,000	6.25%	15,000
Four to five years	4.95%	80,000	5.17%	110,000
Beyond five years	5.92%	870,000	6.30%	720,000

As interest rates change, these derivative financial instruments are revalued to fair value and the change in fair value is recorded in surplus or deficit.

#### Interest rate sensitivity

The following sensitivity analysis is based on the interest rate risk exposures in existence at balance date.

At balance date, if interest rates had moved, as illustrated in the table below, with all other variables held constant, post-tax deficit and equity would have been affected as follows:

	2012		2011	
	Group and Company		Group and Company	
	Post-tax deficit (Higher)/lower	Equity Higher/(lower)	Post-tax deficit (Higher)/lower	Equity Higher/(lower)
JUDGMENTS OF REASONABLY POSSIBLE MOVEMENTS:	\$000	\$000	\$000	\$000
Interest paid				
1% (100 basis points) higher for the year	(2,725)	(2,725)	(1,656)	(1,656)
1% (100 basis points) lower for the year	2,725	2,725	1,656	1,656
Revaluation of derivative financial instruments				
1% (100 basis points) higher at year-end	37,744	37,744	21,548	21,548
1% (100 basis points) lower at year-end	(43,012)	(43,012)	(23,596)	(23,596)

#### Foreign currency risk

Foreign currency risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. Most of the group's transactions are carried out in New Zealand dollars.

From time to time the group is exposed to foreign currency risk on transactions denominated in foreign currencies. This was predominantly for the purchase of equipment, parts and chemicals in foreign currency. Where amounts exceed \$100,000 the group manages this risk with forward foreign exchange contracts or options.

## NOTES TO THE FINANCIAL STATEMENTS (continued)

FOR THE YEAR ENDED 30 JUNE 2012

### 22. FINANCIAL ASSETS AND LIABILITIES (CONTINUED)

The group has forward foreign exchange contracts at balance date as follows:

	2012			
	Group and Company			
	Average exchange	Foreign exchange	Contract value	Carrying amount and fair value
	RATE	FC 000	NZ\$000	NZ\$000
<b>USD</b>				
3 months and beyond	0.767	1,473	1,920	(42)
<b>AUD</b>				
Less than 3 months	-	-	-	-
3 months and beyond	0.776	397	512	(6)
<b>Total forward foreign exchange contracts</b>			<b>2,432</b>	<b>(48)</b>

	2011			
	Group and Company			
	Average exchange	Foreign exchange	Contract value	Carrying amount and fair value
	RATE	FC 000	NZ\$000	NZ\$000
<b>USD</b>				
Less than 3 months	0.737	274	372	(41)
3 months and beyond	0.721	3,575	4,961	(542)
<b>EUR</b>				
3 months and beyond	0.515	150	292	(19)
<b>GBP</b>				
Less than 3 months	0.452	88	194	(23)
<b>AUD</b>				
Less than 3 months	0.734	3,113	4,241	(216)
3 months and beyond	0.758	420	554	(23)
<b>Total forward foreign exchange contracts</b>			<b>10,614</b>	<b>(864)</b>

## NOTES TO THE FINANCIAL STATEMENTS (continued)

FOR THE YEAR ENDED 30 JUNE 2012

### 22. FINANCIAL ASSETS AND LIABILITIES (CONTINUED)

#### Foreign currency sensitivity

The following sensitivity analysis is based on the foreign currency risk exposures in existence at year-end. At balance date, had the New Zealand dollar exchange rate changed, as illustrated in the table below, with all other variables held constant, post-tax deficit and equity would have been affected as follows:

	2012		2011	
	Group and Company		Group and Company	
	Post-tax deficit (Higher)/lower	Equity Higher/(lower)	Post-tax deficit (Higher)/lower	Equity Higher/(lower)
	\$000	\$000	\$000	\$000
<b>SENSITIVITY TO REASONABLE MOVEMENTS</b>				
<b>Change in United States dollar exchange rate</b>				
10% increase	(123)	(123)	(309)	(309)
10% decrease	150	150	380	380
<b>Change in Euro Monetary Union euro exchange rate</b>				
10% increase	–	–	(18)	(18)
10% decrease	–	–	22	22
<b>Change in United Kingdom pound exchange rate</b>				
10% increase	–	–	(11)	(11)
10% decrease	–	–	13	13
<b>Change in Australian dollar exchange rate</b>				
10% increase	(33)	(33)	(289)	(289)
10% decrease	40	40	353	353

#### Credit risk

Credit risk is the risk that a counterparty will default on its contractual obligations resulting in financial loss to the group. Financial instruments which potentially subject the group to credit risk principally consist of cash and cash equivalents, derivative assets held for risk management, and trade and other receivables.

The group's cash and cash equivalents are placed with major trading banks with a minimum AA- credit rating assigned by international credit-rating agencies. Debtors and other receivables arise from the group's statutory functions. Therefore, there are no procedures in place to monitor the credit quality of debtors and other receivables with reference to credit evaluations or external credit rating. However, there was no concentration of credit risk with respect to receivables as the company has a large number of customers. The ageing of the trade receivables at balance date was as follows:

	2012			2011		
	Group and Company			Group and Company		
	Carrying amount	Provision for doubtful debts	Net carrying amount	Carrying amount	Provision for doubtful debts	Carrying amount
	\$000	\$000	\$000	\$000	\$000	\$000
Not past due	22,395	(75)	22,320	18,415	–	18,415
Past due one to thirty days	2,466	(198)	2,268	7,229	(302)	6,927
Past due thirty to sixty days	1,624	(156)	1,468	3,337	(124)	3,213
Past due more than sixty days	8,658	(2,776)	5,882	12,128	(2,702)	9,426
<b>Total</b>	<b>35,143</b>	<b>(3,205)</b>	<b>31,938</b>	<b>41,109</b>	<b>(3,128)</b>	<b>37,981</b>

#### MOVEMENT IN THE PROVISION FOR DOUBTFUL DEBTS

	2012	2011
	Group and Company	Group and Company
	\$000	\$000
Balance at 1 July 2011	3,128	–
Acquisition through integration on 1 November 2010	–	1,845
Additions during the year	689	1,313
Bad debts written off	(612)	(30)
<b>Balance at 30 June 2012</b>	<b>3,205</b>	<b>3,128</b>

## NOTES TO THE FINANCIAL STATEMENTS (continued)

FOR THE YEAR ENDED 30 JUNE 2012

### 22. FINANCIAL ASSETS AND LIABILITIES (CONTINUED)

#### Liquidity risk

Liquidity risk is the risk arising from the group not being able to meet its financial obligations.

Ultimate responsibility for liquidity risk management rests with the board of directors, which has an appropriate liquidity risk management framework for the management of the group's short, medium and long-term funding and liquidity management requirements. The group manages liquidity risk by maintaining adequate reserves and banking facilities, monitoring forecast and actual cash flows and by matching this with the maturity profiles of financial liabilities.

The group's objective is to maintain a balance between continuity of funding and flexibility through the use of medium-term notes, term loans, overdraft, revolving credit facility and commercial paper. The liquidity risk associated with the short-term commercial paper debt is mitigated by a standby facility of \$200 million.

The following tables detail the gross undiscounted cash flows of the financial liabilities on the basis of their earliest possible contractual maturity (including interest payments where applicable). Cash flows for financial liabilities without fixed amount or timing restrictions are based on the conditions existing at balance date.

#### Gross contractual maturity analysis

	CURRENT		NON-CURRENT				
	Group and Company						
	0-6 months	7-12 months	1-2 years	2-3 years	Over 3 years	Gross nominal cash outflow	Carrying amount
2012	\$000	\$000	\$000	\$000	\$000	\$000	\$000
<b>Financial liabilities</b>							
Trade and other payables	24,484	–	–	–	–	24,484	24,484
Accrued expenses*	55,918	–	–	–	–	55,918	55,918
Forward exchange contracts	6	68	–	–	–	74	74
Interest rate swaps	9,805	10,941	20,067	14,554	110,036	165,403	133,624
Borrowings	221,813	72,759	356,466	321,740	533,890	1,506,668	1,296,066
<b>Total</b>	<b>312,026</b>	<b>83,768</b>	<b>376,533</b>	<b>336,294</b>	<b>643,926</b>	<b>1,752,547</b>	<b>1,510,166</b>

	CURRENT		NON-CURRENT				
	Group and Company						
	0-6 months	7-12 months	1-2 years	2-3 years	Over 3 years	Gross nominal cash outflow	Carrying amount
2011	\$000	\$000	\$000	\$000	\$000	\$000	\$000
<b>Financial liabilities</b>							
Bank overdraft	558	–	–	–	–	558	558
Trade and other payables	16,157	–	–	–	–	16,157	16,157
Accrued expenses*	63,031	–	–	–	–	63,031	63,031
Forward exchange contracts	494	212	158	–	–	864	864
Interest rate swaps	10,009	7,948	10,550	9,379	29,347	67,233	61,420
Borrowings	246,618	53,542	157,902	351,628	649,018	1,458,708	1,228,899
<b>Total</b>	<b>336,867</b>	<b>61,702</b>	<b>168,610</b>	<b>361,007</b>	<b>678,365</b>	<b>1,606,551</b>	<b>1,370,929</b>

\* Excludes current and non-current income received in advance of \$14.8 million (2011: \$14 million) as it was not categorised as a financial liability, refer Note 19, page 100.

The group monitors rolling forecasts of liquidity reserves on the basis of expected cash flow. At balance date the group had \$267 million of unused credit facilities (commercial paper, overdraft facility and revolving credit facility) available for its immediate use (2011: \$318 million).

## NOTES TO THE FINANCIAL STATEMENTS (continued)

FOR THE YEAR ENDED 30 JUNE 2012

### 22. FINANCIAL ASSETS AND LIABILITIES (CONTINUED)

#### Capital management

The capital structure of the group consists of equity attributable to the owners of the parent, comprising issued capital, reserves and retained earnings as disclosed on page 77 and debt including borrowings and covenants compliance as disclosed in Note 21 on page 102.

The group's policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business. The objective of the group is to maintain an optimal capital structure to reduce the cost of capital. In ensuring that the group has sufficient solvency to satisfy all its operational needs, it closely monitors the ratio between the funds that it receives from operation and its finance costs.

The group continues to focus on the maintenance of the long-term integrity of its assets whilst keeping the overall costs to its customers at minimum levels and there has been no change in the group's overall strategy for capital management during the years ended 30 June 2012 and 30 June 2011.

### 23. RELATED PARTIES

SHAREHOLDER	2012		2011	
	%	Shares	%	Shares
Auckland Council	100%	260,693,164	100%	260,693,164

#### Other related parties

During the prior year, Metrowater Limited and Manukau Water Limited (subsidiaries of Auckland City Council and Manukau City Council respectively) were related parties until integration with the company on 1 November 2010. Metrowater Community Trust (formerly a Metrowater Limited subsidiary) and Auckland City Water Limited (dormant company) were related parties until 1 November 2010 after which they became subsidiaries of the company. Details of the integration of retail business are disclosed in Note 11, page 91. The group's subsidiaries are set out in Note 11, page 90.

#### Transactions with related parties

Watercare entered into borrowing arrangements with Auckland Council on the terms set out in Note 21, page 102. Watercare also entered into interest rate swap arrangements with Auckland Council (with a notional value of \$130 million, 2011: \$155 million) with a fair value of \$3.7 million (2011: \$5.1 million) as at balance date. The balances outstanding and transactions relating to the borrowings from Auckland Council during the year were as follows:

	2012	2011
	Group and Company	Group and Company
	\$000	\$000
Loans from Auckland Council	476,800	543,258
Interest payable on loans from Auckland Council	5,434	6,036
Interest paid on loans from Auckland Council	22,702	15,688
Loans repaid to Auckland Council	66,458	168,800
Interest receivable on interest rate swaps with Auckland Council	316	305
Interest paid on swaps (net) with Auckland Council	3,367	–

During the year the group provided funding to its subsidiaries listed in Note 11, page 90. Also in the normal course of business, Watercare received monies and incurred expenses on behalf of Te Motu A Hiaroa (Puketutu Island) Governance Trust and at balance date \$236,427 was payable to the Trust by the group.

The group provides retail water and wastewater services to its parent, Auckland Council and its controlled, jointly controlled and significantly influenced entities as well as to key management personnel of the company and its parent. These sales take place in the normal course of business. The group also entered into sales and purchases transactions with related parties in the normal course of business such as the payment of rates. These were not collectively significant. During the prior year, until integration on 1 November 2010 the group supplied bulk water and wastewater services predominantly to related parties in the Auckland region.

	2012	2011
	Group and Company	Group and Company
	\$000	\$000
Sales to related parties	94,783	136,058
Trade receivables – related parties	1,445	2,985
Purchases from related parties	4,247	2,915
Trade payables – related parties	327	1,201
Receivable accruals	1,531	–
Payables accruals	7,240	7,894

## NOTES TO THE FINANCIAL STATEMENTS (continued)

FOR THE YEAR ENDED 30 JUNE 2012

### 24. COMMITMENTS

	2012	2011
	Group and Company	Group and Company
	\$000	\$000
<b>Capital expenditure</b>		
The capital expenditure committed to, but not recognised in these financial statements, at balance date was:		
Buildings	174	488
Pipelines	251,376	63,463
Tanks, tunnels, roads and reservoirs	1,000	4,295
Intangibles	556	–
Other	20,290	35,018
<b>Total capital expenditure commitments</b>	<b>273,396</b>	<b>103,264</b>
<b>Anticipated payment schedule:</b>		
Less than one year	90,608	79,636
One to two years	11,547	22,713
Two to five years	171,241	915
<b>Total capital expenditure commitments</b>	<b>273,396</b>	<b>103,264</b>
The commitments relate to the following projects:		
Wastewater treatment plant	8,197	4,109
Water treatment plants	3,838	10,253
Bulk supply meters	6,793	6,797
Expansion of the Waikato water treatment plant	7,136	11,156
South Western interceptor	418	13,019
Stage 1 Northern Waitakere wastewater	5,182	6,985
Hunua No 4 Trunk Water Main	192,663	1,743
Other projects	49,169	49,202
<b>Total capital expenditure commitments</b>	<b>273,396</b>	<b>103,264</b>
<b>Operating leases</b>		
Anticipated payments under non-cancellable operating leases:		
Less than one year	3,229	3,159
One to two years	2,942	3,003
Two to five years	4,584	6,361
Beyond five years	49,312	49,288
<b>Total lease commitments</b>	<b>60,067</b>	<b>61,811</b>

The major lease commitments relate to long-term leases of the land forming the water catchments areas, which expires in July 2092. The annual rental of \$510,000 (2011: \$510,000) was included in these commitments at face value. Other leases include Newmarket office, East Tamaki office, parks, reservoirs and office equipment.

## NOTES TO THE FINANCIAL STATEMENTS (continued)

FOR THE YEAR ENDED 30 JUNE 2012

### 25. CONTINGENCIES

In November 2011, the Department of Labour commenced proceedings against Watercare Services Limited for three charges laid in relation to the Onehunga gas explosion incident. In the event that Watercare Services Limited is proven to be liable, the maximum liability for each charge is estimated to be approximately \$250,000.

In the normal course of its business the group was exposed to claims, legal proceedings and arbitrations that may in some cases result in costs to the group. The directors believe that these were adequately provided for by the group within Note 20, page 100 of these financial statements and no additional material contingent liabilities requiring disclosure have been identified.

### 26. RETIREMENT BENEFIT PLANS

The employees of the group can elect to join the KiwiSaver scheme. KiwiSaver is a work-based savings scheme run through a selection of private providers. The obligation of the group is to contribute a specified percentage of payroll costs to the KiwiSaver scheme in line with employee contributions and the only obligation of the group to the KiwiSaver scheme was to make the specified contributions.

The total defined contribution expense recognised in the surplus or deficit for 2012 was \$798,338 (2011: \$566,483).

### 27. REMUNERATION

The directors and key management personnel are included in this compensation.

	2012	2011
	Group and Company	Group and Company
	\$000	\$000
<b>COMPENSATION OF DIRECTORS AND KEY MANAGEMENT PERSONNEL</b>		
Employees' salaries and wages and directors' fees	3,489	4,046
Post-employment benefits	60	67
Other long-term employee benefits	–	8
Termination benefits	–	45
<b>Total compensation for directors and key executives</b>	<b>3,549</b>	<b>4,166</b>

		2012	2011
		Group and Company	Group and Company
	Appointed	\$000	\$000
<b>DIRECTORS' REMUNERATION</b>			
Graeme Hawkins (retired December 2010)	December 2002	–	96
David Clarke (Deputy Chairman)	July 2008	66	72
Peter Drummond	March 2010	50	65
Susan Huria	July 2008	53	66
Ross Keenan (Chairman)	March 2010	96	100
Patrick Snedden (resigned December 2011)	December 2002	26	66
Jeff Todd	May 2007	60	77
Tony Lanigan	May 2011	53	9
Catherine Harland	May 2011	53	9
Mike Allen	December 2011	27	0
<b>Total</b>		<b>484</b>	<b>560</b>

Directors' fees paid during the 2011 financial year included additional fees of \$165,451 paid to directors as a result of the increased workload and commitment leading up to the integration. Of this amount, \$94,312 was a back payment relating to the year ended 30 June 2010.

### 28. EVENTS OCCURRING AFTER BALANCE DATE

No significant events have occurred since balance date requiring disclosure in these financial statements.

## STATUTORY INFORMATION

FOR THE YEAR ENDED 30 JUNE 2012

### EMPLOYEES REMUNERATION RANGE

The table below shows the number of employees and former employees of the group, who in their capacity as employees, received remuneration and other benefits during the year of at least \$100,000.

EMPLOYEE REMUNERATION RANGE	2012		
	Group and Company		
	Number of employees		
	Remuneration	Remuneration including redundancy & restructuring *	Total
\$100,000 – \$110,000	43		43
\$110,001 – \$120,000	22		22
\$120,001 – \$130,000	22	1	23
\$130,001 – \$140,000	18		18
\$140,001 – \$150,000	5		5
\$150,001 – \$160,000	3		3
\$160,001 – \$170,000	2		2
\$170,001 – \$180,000	2		2
\$180,001 – \$190,000	2		2
\$190,001 – \$200,000	1		1
\$200,001 – \$210,000	5		5
\$210,001 – \$220,000	4		4
\$220,001 – \$230,000	1		1
\$230,001 – \$240,000 **	1		1
\$240,001 – \$250,000	2		2
\$270,001 – \$280,000	1		1
\$300,001 – \$310,000	1		1
\$330,001 – \$340,000	2		2
\$370,001 – \$380,000 **	1		1
\$710,001 – \$720,000	1		1

\* Includes \$60,296 in redundancy and outstanding annual leave entitlements.

\*\* Includes outstanding leave entitlements paid out on termination.

## 2012 STATEMENT OF SERVICE PERFORMANCE

(NON-FINANCIAL PERFORMANCE MEASURES)

### ENVIRONMENTAL CARE

#### (a) To promote conservation of the region's water resources.

- (i) To maintain regional unaccounted for water losses at less than 17.7 million m<sup>3</sup>.

A proportion of the water supplied by Watercare is not invoiced (non-revenue water) because it is used as part of the production process (such as flushing), for fire fighting, is meter inaccuracy or unauthorised usage. Some of these volumes are calculated based on the best information available and other industry accepted parameters. The balance of non-revenue water is unaccounted for water losses and was estimated at 15.2 million m<sup>3</sup> against a target of 17.7 million m<sup>3</sup> for 2011/12.

#### (b) To ensure the impact of the company's activities on the environment is controlled.

- (i) Compliance with treatment plant discharge consents (excludes minor or technical non-compliance).

Compliance with consents at the major urban wastewater treatment plants was 99% against a target of 100%. The non-compliance reported this year was due to illegal trade waste discharge and an off-site power failure, circumstances beyond Watercare's control. There were several transient periods of technical or minor non-compliance<sup>1</sup> at the Mangere Wastewater Treatment Plant during the year. An upgrade programme has been implemented to address these.

The remaining non-compliance levels were influenced by the poor performance of some of the rural wastewater treatment plants transferred to Watercare by councils upon integration. These plants performed at 64% against a target of 65%, by 2015, and a target of 100% compliance by 2020. Watercare has developed a longer-term strategy and more immediate measures, forecast to cost \$50 million, to reduce the impacts of these plants on the environment.

- (ii) No successful Resource Management Act prosecutions against Watercare.

There were no Resource Management Act prosecutions.

### HEALTH, SAFETY AND WELLBEING

#### (a) To promote staff productivity and wellbeing.

- (i) To attain a lost-time injury frequency rate (LTIFR) of less than or equal to 5 hours per million hours worked.

Watercare staff achieved a LTIFR rate of 1.39 which was within the target range.

- (ii) To target an unplanned absenteeism rate of less than 2.5%.

Watercare achieved an unplanned absenteeism rate of 1.81% which achieved the target.

- (iii) To target annual staff turnover in the target range 10-12%.

Voluntary staff turnover at 11.81% was within the target of 10 to 12% which is generally recognised as a healthy staffing refreshment rate.

#### (b) To provide comprehensive development programmes.

- (i) To target a ratio of less than 1.6:1 of external to internal appointments.

The ratio of new hires (excluding entry positions) to promotions is monitored and a more challenging target was set for this year of 1.6:1 compared to 2.25:1 last year. During the period Watercare achieved a ratio of 1 promotion to every 1.71 new hires, due to the nature of the candidate pool.

#### (c) To provide employees with safe working conditions.

- (i) To maintain the tertiary level ACC workplace management practices accreditation.

ACC tertiary level accreditation was maintained following an audit in December 2011.

### STAKEHOLDER RELATIONSHIPS

#### (a) To maintain sound governance and contribute to the development of a productive working relationship with the Shareholder.

- (i) To hold briefings with the Shareholder at least quarterly and to undertake Council briefings as requested.

Watercare briefed the Auckland Council formerly through quarterly reports and quarterly briefings through the year. The Watercare Board of Directors hosted the Auckland Council Councillors for a combined strategy session in May in preparation for the development of a new Water Strategy.

<sup>1</sup> For instance, a technical non-compliance might be late completion of documentation, minor non-compliance might be a single reading above a target the impact of which is total load based where there is no material impact on the environment. In each case, the regulator, Auckland Council, our related party, is fully informed.

## 2012 STATEMENT OF SERVICE PERFORMANCE (continued)

(NON-FINANCIAL PERFORMANCE MEASURES)

### CUSTOMER SERVICE COMMITMENT

#### (a) To supply high quality and reliable drinking water.

- (i) To maintain 100% compliance with the Ministry of Health's drinking water standards at graded plants.

Watercare fully met the target in respect of the achievement of the Ministry of Health's Drinking Water Standards for New Zealand (DWSNZ) at Ministry of Health-graded water treatment plants which supply the bulk of the drinking water to the Auckland Region. The DWSNZ standards are based on a quality assurance approach, underpinned by the requirement to develop public health risk-management plans.

This is verified through a sampling programme at the water treatment plants and in the reticulation network, where approximately 80 sites are sampled per day. Compliance with the DWSNZ is reported in the Water Information for New Zealand (WINZ) database, and is assessed by the Drinking Water Assessor on an annual basis. The next assessment of grading for qualifying water treatment plants will take place in the final quarter of the 2012 calendar year.

- (ii) To maintain the public health grading of water treatment plants and networks of 'Aa'.

Water quality has been maintained based on the 2010 grading assessment carried out by the Auckland District Health Board on behalf of the Ministry of Health<sup>2</sup>. All the metropolitan water treatment plants that supply the bulk of drinking water to the people in the Auckland Region meet the 'A' grade standard.

Of the smaller non-metropolitan plants transferred to Watercare on 1 November 2010, nine remain ungraded. Watercare is continuing with a programme of work to ensure all plants meet the 'A' grade standard by 2020, at a capital cost of \$100 million for both water treatment plants and the distribution network.

The same risk-based assessment used for water treatment plants also applies to the pipes and pump stations that make up the water distribution networks. The metropolitan network is graded 'a' under the Ministry of Health's standards and supplies the bulk of the drinking water to the people in the Auckland Region. Of the 15 non-metropolitan networks (inherited on 1 November 2010), three are 'a' graded, three are 'b' graded and 9 are ungraded. Watercare has set in place a programme to ensure that all the networks meet the 'a' grade standard by 2020.

#### (b) To provide for the safe transportation, treatment and disposal of bulk wastewater.

- (i) To target no more than fifteen dry-weather sewer overflows per 100km of wastewater pipe length per annum.

Watercare reports on the number of wastewater overflows from its retail network during dry weather as a measure of the ability of the network to manage current demand. The result for 2011/12 was 2.3 overflows per 100km of waste water pipe.

### ASSET MANAGEMENT

#### (a) To develop and implement effective and efficient capital investment and maintenance programmes.

- (i) To ensure that capital projects have robust business cases.

All Watercare capital projects are supported by robust business cases and are managed to ensure delivery to plan in a timely and cost effective manner. Performance of the project portfolio is reported on a monthly basis to the Board and quarterly to the shareholder, Auckland Council.

### ECONOMIC PERFORMANCE

#### (a) To ensure that financial strategies are consistent with achieving economic efficiency, intergenerational equity and an optimal cost of capital.

- (i) To meet the requirements of the Auckland City Council guarantee of Watercare's debt.

All requirements of the guarantee were met.

- (ii) To achieve a minimum funds flow from operations (FFO) to interest cover of 2.5 times before any price adjustments.

The funds from operations (FFO) to interest cover ratio for the year ending 30 June 2012 was 3.23, higher than the budget figure of 2.94 and the required target a minimum of 2.50. Cost savings achieved during the year lead to lower than budgeted operating expenses and more than offset the reduced revenues arising from lower than projected water volumes.

#### (b) To ensure that the regime for the pricing of water and wastewater services is enduring, transparent and reliable.

- (i) Annual (2011/12) average increase in total price of water services per property consistent with the current capital programme.

A legacy of disparate volumetric and fixed water tariffs from the former councils in the Auckland region was replaced with a uniform water tariff of \$1.30 (including GST) per cubic metre with effect from 1 July 2011, representing a decrease of 15% in budgeted water revenue. The uniform tariff was set to deliver water revenue consistent with the 2011/12 Funding Plan, which in turn was based on the current capital programme.

- (ii) Annual (2011/12) average increase in total price of wastewater services per property consistent with the current capital programme.

All retail wastewater tariffs were increased uniformly by 4.5% with effect from 1 July 2011 in order to deliver wastewater revenue consistent with the 2011/12 Funding Plan, which in turn was based on the current capital programme.

#### (c) To ensure efficiency in capital expenditure is maintained.

- (i) To report capital expenditure relative to budget for water and wastewater.

Watercare's target is that capital expenditure should be within 20% of the approved financial budget. For 2011/12 the actual capital expenditure was 96.5%, which was within 3.5% of budget.

<sup>2</sup> The next grading assessment is due in the last calendar quarter of 2012.

## 2012 STATEMENT OF SERVICE PERFORMANCE (continued)

(NON-FINANCIAL PERFORMANCE MEASURES)

### CUSTOMER SERVICES PERFORMANCE

#### (a) To maintain delivery of cost-effective services.

- (i) To maintain the average household bill at less than 1.5% of the average household income.

The average monthly household water and wastewater bill from Watercare was \$52.30 for the period 1 July 2011 to 30 Jun 2012. Based on Statistics NZ average monthly household income in Auckland of \$7,219, the bill represents 0.72% of the average household income.

#### (b) To maintain delivery of high quality water and wastewater services.

- (i) 80% of customers surveyed satisfied with overall water and wastewater services.

Of the customers who contacted Watercare to report faults and were surveyed by independent researchers, 82.2% were satisfied, this being an overall score of at least 7 out of a possible 9.

- (ii) To achieve less than five water quality complaints per 1,000 connections.

Watercare monitors the number and type of water quality complaints received from customers. The result of 4.1 complaints per 1000 connections covering taste, odour and appearance per 1,000 connections was lower than the target of five per year.

#### (c) To maintain good customer relationships.

- (i) To ensure 95% of all complaints and enquiries are "closed" within 10 working days.

The target of 'closed' complaints and enquiries measures the time taken for an issue to be resolved and feedback given to the customer. A 10-day target is considered industry best practice. Performance was 99.7% for the 2011/12 period. Complaints performed at 96.4% and enquiries at 99.8%. Complaints (1,355) made up 5.1% of the total enquiries (26,762).

- (ii) To achieve an average call centre operator connect time of <20 seconds.

Grade of service is an industry best-practice performance measure, aimed at ensuring calls are answered within 20 seconds. During the 2011/12 year, the grade of service target was met. Overall performance was 81.8%. First Contact (after hour) calls were not included in the grade of service SCI. First Contact performance was 81.6%.

#### (d) To maintain service capacity.

- (i) To maintain a water interruption frequency of <10 per 1,000 connections<sup>3</sup>.

Watercare monitors the number of times the water supply is disrupted to its customers as a measure of reliability of service. The target is set at achieving fewer than 10 interruptions per 1,000 connections for the year. The result for 2011/12 was 5.8.

- (ii) To maintain the frequency of sewer breaks and chokes (unplanned interruptions) at <10 interruptions per 1,000 connections.

The number of unplanned wastewater network interruptions as a result of breaks and chokes is a measure of the integrity of the system. The result for 2011/12 was 6.4.

#### (e) To restore service capacity.

- (i) To ensure that at least 90% of unplanned water shutdowns are restored within five hours<sup>4</sup>.

Watercare has a target of equal to or greater than 90% of unplanned water shutdowns restored within 5 hours. The result for 2011/12 was 98%.

- (ii) To ensure that at least 98% of wastewater blockages are responded to within one to two hours.

The target required Watercare to respond to all urgent wastewater blockages within the standard agreed with contractors, 98% of the time. The result was 99% for the 2011/12 year. Response times within contractual agreements with maintenance service providers are dependent upon location.

<sup>3</sup> Rather than estimating the number of properties affected by interruptions Watercare uses the number of interruptions per 1,000 connections. This measure is consistent with that used in the 2007/08 Auckland Water Industry Performance Report.

<sup>4</sup> This measure is stated as planned in the Watercare 2011-2014 SCI; the measure should have been recorded as unplanned.

### G3 CROSS-REFERENCE TABLE

**KEY:**

- Fully reported
- ◐ Partially reported
- Not reported

Watercare’s Annual Report 2012 has been prepared in accordance with the G3 framework of the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines. This framework exists to assist organisations to report their economic, environmental and social performance in a consistent and comparable manner. The following pages show how Watercare reports its performance against the G3 indicators. Against each indicator, Watercare has fully reported, partially reported or not reported. The key (left) explains the symbols used. The GRI disclosures for strategy and analysis, organisational profile, report parameters in governance and management approach (parts I and II) are excluded from the G3 cross-reference table but are covered in pages 1 to 62 of this report.

The GRI aims, objectives and guidelines can be found on their website [www.globalreporting.org](http://www.globalreporting.org).

ECONOMIC INDICATORS			
ASPECT: ECONOMIC PERFORMANCE		REFERENCE	RULER
EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	● Page 63-116	
EC2	Financial implications and other risks and opportunities for the organisation’s activities due to climate change.	● Figure 61	
EC3	Coverage of the organisation’s defined benefit plan obligations.	● Figure 24	3E
EC4	Significant financial assistance received from government.	○ Self funded	
ASPECT: MARKET PRESENCE		REFERENCE	RULER
EC5	Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation.	● Figure 24	3E
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	● Figure 55; 56	
EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation.	○ Merit based	
ASPECT: INDIRECT ECONOMIC IMPACTS		REFERENCE	RULER
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.	● Figure 54	
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts.	● Page 46	5A
ENVIRONMENTAL INDICATORS			
ASPECT: MATERIALS		REFERENCE	RULER
EN1	Materials used by weight or volume.	● Figure 52	
EN2	Percentage of materials used that are recycled input materials.	● Figure 52	
ASPECT: ENERGY		REFERENCE	RULER
EN3	Direct energy consumption by primary energy source.	◐ Figure 42	
EN4	Indirect energy consumption by primary source.	○ Being revised	
EN5	Energy saved due to conservation and efficiency improvements.	○ Being revised	
EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	● Figure 42	6B
EN7	Initiatives to reduce indirect energy consumption and reductions achieved.	◐	6B
ASPECT: WATER		REFERENCE	RULER
EN8	Total water withdrawal by source.	● Figure 1	
EN9	Water sources significantly affected by withdrawal of water.	● Pages 24-28; 54-56	
EN10	Percentage and total volume of water recycled and reused.	● Figure 1	
ASPECT: BIODIVERSITY		REFERENCE	RULER
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	● Figure 46	6F
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	● Figure 47	6E
EN13	Habitats protected or restored.	● Figure 46	6F
EN14	Strategies, current actions and future plans for managing impacts on biodiversity.	● Figure 46	6F
EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	○ Under review	

## G3 CROSS-REFERENCE TABLE (continued)

ENVIRONMENTAL INDICATORS (CONTINUED)		
ASPECT: EMISSIONS, EFFLUENTS AND WASTE	REFERENCE	RULER
EN16 Total direct and indirect greenhouse gas emissions by weight.	● Figure 37	6A
EN17 Other relevant indirect greenhouse gas emissions by weight.	● Figure 37	6A
EN18 Initiatives to reduce greenhouse gas emissions and reductions achieved.	● Figure 38	6A
EN19 Emissions of ozone-depleting substances by weight.	● Figure 37	
EN20 NO <sub>x</sub> , SO <sub>x</sub> , and other significant air emissions by type and weight.	● Figure 38	6A
EN21 Total water discharge by quality and destination.	● Figure 15	2C
EN22 Total weight of waste by type and disposal method.	● Figure 42-45	6C; 6D
EN23 Total number and volume of significant spills.	● Figure 17	2B
EN24 Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.	○ No international transport	
EN25 Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organisation's discharges of water and runoff.	● Pages 50-51; 44-47 Figure 15; 46; 47	
ASPECT: PRODUCTS AND SERVICES	REFERENCE	RULER
EN26 Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	● Pages 6-7	
EN27 Percentage of products sold and their packaging materials that are reclaimed by category.	○ Not applicable	
ASPECT: COMPLIANCE	REFERENCE	RULER
EN28 Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.	● Table 14	5C
ASPECT: TRANSPORT	REFERENCE	RULER
EN29 Significant environmental impacts of transporting products and other goods and materials used for the organisation's operations, and transporting members of the workforce.	○ Not significant	
ASPECT: OVERALL	REFERENCE	RULER
EN30 Total environmental protection expenditures and investments by type.	● Pages 63-116 Figure 7; 61	
LABOUR PRACTICES AND DECENT WORK INDICATORS		
ASPECT: EMPLOYMENT	REFERENCE	RULER
LA1 Total workforce by employment type, employment contract, and region.	● Figure 28	
LA2 Total number and rate of employee turnover by age group, gender and region.	● Figure 23; 25	3D; 3F
LA3 Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.	● Figure 28	
ASPECT: LABOUR/MANAGEMENT RELATIONS	REFERENCE	RULER
LA4 Percentage of employees covered by collective bargaining agreements.	● Figure 28	
LA5 Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements.	● Figure 28	
ASPECT: OCCUPATIONAL HEALTH AND SAFETY	REFERENCE	RULER
LA6 Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programmes.	● Figure 21	
LA7 Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region.	● Figure 20; 22	3A; 3B; 3C
LA8 Education, training, counselling, prevention, and risk-control programmes in place to assist workforce members, their families, or community members regarding serious diseases.	● Figure 21	3E
LA9 Health and safety topics covered in formal agreements with trade unions.	● Figure 21	

## G3 CROSS-REFERENCE TABLE (continued)

LABOUR PRACTICES AND DECENT WORK INDICATORS (CONTINUED)			
ASPECT: TRAINING AND EDUCATION		REFERENCE	RULER
LA10	Average hours of training per year per employee by employee category.	<input checked="" type="radio"/> Figure 24	3E
LA11	Programmes for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	<input checked="" type="radio"/> Figure 28	3C
LA12	Percentage of employees receiving regular performance and career development reviews.	<input checked="" type="radio"/> Figure 28	
ASPECT: DIVERSITY AND EQUAL OPPORTUNITY		REFERENCE	RULER
LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity.	<input checked="" type="radio"/> Figure 26	3G
LA14	Ratio of basic salary of men to women by employee category.	<input checked="" type="radio"/> Figure 26	
HUMAN RIGHTS INDICATORS			
ASPECT: INVESTMENT AND PROCUREMENT PRACTICES		REFERENCE	RULER
HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening.	<input type="radio"/> Not applicable	
HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken.	<input type="radio"/> Not applicable	
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.	<input type="radio"/> Not applicable	
ASPECT: NON-DISCRIMINATION		REFERENCE	RULER
HR4	Total number of incidents of discrimination and actions taken.	<input checked="" type="radio"/> None recorded	
ASPECT: FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING		REFERENCE	RULER
HR5	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights.	<input checked="" type="radio"/> Not material	
ASPECT: CHILD LABOUR		REFERENCE	RULER
HR6	Operations identified as having significant risk for incidents of child labour, and measures taken to contribute to the elimination of child labour.	<input type="radio"/> Not applicable	
ASPECT: FORCED AND COMPULSORY LABOUR		REFERENCE	RULER
HR7	Operations identified as having significant risk for incidents of forced or compulsory labour, and measures to contribute to the elimination of forced or compulsory labour.	<input type="radio"/> Not applicable	
ASPECT: SECURITY PRACTICES		REFERENCE	RULER
HR8	Percentage of security personnel trained in the organisation's policies or procedures concerning aspects of human rights that are relevant to operations.	<input type="radio"/> Not applicable	
ASPECT: INDIGENOUS RIGHTS		REFERENCE	RULER
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken.	<input type="radio"/> Not applicable	
SOCIETY INDICATORS			
ASPECT: COMMUNITY		REFERENCE	RULER
SO1	Nature, scope and effectiveness of any programmes and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting.	<input checked="" type="radio"/> Figure 33	5B
ASPECT: CORRUPTION		REFERENCE	RULER
SO2	Percentage and total number of business units analysed for risks related to corruption.	<input checked="" type="radio"/> Pages 17-20 Figure 58	
SO3	Percentage of employees trained in organisation's anti-corruption policies and procedures.	<input checked="" type="radio"/> Pages 17-20 Figure 59	
SO4	Actions taken in response to incidents of corruption.	<input checked="" type="radio"/> Pages 17-20 Figure 60	
ASPECT: PUBLIC POLICY		REFERENCE	RULER
SO5	Public policy positions and participation in public policy development and lobbying.	<input checked="" type="radio"/> Figure 34	
SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	<input checked="" type="radio"/> Figure 34	
ASPECT: ANTI-COMPETITIVE BEHAVIOUR		REFERENCE	RULER
SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes.	<input checked="" type="radio"/> Figure 14	5C
ASPECT: COMPLIANCE		REFERENCE	RULER
SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.	<input checked="" type="radio"/> Figure 14	5C

### G3 CROSS-REFERENCE TABLE (continued)

PRODUCT RESPONSIBILITY PERFORMANCE INDICATORS			
ASPECT: CUSTOMER HEALTH AND SAFETY		REFERENCE	RULER
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.	● Fundamental to organisation	
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes.	● Figure 14	1A-1C
ASPECT: PRODUCT AND SERVICE LABELLING		REFERENCE	RULER
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	● Figure 59	1A-1C
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labelling, by type of outcomes.	● Figure 14	1A-1D; 6I
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	● Figure 26-31	4A-4C
ASPECT: MARKETING COMMUNICATIONS		REFERENCE	RULER
PR6	Programmes for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.	● Page 47	5C
PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes.	● None reported	
ASPECT: CUSTOMER PRIVACY		REFERENCE	RULER
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.	● Figure 14	
ASPECT: COMPLIANCE		REFERENCE	RULER
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.	● Figure 14	

### Report Application Levels

Under the G3 framework, annual reports are graded at three different levels (C, B and A) according to the extent to which the framework has been applied. Watercare’s report has been self-declared and third-party checked.

		C	C+	B	B+	A	A+
MANDATORY	Self-declared						✓
OPTIONAL	Third-party checked						✓
	GRI checked						

## INDEX

Adopt A Stream	7, 14, 46, 51	Procurement	6, 13, 60
Asset management	18-19, 46, 54-57	Pukekohe water supply improvements	21, 28
Audit and Risk Committee	10, 19-20	Puketutu Island	6, 14, 38-39, 50-52
Central Interceptor	8, 21	Rain Forest Express	7, 46, 63
Customer satisfaction	40-43	Safe and reliable water	24-29
Drinking Water Standards for New Zealand	26	SAP Enterprise Asset Management Solution	6, 56
Emissions	6, 49-50	Sound Financial Management	58-61
Employment equity and diversity	37	Species preservation	50-51
Environmental Advisory Group (EAG)	20, 22	Staff training, staff turnover	37
Graduate Engineering Programme	7, 37	Stakeholder relations	44-47
Governance	17-20	Statement of Intent (SOI)	19
Hunua No. 4 Watermain	7-8, 13-14, 16, 23	Statement of Service Performance	113-115
Health, safety and well-being	34-37	Southwestern Interceptor	11-12, 33
Healthy waterways	30-33	Sustainability	6-7, 14, 48-53
Helensville Water Treatment Plant	47	Tangata Whenua	18, 23, 46
Kawakawa Bay wastewater treatment scheme	53	Trade waste	2, 22, 32, 51
Local boards	3, 21	Trees for Survival	6, 51
Local Government Acts	17	Waikato Water Treatment Plant	54-55
Mangere Wastewater Treatment Plant	38-39, 57	Watercare Coastal Walkway	6, 38
Midges	7, 51	Watercare Harbour Clean-Up Trust	6, 14, 29, 46, 49, 51
Networks map	3	Water quality	26-28, 38-39, 46, 51, 53
Odour	7, 27, 51, 53, 57, 61	Water Utility Consumer Assistance Trust	14, 29
Overflows	7, 8, 22, 25, 30, 32	Zero Waste programme and recycling	14, 49-50

## GLOSSARY

<b>Adopt A Stream</b>	Watercare's free, student-centred science programme.
<b>Asset Management Plan (AMP)</b>	A document that defines Watercare's best engineering judgement of the revenue and capital investment required to maintain the integrity of its asset base over a 20-year period.
<b>Biogas</b>	A by-product of the wastewater treatment process that is comprised of approximately 65 per cent methane.
<b>Biosolids</b>	A treated solid by-product of the wastewater treatment process.
<b>ERP</b>	Enterprise resource planning (ERP) is a company-wide information system which consolidates information from various functions/departments. See SAP below.
<b>G3</b>	Version three of the Global Reporting initiative guidelines for sustainability reporting.
<b>Greenhouse gases</b>	Gases that trap heat in the atmosphere. Examples of greenhouse gases are methane, perfluorocarbons and nitrous oxide.
<b>Hansen</b>	A technology and information platform on which Watercare runs its customer business.
<b>Iwi</b>	Tribal group/s (origin: Maori).
<b>Mana whenua</b>	Territorial rights; tribal connection to a geographic region; associated with possession and occupation (origin: Maori).
<b>Regional Demand Management Plan</b>	A plan that outlines how Watercare intends to achieve a 15% reduction in gross per capita water consumption by 2025.
<b>Reliability-Centred Maintenance (RCM)</b>	A framework which identifies the optimum time to maintain or replace assets based on operational performance, cost, health and safety and the environment.
<b>SAP</b>	Systems, Applications and Products (SAP) is a company which offers enterprise resource planning solutions to companies to integrate information from various functions of that company under one system. See ERP above.
<b>Statement of Intent (SOI)</b>	The SOI represents Watercare's public and legislative expression of accountability to its shareholder and establishes the agreement between the board and its shareholder.
<b>Statement of Service Performance (SSP)</b>	The SSP is a retrospective record of the performance of the company against the measures in its SOI.
<b>Tāmaki Makaurau</b>	The Auckland isthmus region (origin: Maori).
<b>Tangata whenua</b>	Indigenous people of the land (origin: Maori).
<b>Trade Waste</b>	Any discharge into a sewer in the course of an industry or trade process.
<b>Unaccounted-for water loss</b>	Water that is lost before it reaches the customer. Losses can be real losses (through leaks) or apparent losses (for example, through theft or metering inaccuracies).
<b>Wastewater</b>	Liquid or solid matter discharged into the sewer network from domestic, commercial or industrial locations.
<b>Zero Waste</b>	Watercare's project to minimise or eliminate wastewater throughout the company.



## FIGURE 1

### Water and wastewater facts

Under the G3 reporting framework, Watercare is required to provide additional information on G3 environment indicators EN8, EN9, EN10 relating to water.

Water		
Water supply dams	12	
River sources	3	
Groundwater sources	14	
Supply dam catchment area (ha)	16,056	
Groundwater catchment area (ha)	2,395	
Length of raw water mains (km)	92	
'A' grade water treatment plants	11 <sup>1</sup>	
Other water treatment plants	10	
Length of treated water mains (km)	8,829	
Service reservoirs	84	
Pump stations	90	
Annual volume produced (Ex Plant m <sup>3</sup> )	140,706,179	
Annual volume sold (m <sup>3</sup> )	134,229,925 <sup>2</sup>	
Wastewater		
Length of sewers km	7,757	
Pump stations	539	
Trade waste customers	1,654	
Treatment Plants Metropolitan	4	
Treatment Plants Rural	15 <sup>3</sup>	
Volume treated annually m <sup>3</sup>	163,988,716	
Biosolids produced (wet) annually (tonnes)	119,747	
Effluent re-used annually (m <sup>3</sup> )	21,272,529 <sup>4</sup>	
Volume abstracted by source m <sup>3</sup>	2011/12 total	%
Waitakere Dam	2,447,989	1.7
Upper Huia Dam	6,049,346	4.2
Upper Nihotupu Dam	6,269,675	4.4
Lower Huia Dam	16,501,033	11.5
Lower Nihotupu Dam	882,057	0.6
Cosseys Dam	13,825,051	9.7
Upper Mangatawhiri Dam	24,341,609	17.0
Wairoa Dam	10,589,963	7.4
Mangatangi Dam	41,803,834	29.2
Waikato River	11,976,425	8.4
Onehunga Aquifer	3,349,933	2.3
Rural North	1,410,605	1.0
Rural South	3,492,813	2.4
<b>TOTAL</b>	<b>142,940,334</b>	<b>100.0</b> <sup>5</sup>
Dam storage	30 Jun 12	30 Jun 11
Total storage volume (m <sup>3</sup> )	80,927,569	95,551,956
% full	84.78%	99.99%

#### Notes:

1. Papakura is currently not in service.
2. Figure lower than last year. Includes retail and wholesale volume from metropolitan and rural plants.
3. Kawakawa Bay included, transferred to Watercare 30/6/11.
4. Re-use figures for Mangere only. Not measured for Rosedale or other plants.
5. Meters are accurate to +/- 2%.

**FIGURE 2**  
Financial overview

	Annual turnover	Asset value
	\$000	\$000
Water	149,891	3,313,687
Wastewater	292,059	4,585,199
<b>TOTAL</b>	<b>441,950</b>	<b>7,898,886</b>

**FIGURE 3**  
Taxation

	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
Income tax paid		3,350	-	-	-	-	-	-
GST collected	19,448	20,857	21,119	20,913	23,207	24,727	53,751	65,958
Accident compensation levies	316	200	230	287	369	380	474	548
Local and Regional Council rates	1,441	1,732	2,809	2,107	2,106	2,417	6,494	1,208
	<b>21,205</b>	<b>26,139</b>	<b>24,158</b>	<b>23,307</b>	<b>25,682</b>	<b>27,524</b>	<b>60,719</b>	<b>67,714</b>

**FIGURE 4**  
Population and water sales

30 Jun	Connected population	Bulk supply volume (m <sup>3</sup> )	Litres per person per day
2002	1,080,000	119,720,000	304
2003	1,145,000	124,514,000	298
2004	1,174,500	127,089,000	296
2005	1,193,500	131,052,000	301
2006	1,213,000	134,699,000	304
2007	1,232,000	136,220,334	303
2008	1,258,000	136,559,180	297
2009	1,298,144	131,111,976	277
2010	1,318,367	134,637,738	280
2011	1,335,510	135,119,845	277
2012	1,354,401	134,229,925	272

**FIGURE 6**  
Organisational structure



**Number of employees and contract staff**

Staffing Levels	June 2012
Employees	665.5
Contract Staff (as FTE)	2.85
<b>Total</b>	<b>668.35</b>
Budgeted FTE (11/12)	690.5

**FIGURE 7**  
Sustainability accounting analysis

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	\$million						
Total expenditure including that necessary to meet the statutory and legal obligations	142.1	157.7	164.0	168.9	187.4	359.2	431.9
<b>Additional expenditure to meet the standards expected of Watercare</b>							
1. Wastewater treatment plant midge control	0.3	0.6	0.6	0.5	0.5	0.6	0.4
2. Odour control	0.7	0.1	0.1	0.1	0.1	0.2	0.5
3. Wastewater overflow clean-up	0.1	0.1	0.1	0.1	0.1	0.2	0.7
4. Wastewater pump station 'failsafe' maintenance	0.9	0.7	0.9	0.9	0.9	1.1	3.5
<b>Subtotal</b>	<b>2.0</b>	<b>1.5</b>	<b>1.7</b>	<b>1.6</b>	<b>1.6</b>	<b>2.1</b>	<b>5.1</b>
Costs forming the basis of water and wastewater charges – per audited financial statements	144.1	159.2	165.7	170.5	189.0	361.3	437.0
<b>Annualised cost of the additional activities that could improve the environmental standards</b>							
5. CO <sub>2</sub> emission reduction	0.7	0.7	0.7	0.3	0.4	0.5	0.1
6. Compensation flows below water supply dams	17.7	17.9	18.2	19.2	19.5	21.0	22.9
7. Odour emission elimination	3.2	3.3	3.4	3.9	4.0	5.6	6.0
8. Wastewater overflow minimisation	58.4	58.6	62.4	85.1	88.2	165.0	175.0
9. Visual enhancement	3.7	3.9	4.6	5.0	5.2	9.7	9.9
10. Biosolids re-use	15.4	15.4	16.3	16.8	16.9	19.0	21.5
11. Partial (30ML/d) wastewater reuse for industry, forestry and agriculture	5.3	5.4	5.6	6.0	6.2	7.7	7.8
12. Partial (100ML/d) wastewater recharge to catchments used for water extraction	63.4	63.5	65.9	77.2	78.5	78.0	83.8
13. Partial (170ML/d) wastewater reuse to potable water	90.1	90.2	93.0	90.4	91.6	133.0	134.4
<b>Subtotal</b>	<b>257.9</b>	<b>258.9</b>	<b>270.1</b>	<b>303.9</b>	<b>310.5</b>	<b>439.5</b>	<b>461.4</b>
Cost base required to deliver sustainable performance	402.0	418.1	435.8	474.4	499.5	800.8	898.7

## Notes:

- 1. Wastewater treatment plant midge control**  
The treated effluent at Mangere and Rosedale is potentially a fertile breeding ground for midges, a considerable social nuisance. In 2011/12 spraying and decanting were used to control the midge habitat, at a cost of \$400,000.
- 2. Odour control**  
In the past year, the operating and maintenance costs of facilities to minimise odours in the reticulation network and at the wastewater treatment plants were approximately \$500,000.
- 3. Wastewater overflow clean-up**  
The wastewater reticulation network overflows in heavy storms or as the result of system failure or third party damage. Watercare employees clean and disinfect overflow sites which costs approximately \$700,000 per year.
- 4. Wastewater pump station 'failsafe' maintenance**  
Watercare spends a considerable amount of its maintenance budget on planned maintenance, which is necessary to minimise the occurrence of pump station failures and consequential environmental damage. This safeguard cost approximately \$3.5 million.
- 5. CO<sub>2</sub> emissions**  
Watercare's total greenhouse gas emissions were 16771 tonnes for the year. If this is 'charged' at \$8 per tonne it equates to \$134,168.
- 6. Compensation flows from water supply dams**  
The water supply dams cut off most of the flows from the streams below the dams. To promote the stream ecosystems, Watercare could release larger compensation flows. This would reduce the yield of the water supply system and require the construction of a new water source at \$180 million and operation and maintenance costs of \$11 million per year. The total annual cost, including operation and maintenance costs and interest on capital but excluding depreciation, would be \$22.9 million.
- 7. Odour emission elimination**  
Reducing the system's odours to minimal levels at all site boundaries, primarily by constructing new biofilters, would involve \$80 million in capital cost and \$750,000 per year in operating and maintenance costs. The total annual cost, including operation and maintenance costs and interest on capital but excluding depreciation, would be \$6.0 million.
- 8. Wastewater overflow minimisation**  
Watercare has estimated that eliminating all wet weather overflows except in extreme storms could be achieved through installing storage tunnels and tanks in the network. The estimated capital cost of this is \$2,500 million (which includes a further wastewater treatment plant upgrade) with a \$10 million annual operating and maintenance cost. The total annual cost, including operation and maintenance costs and interest on capital but excluding depreciation, would be \$175 million.
- 9. Visual enhancement**  
Watercare estimates that the cost of camouflaging, removing or replacing 'unattractive' assets would be approximately \$120 million and \$2 million a year in operating and maintenance costs. The total annual cost, including operation and maintenance costs and interest on capital but excluding depreciation, would be \$9.9 million.
- 10. Biosolids re-use**  
Watercare estimates that the cost of developing a long-term use for biosolids would be approximately \$250 million and \$5 million a year in operating and maintenance costs. The total annual cost, including operation and maintenance costs and interest on capital but excluding depreciation, would be \$21.5 million.
- 11. Partial wastewater reuse for industry, forestry and agriculture**  
Part (30ML/d) of the treated wastewater, after further treatment, could be distributed to industry for reuse. This is estimated to cost \$80 million and \$2.5 million a year in operation and maintenance costs. The annual cost, including operation and maintenance costs and interest on capital but excluding depreciation, would be \$7.8 million.
- 12. Partial wastewater recharge to catchments used for water extraction**  
Part (100ML/d) of the treated wastewater could be further treated and piped to recharge catchments which have had the water extracted from them. This is estimated to cost \$74.0 million and \$35 million a year in operation and maintenance costs. The annual cost, including operation and maintenance costs and interest on capital but excluding depreciation, would be \$83.8 million.
- 13. Partial wastewater reuse direct to potable water**  
Part (up to 170ML/d) of the treated wastewater could be further treated and injected into the potable water supply. This is estimated to cost \$90 million and \$75 million a year to operate. The annual cost including operation and maintenance costs and interest on capital but excluding depreciation, would be \$134 million.

**Sustainability accounting**  
Sustainability accounting puts a value on a company's environmental and social initiatives. The above figure shows Watercare's operational expenditure in 2011/12 was \$437.3 million. That sum includes the cost of meeting the company's statutory and regulatory obligations for its water and wastewater operations. In addition to this, Watercare spent \$5.1 million on activities to reduce its environmental impact. A further \$461.4 million would be required to sustainably mitigate the effects of the company's operations on the environment. Sustainability accounting allows organisations to quantify the trade-offs between price and services, and social and environmental impacts. For example, the capital cost for making any significant investment in improving the wastewater system would initially be met by increasing Watercare's borrowings, and prices would need to rise to meet those debt servicing costs. However, customers may not be willing to accept significant price rises. Instead, they may prefer to accept the current number of overflows in return for relatively lower prices.

FIGURE 8

## Grading of water treatment plants and networks

WTP	Percent of 2011–12 annual production (%)	WTP Grade	Zone	Zone Grade
Metropolitan WTPs	88.4	A	Metropolitan zones	a
Muriwai	0.1	A	Muriwai	a
Warkworth	0.9	A	Warkworth	b
Snells/Algies	0.7	A	Snells/Algies	a
Helensville	0.8	A	Helensville	b
Wellsford	0.5	A	Wellsford/Te Hana	b
Bombay WTP	0.1	U	Bombay	u
Buckland WTPs	0.2	U	Buckland	u
Clarks Beach WTP	0.2	U	Clarks and Waiau	u
Waiau Beach WTP	0.1	U	Clarks and Waiau	u
Douglas WTP	0.0	U	Douglas Road	u
Glenbrook Beach	0.0	U	Glenbrook Beach	u
Patumahoe WTP	0.1	U	Patumahoe	u
Waiuku WTPs	2.1	U	Waiuku	u
Pukekohe WTP	5.7	U	Anzac/Hilltop Kitchener	u
<b>TOTAL</b>	<b>100.0</b>			

## Note:

'U' and 'u' indicates ungraded plants and networks.

**FIGURE 9**  
Drinking water quality

Determinands	Standard and allowable exceedences	Year	Treatment plants								
			Ardmore	Huia	Waitakere	Onehunga	Huia Village	Waikato	Helensville Warkworth Wellsford	Pukekohe Muriwai Bombay Glenbrook	Waiuku Clarks Beach Waiau Agnes Patumahoe Buckland
Turbidity is a measure of filtration effectiveness and a surrogate measure for the presence of protozoa such as <i>Cryptosporidium</i>	5% > 0.5 NTU	2008/09	0.00%	0.04%	0.02%	0.00%	0.00%	0			
	none > 1 NTU		0	0	0	0	0				
	5% > 0.5 NTU	2009/10	0.00%	0.00%	0.01%	0.00%	0.00%	0	Waikato and Huia Village compliance are based on membrane integrity not turbidity		
	none > 1 NTU	2010/11	0.00%	0.00%	0.00%	0.00%	0.00%	0			
	5% > 0.5 NTU	2011/12	0.00%	0.00%	0.00%	0.00%	0.00%	0			These WTPs are supplied from secure or interim secure groundwater bores and therefore meet the DWSNZ.
Protozoa removal based on log credit requirements of the WTP	Required log credits	2011/12	3	3	3	3	3	3	3	3	
	% Compliance periods*		100%	100%	100%	100%	100%	100%	100%	100%	
<i>E. coli</i> is an indicator of potential waterborne disease carrying organisms	10 samples > nil/100ml	2008/09	0	0	1	0	0	0	0	0	
	2 samples > nil/100ml		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	10 samples > nil/100ml	2009/10	0	0	0	0	0	0	0	0	
	2 samples > nil/100ml		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	10 samples > nil/100ml	2010/11	0	0	0	0	0	0	0	0	
Waterborne disease carrying organisms	2 samples > nil/100ml	2011/12	0	0	0	0	0	0	0	0	
			n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Fluoride is added to treated water at the request of Watercare's customers	<5% samples > nil/100ml	2011/12	0	0	0	0	0	0	0	0	0 (except for Muriwai where compliance is based on contact time)
	10 samples > 1.5 mg/l	2008/09	0	0	0	0	0	0	0	0	
	10 samples > 1.5 mg/l	2009/10	0	0	0	0	0	0	0	0	
	10 samples > 1.5 mg/l	2010/11	0	0	0	n/a	n/a	n/a	0	0	
	<5% samples > 1.5 mg/l	2011/12	0	0	0	0	0	0	0	0	0 (only Pukekohe doses fluoride)
<i>E. coli</i> is an indicator of potential waterborne disease carrying organisms	100 samples > nil/100ml	2008/09	0	0	0	0	0	0	0	0	Testing incorporated within the Ardmore, Huia, Waitakere bulk reticulation zone
	100 samples > nil/100ml	2009/10	0	0	0	0	0	0	0	0	
	100 samples > nil/100ml	2010/11	0	0	0	0	0	0	0	0	
	<5% samples > 1/100ml**	2011/12	0	0	0	0	0	0	0	0	

**Note:**

\* Log credit compliance monitoring period is one month.

\*\* Data in this period refers to transmission and network data. Previous years refer only to transmission data.

Dark squares are where information was not available at the time of creating the report.

**FIGURE 10**  
Typical analysis of Auckland’s drinking water

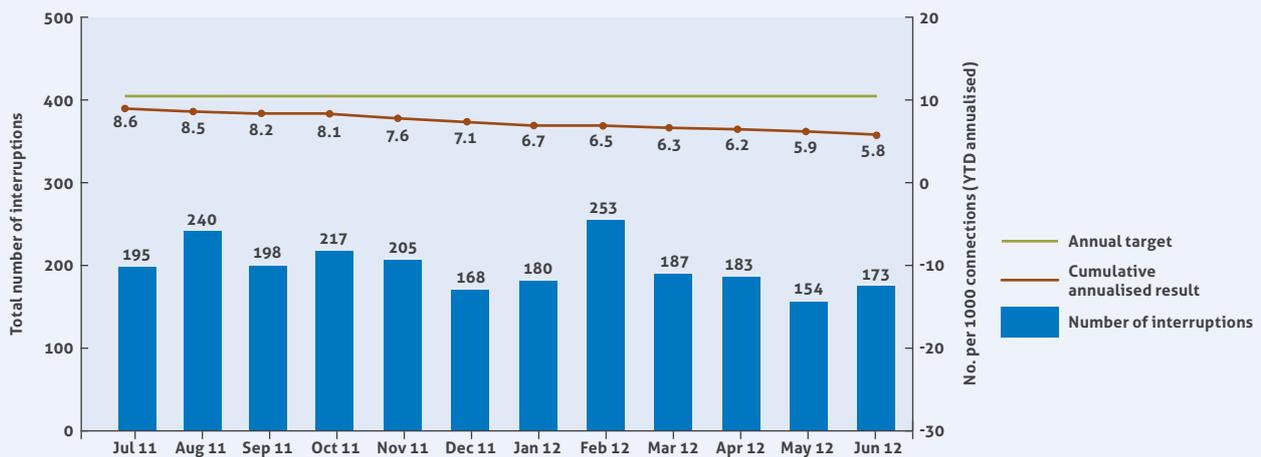
Determinands	Ardmore		Huia		Waitakere		Onehunga		Waikato	
	Raw	Treated	Raw	Treated	Raw	Treated	Raw	Treated	Raw	Treated
Turbidity (NTU)	2.89	0.18	6.96	0.22	3.53	0.24	0.26	0.21	13.03	0.57
E. coli (Number per 100ml)	4	N/D	24	N/D	10	N/D	324	N/D	92	N/D
Aluminium (mg/L)	0.28	0.03	0.85	0.05	0.65	0.03	0.01	0.03	0.66	0.11
Iron (mg/L)	0.33	0.01	0.79	0.09	0.78	0.02	0.01	0.00	0.98	0.03
Manganese (mg/L)	0.03	N/D	0.03	ND	0.03	ND	N/D	N/D	0.06	N/D
pH Value	7.4	8.0	7.6	7.9	7.1	7.8	7.3	7.9	7.6	8.0
Total hardness (mg/L CaCO <sub>3</sub> )	12.4	23.3	21.8	34.3	16.1	34.3	54.2	53.2	30.7	55.6

**Note:**

This covers the 12 month period for water supplied from the metropolitan water treatment plants from 1 July 2011 to 30 June 2012.

N/D: Non Detectable

**FIGURE 11**  
Water interruption frequency



**Note:**

The annual target is to maintain water supply interruption frequency to less than 10 per 1,000 connections.

FIGURE 12

Unplanned water shutdowns restored within 5 hours



Note:

The annual target is to ensure that 90% of unplanned water shutdowns are restored within five hours.

FIGURE 13

Water quality complaints

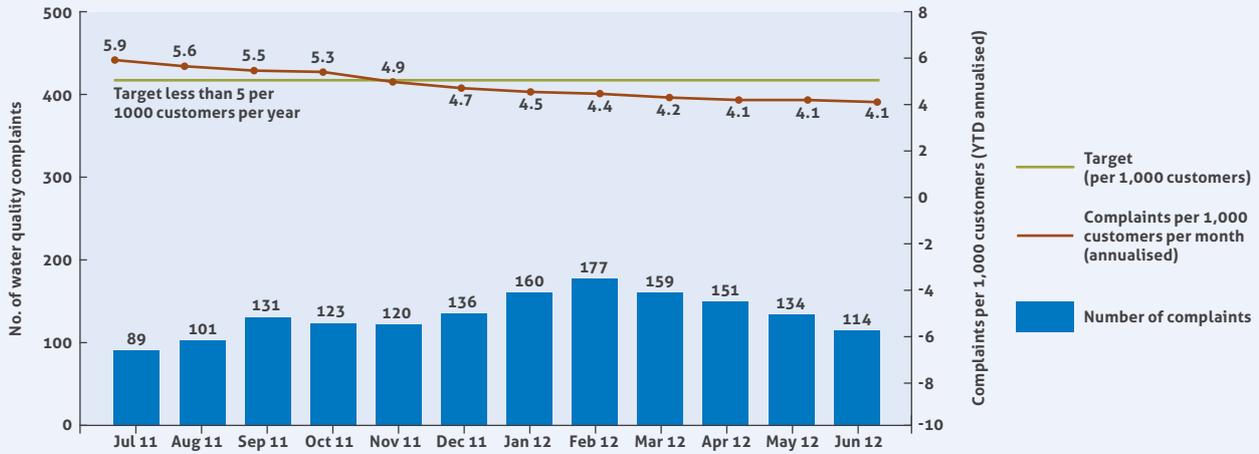


FIGURE 14

## Resource consent compliance

Location	Nature of non-compliance	Month	Potential or actual impact	Mitigation action and comments
Water				
Ardmore Water Treatment Plant	Exceedance of aluminium limit in the stormwater discharge.	Aug & Sep	No adverse effects anticipated in the receiving environment.	Exceedance caused by dredging of detention ponds to increase capacity on ponds.
Clarks Beach Water Supply	Exceedance of daily extraction limit of bore.	Aug, Sep, Nov, Dec, Jan & May	The over abstraction was on isolated days following busy weekends or caused by watermain bursts. No ongoing adverse impact is expected.	A new watermain will be laid to supply Clarks Beach from the Waikato Watermain and the bore will be decommissioned. The watermain is expected to be completed in 2014.
Huia Water Treatment Plant	Exceedance of aluminium limit in the stormwater discharge.	Oct, Dec, Jan, Mar, May & Jun	Discharge limit exceeded due to heavy rain on sludge storage area. No effects observed in stream.	Sludge processing plant due to be upgraded in 2016.
Mangakura Dam	Exceeded authorised take volume.	Ongoing	No adverse effects anticipated in the receiving environment.	Exceedance necessary to meet water demands of Helensville. New application lodged which would increase the authorised limit of this old water right permit. Consent application now on hold (with approval from Auckland Council) whilst Watercare evaluates future requirements.
Onehunga Water Treatment Plant	Not maintaining environmental mitigation flows to downstream wetland.	Dec, Jan & Feb	No adverse effects anticipated in the receiving environment.	Review of plant operation underway to ensure environmental flows are maintained.
Waikato Water Treatment Plant	No flow measurement equipment in place to ensure compliance with maximum discharge rate back to the river.	Ongoing	No adverse effects anticipated in the receiving environment.	Consent variation is to be lodged with Waikato Regional Council to change the wording of the relevant consent condition.
Waitakere Water Treatment Plant	Exceedance of aluminium limit in the stormwater discharge.	Jul, Aug, Sep & Mar	Discharge limit exceeded due to heavy rain on sludge storage areas. No effects observed in stream.	Options being reviewed by the Planning Department to ensure compliance with consent requirements.

**Note:**

No sanctions or fines related to accounting fraud, workplace discrimination or corruption have been brought against Watercare.

No administrative or judicial sanctions were levied against Watercare for failure to comply with laws or regulations concerning the provision and use of products and services.

No legal actions for anti-competitive behaviour, anti-trust, or monopoly practices have been brought against Watercare.

There have been no complaints regarding breaches of customer privacy or losses of customer data.

FIGURE 14 (CONTINUED)

## Resource consent compliance (continued)

Location	Nature of non-compliance	Month	Potential or actual impact	Mitigation action and comments
<b>Wastewater</b>				
Clarks Beach Wastewater Treatment Plant	Exceedance of various discharge quality limits and peak flow limit.	Ongoing	No adverse effects anticipated in the receiving environment.	Watercare took over operation of this plant in Nov 2010. A new consent is required to be lodged in late 2012 and the plant will be upgraded once this is granted.
Helensville Wastewater Treatment Plant	Exceedance of various discharge quality limits and peak flow limit.	All year	No adverse effects anticipated in the receiving environment. Memorandum of Understanding agreed with Auckland Council regarding the discharge.	New consent was granted in June 2012 that includes achievable performance standards that will allow the plant to become compliant.
Kingsseat Wastewater Treatment Plant	Minor exceedance of various quality limits.	Jul, Sep, Oct, Nov, Dec, Feb, Mar, Apr, May & Jun	No adverse effects anticipated in the receiving environment.	Watercare took over operation of this plant in Nov 2010. This plant will be upgraded once a new consent, which is currently being processed by Auckland Council, is granted.
Mangere Wastewater Treatment Plant	Failed monthly 99% average UV dose	Oct	No adverse effects anticipated in the receiving environment as 98.95% dose achieved.	Poor UV transmittance due to prolonged wet weather flow.
Mangere Wastewater Treatment Plant	Exceedance of monthly total nitrogen discharge limit.	Jan & Feb	No adverse effects anticipated in the receiving environment.	Result of low incoming flows during holiday period. Options to enhance nitrogen removal over summer being investigated.
Mangere Wastewater Treatment Plant	Exceedance of ammonia discharge limit on a single day.	Sep	No adverse effects anticipated in the receiving environment.	Blower maintenance reviewed to minimise risk of reoccurrence.
Matakana Wastewater Treatment Plant	Exceedance of various discharge quality limits and peak flow limit.	Ongoing	Some minor local effects are anticipated in the Matakana River.	Plant to be decommissioned in late 2012 as Watercare has installed a pipeline to pump the wastewater to the Omaha Wastewater Treatment Plant.
Owhanake Wastewater Treatment Plant	Exceedance of various discharge quality limits and peak flow limit.	Jan, Feb, Mar, Apr & May	No adverse effects anticipated in the receiving environment.	Watercare is considering methods to modify the operation of plant to prevent the exceedance of the conditions.
Pukekohe Wastewater Treatment Plant	Exceedance of various discharge quality limits and peak flow limit.	Jul, Aug, Nov, Dec & Jun	No adverse effects anticipated in the receiving environment.	Watercare has changed how this plant has run to try and reduce non-compliances.
Waiuku Wastewater Treatment Plant	Exceedance of various discharge quality limits and peak flow limit.	Ongoing	No adverse effects anticipated in the receiving environment.	Watercare took over operation of this plant in Nov 2010. Auckland Council is currently processing a consent application for this plant and the plant will be upgraded once this has been granted.
Wellsford Wastewater Treatment Plant	Exceedance of various discharge quality limits and peak flow limit.	Ongoing	No adverse effects anticipated in the receiving environment.	Watercare took over operation of this plant in Nov 2010. Auckland Council is currently processing a consent application for this plant and the plant will be upgraded once this has been granted.

**Note:**

Technical and minor non-compliances, such as a report being submitted late, are not included in the list above.

Under the G3 reporting framework, Watercare is required to provide information on environment indicator EN28, society indicators SO7 and SO8 and product responsibility indicators PR2, PR4, PR7, PR8 and PR9, relating to compliance, anti-competitive behaviour, product and service labelling and customer privacy. Extra information has been added to this table from previous years to meet G3 reporting requirements.

FIGURE 15

## Wastewater treatment plant discharge 2011/2012

	Wastewater Treatment Plant	Discharge Volume m <sup>3</sup> /year	Discharge Volume Consent Compliance*	Other volume Discharged Non-Compliant **	Biosolids Quantity tonnes	Screenings Quantity tonnes	Grit Quantity tonnes
Metro	Mangere	117,204,866	Yes	8,861,903***	106,798	1,377	1,985
	Rosedale	28,985,822	Yes	0	14,784	247	190
	Army Bay	3,639,510	Yes	0	4,372		
	<b>Sub Total – Metro WWTPs</b>	<b>149,830,198</b>		<b>686,932</b>	<b>125,923</b>	<b>1,622</b>	<b>2,126</b>
Non-Metro	Pukekohe	2,467,653	Yes	511,659	0	20	24
	Warkworth	378,921	Yes	0	354	7.9	10
	Omaha	144,851	Yes	0	–	–	–
	Helensville	553,722	No	553,722	–	–	–
	Wellsford	275,778	No	275,778	–	–	–
	Snells/Algies	267,079	Yes	0	–	–	–
	Waiwera	84,018	Yes	0	–	–	–
	Huapai/Kumeu	27,183	No	27,183	–	–	–
	Matakana	39,009	No	39,009	–	–	–
	Denehurst Drive	5,641	No	5,641	–	–	–
	Beachlands	393,567	Yes	30,254	300	13.0	0
	Owhanake	7,804	Yes	3,425	0	–	–
	Clarks Beach	182,478	No	148,589	0	–	–
	Waiuku	812,035	No	812,035	0	–	–
	Kingseat	10,206	No	3,067	0	–	–
Bombay	1080	Yes	0	0	–	–	
<b>Sub Total – Non Metro WWTPs</b>	<b>5,651,023</b>		<b>2,410,361</b>	<b>622</b>	<b>44</b>	<b>34</b>	

**Note:**

\* Annual Average and Maximum volume.

\*\* Excludes minor or technical non-compliance.

\*\*\*Consent limits for Total Nitrogen (36 days), Ammonia (5 days) and UV dose (2 days) were not met for each during the year.

**FIGURE 16**

**Wastewater treatment plant performance – Mangere**

	Jul 2011	Aug 2011	Sep 2011	Oct 2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	Jun 2012	No 30083 Consent Limits	
<b>Plant load</b>														
<b>Monthly mean</b>														
BOD (g/m <sup>3</sup> )	2.9	2.4	3.3	3.6	2.0	2.6	1.9	1.9	2.8	1.6	2.0	2.5	<15	
NFR (g/m <sup>3</sup> )	5.0	5.2	5.3	10.3	5.2	8.8	5.7	8.3	9.1	8.7	6.1	6.3	<15	
Total petroleum hydrocarbons (g/m <sup>3</sup> )	0.39	0.43	0.32	0.39	0.31	0.30	0.30	0.30	0.30	0.31	0.30	0.30	<0.5	
<b>Monthly maximum</b>														
BOD (g/m <sup>3</sup> )	5.3	3.7	6.0	11.0	3.7	14.0	5.8	3.5	20.0	5.8	4.9	7.7	<50	
pH	7.5	7.6	8.3	7.8	7.7	7.7	7.6	7.6	7.7	7.7	7.5	7.5	<9	
<b>Monthly minimum</b>														
pH	6.8	7.0	7.0	7.0	7.1	6.7	6.4	6.5	7.0	7.1	7.1	7.1		
<b>95 percentile over three discrete months</b>														
BOD (g/m <sup>3</sup> )	N.A.	N.A.	5.0	N.A.	N.A.	5.7	N.A.	N.A.	5.1	N.A.	N.A.	3.8	<30	
NFR (g/m <sup>3</sup> )	N.A.	N.A.	10.9	N.A.	N.A.	17.8	N.A.	N.A.	14.0	N.A.	N.A.	12.0	<30	
<b>Nutrients</b>														
<b>Monthly mean</b>														
Reactive phosphorus (g/m <sup>3</sup> )	2.5	2.6	2.4	2.8	3.0	2.4	3.1	3.2	2.1	2.8	2.4	1.1	<9	
Total nitrogen (g/m <sup>3</sup> ) (Apr-Nov)	9.5	7.0	11.0	8.2	9.3	N.A.	N.A.	N.A.	N.A.	10.0	8.9	9.0	<35	
Nitrogen in ammoniacal form (g/m <sup>3</sup> ) (Apr-Nov)	2.4	0.6	3.5	0.8	0.6	N.A.	N.A.	N.A.	N.A.	1.2	0.6	0.9	<5	
Total nitrogen (g/m <sup>3</sup> ) (Dec-Mar)	N.A.	N.A.	N.A.	N.A.	N.A.	7.7	10.8	9.9	6.8	N.A.	N.A.	N.A.	<9.5	
Nitrogen in ammoniacal form (g/m <sup>3</sup> ) (Dec-Mar)	N.A.	N.A.	N.A.	N.A.	N.A.	0.9	1.7	0.8	0.7	N.A.	N.A.	N.A.	<3	
<b>Monthly maximum</b>														
Nitrogen in ammoniacal form (g/m <sup>3</sup> ) (Apr-Nov)	8.7	1.1	15.3	5.7	4.1	N.A.	N.A.	N.A.	N.A.	12.0	2.6	3.9	<15	
Nitrogen in ammoniacal form (g/m <sup>3</sup> ) (Dec-Mar)	N.A.	N.A.	N.A.	N.A.	N.A.	4.0	14.0	10.0	2.7	N.A.	N.A.	N.A.	<6	
<b>Disinfection</b>														
% of duration receiving 35 mWs/cm <sup>2</sup>	100%	100%	100%	98.95%	100%	99.79%	100%	100%	100%	100%	100%	100%	≥99%	
<b>Monthly mean (% saturation)</b>														
Dissolved oxygen % saturation	80%	104%	101%	123%	116%	95%	83%	109%	115%	115%	119%	108%	>80%	
<b>Breaches of resource consents</b>													<b>YTD</b>	
Breaches of consent conditions	1	0	1	1	0	0	3	2	0	0	0	0	8	
<b>Resolved WTP source incidents and complaints</b>													<b>YTD</b>	<b>Target</b>
Reportable odour incidents	0	0	0	0	0	0	0	0	0	0	2	0	2	0
Odour complaints	0	0	0	0	0	0	0	1	0	0	3	0	4	0
Insect complaints	0	2	0	0	0	0	0	0	0	0	0	0	2	0
Noise complaints	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other complaints (dust)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>6</b>	
<b>Volumes (M m<sup>3</sup>)</b>													<b>Consent limit</b>	
Total month	11,530	9,226	9,303	10,600	8,010	9,831	9,126	7,832	10,573	7,477	11,265	8,888		
Average daily	372	298	310	342	267	317	294	270	341	249	352	296		
Rolling 12 month average	344	330	323	329	331	335	332	331	332	326	321	310	390	
Peak day	592	474	520	617	389	753	461	417	678	371	624	376	1209	

FIGURE 16 (continued)

## Wastewater treatment plant performance – Beachlands

	Jul 2011	Aug 2011	Sep 2011	Oct 2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	Jun 2012	No 26875 Consent Limits	
<b>Plant load</b>														
<b>90 percentile on 10 consecutive samples tested to current month</b>														
BOD (g/m <sup>3</sup> )	2.5	2.5	3.6	3.6	2.0	2.0	2.5	1.6	7.1	2.1	1.1	1.1	<15	
NFR (g/m <sup>3</sup> )	5.9	5.9	6.0	4.0	3.9	4.7	8.4	10.0	11.1	10.6	7.1	7.9	<15	
<b>Nutrients (g/m<sup>3</sup>)</b>														
<b>95 percentile on 20 consecutive samples tested to current month</b>														
Nitrogen in ammoniacal form (g/m <sup>3</sup> ) Summer (Nov-Apr)	N.A.	N.A.	N.A.	N.A.	0.4	0.4	0.4	0.4	0.4	0.4	N.A.	N.A.	<4	
Nitrogen in ammoniacal form (g/m <sup>3</sup> ) Winter (May-Oct)	0.4	0.4	0.4	0.4	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.4	0.4	<5	
<b>90 percentile on 10 consecutive samples tested to current month</b>														
Nitrogen in nitrate form (g/m <sup>3</sup> )	10.4	9.7	11.6	13.7	14.2	11.7	14.2	12.1	12.1	9.2	11.9	11.9	<15	
Reactive phosphorus (g/m <sup>3</sup> )	0.5	0.1	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.4	1.4	1.4	<5	
<b>Pathogens</b>														
<b>Median on 10 consecutive samples tested to current month</b>														
Faecal Coliform (cfu/100mL)	2.0	1.6	1.6	2.0	1.6	1.6	2.0	1.6	1.6	2.0	1.6	1.6	<14	
<b>Breaches of resource consents</b>													<b>YTD</b>	
Breaches of consent conditions	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Resolved WTP source incidents and complaints</b>													<b>YTD</b>	<b>Target</b>
Reportable odour incidents	0	0	1	0	0	0	0	0	0	0	0	0	1	0
Odour complaints	0	0	1	0	0	0	0	0	0	0	0	0	1	0
Insect complaints	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Noise complaints	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other complaints (dust)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>									
<b>Maximum Daily Discharge Volume</b>													<b>Consent limit</b>	
Peak Day (m <sup>3</sup> /day)	2,796	2,082	2,251	2,668	1,370	2,055	2,497	1,153	2,631	1,166	2,285	1,303	<2800	

FIGURE 16 (CONTINUED)

## Wastewater treatment plant performance – Waiheke

	Jul 2011	Aug 2011	Sep 2011	Oct 2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	Jun 2012	No 26771 Consent Limits	
<b>Plant load</b>														
<b>Maximum of monthly sample tested</b>														
BOD (g/m <sup>3</sup> )	2.0	2.0	2.0	2.0	2.0	2.0	0.5	1.0	0.5	0.5	0.5	0.5	<10	
NFR (g/m <sup>3</sup> )	0.8	1.2	0.4	0.4	0.4	0.4	0.8	0.8	0.5	0.8	0.8	0.8	<10	
<b>Nutrients (g/m<sup>3</sup>)</b>														
<b>Maximum of monthly sample tested</b>														
Total phosphorus (g/m <sup>3</sup> )	2.0	2.5	2.1	2.8	4.8	5.00	9.8	9.4	7.6	7.1	5.9	2.2	<7	
Nitrogen in ammoniacal form (g/m <sup>3</sup> )	0.01	0.01	0.01	0.01	0.02	0.03	0.01	0.02	0.02	0.01	0.01	0.01	<2	
Total Oxidised Nitrogen (g/m <sup>3</sup> )	10.0	10.1	11.9	14.4	13.8	14.0	12.0	15.0	13.0	15.0	21.0	35.0	<30	
Total Nitrogen (g/m <sup>3</sup> )	10.7	11.8	12.7	15.2	14.9	14.9	13.8	16.2	14.0	15.86	21.50	35.1	<30	
<b>Pathogens</b>														
<b>Maximum of monthly sample tested</b>														
Faecal Coliform (cfu/100mL)	2	2	2	2	2	2	70	13	15	2	2	2	<50	
<b>Breaches of resource consents</b>													<b>YTD</b>	
Breaches of consent conditions	0	0	0	0	0	0	2	1	1	1	0	2	7	
<b>Resolved WTP source incidents and complaints</b>													<b>YTD</b>	<b>Target</b>
Reportable odour incidents	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Odour complaints	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insect complaints	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Noise complaints	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other complaints (dust)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>0</b>												
<b>Maximum Daily Discharge Volume</b>													<b>Consent limit</b>	
Peak Day (m <sup>3</sup> /day)	57	25	29	43	24	53	51	27	56	39	35	23	<80	

FIGURE 16 (CONTINUED)

## Wastewater treatment plant performance – Kingseat

	Jul 2011	Aug 2011	Sep 2011	Oct 2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	Jun 2012	No 907365 Consent Limits	
<b>Plant load</b>														
95% of samples tested in any 12 month period to current month														
BOD	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	<20 g/m <sup>3</sup>	
NFR	92%	92%	92%	83%	85%	87%	87%	88%	88%	83%	95%	95%	<30 g/m <sup>3</sup>	
<b>Pathogens</b>														
95% of samples tested in any 12 month period to current month														
Faecal Coliform	93%	93%	93%	93%	92%	87%	87%	88%	88%	89%	89%	85%	<1000 cfu/100mL	
95% of samples tested in any 12 month period to current month														
Dissolved oxygen	28%	36%	43%	51%	52%	62%	67%	69%	78%	84%	84%	93%	> 5 g/m <sup>3</sup>	
<b>Breaches of resource consents</b>														
YTD														
Breaches of consent conditions	0	0	0	2	1	1	0	0	0	1	0	1	6	
<b>Resolved WTP source incidents and complaints</b>														
YTD Target														
Reportable odour incidents	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Odour complaints	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insect complaints	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Noise complaints	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other complaints (dust)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>0</b>													
<b>Maximum Daily Discharge Volume</b>														
Consent limit														
Peak Day (m <sup>3</sup> /day)	66	32	62	65	37	76	76	46	53	30	42	36	<38	
Max volume exceeded due to inflow+wet weather infiltration														

FIGURE 16 (CONTINUED)

## Wastewater treatment plant performance – Clarks Beach

	Jul 2011	Aug 2011	Sep 2011	Oct 2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	Jun 2012	No 12998 Consent Limits	
<b>Plant load</b>														
<b>Median on 20 consecutive samples tested to current month</b>														
BOD (g/m <sup>3</sup> )	7.8	7.8	9.2	9.8	12.5	15.0	15.5	13.5	13.5	13.5	11.0	11.0	<10 g/m <sup>3</sup>	
NFR (g/m <sup>3</sup> )	19.1	21.0	24.5	26.4	25.3	25.3	26.7	30.4	30.4	29.3	25.0	25.0	<15 g/m <sup>3</sup>	
<b>95% on 20 consecutive samples tested to current month</b>														
BOD (% of samples)	90%	90%	80%	75%	75%	70%	65%	65%	65%	65%	68%	74%	<20 g/m <sup>3</sup>	
NFR (% of samples)	50%	50%	50%	45%	45%	45%	40%	35%	30%	35%	42%	42%	<20 g/m <sup>3</sup>	
<b>Nutrients</b>														
<b>Median on 20 consecutive samples tested to current month</b>														
Nitrogen in ammoniacal form (g/m <sup>3</sup> )	8.6	8.3	7.6	7.0	7.6	7.6	7.0	7.0	6.2	5.4	5.2	5.1	<10 g/m <sup>3</sup>	
Total Inorganic Nitrogen (g/m <sup>3</sup> )	14.6	13.1	12.1	12.0	13.1	14.0	14.0	14.0	14.0	14.0	12.0	12.0	<15 g/m <sup>3</sup>	
<b>95% on 20 samples tested to current month</b>														
Nitrogen in ammoniacal form (% of samples)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	<20 g/m <sup>3</sup>	
<b>Pathogens</b>														
<b>Median on 20 consecutive samples tested to current month</b>														
Faecal Coliform (cfu/100mL)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.3	3.3	3.3	<14 cfu/100mL	
<b>90% on 20 consecutive samples tested to current month</b>														
Faecal Coliform (% of samples)	95%	95%	95%	95%	95%	95%	95%	90%	90%	90%	90%	90%	<43 cfu/100mL	
<b>95% on 20 consecutive samples tested to current month</b>														
Dissolved Oxygen (% of samples)	30%	30%	35%	35%	35%	35%	30%	30%	20%	20%	18%	22%	>5 g/m <sup>3</sup>	
<b>Breaches of resource consents</b>													<b>YTD</b>	
Breaches of consent conditions	3	4	3	4	5	5	5	5	3	0	1	1	39	
<b>Resolved WTP source incidents and complaints</b>													<b>YTD</b>	<b>Target</b>
Reportable odour incidents	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Odour complaints	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insect complaints	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Noise complaints	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other complaints (dust)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>0</b>												
<b>Maximum Daily Discharge Volume</b>													<b>Consent limit</b>	
Peak Day (m <sup>3</sup> /day)	1,330	1,330	638	1,342	462	1,274	1,147	1,079	1,342	568	830	672	600 + incidental rain m <sup>3</sup> /day	
Max volume exceeded due to inflow+wet weather infiltration														

FIGURE 16 (CONTINUED)

## Wastewater treatment plant performance – Waiuku

	Jul 2011	Aug 2011	Sep 2011	Oct 2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	Jun 2012	No 907443 Consent Limits	
<b>Plant load</b>														
95% of samples tested over any consecutive 12 month period to current month														
BOD (% of samples)	76%	77%	76%	77%	76%	73%	73%	77%	80%	80%	81%	81%	<10 g/m <sup>3</sup>	
NFR (% of samples)	37%	33%	23%	15%	16%	15%	12%	12%	8%	8%	8%	8%	<10 g/m <sup>3</sup>	
<b>Nutrients</b>														
95% of samples tested over any consecutive 12 month period to current month														
Total phosphorus (% of samples)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	<8 g/m <sup>3</sup>	
Nitrogen in ammoniacal form (% of samples)	81%	81%	85%	81%	80%	81%	81%	81%	84%	88%	96%	96%	<5 g/m <sup>3</sup>	
Total Inorganic Nitrogen (% of samples)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	<20 g/m <sup>3</sup>	
<b>Pathogens</b>														
95% of samples tested in any 12 month period to current month														
Enterococci	67%	63%	62%	62%	60%	65%	69%	73%	72%	76%	81%	85%	<35 cfu/100mL	
95% of samples tested over any consecutive 12 month period to current month														
Dissolved oxygen	98%	98%	98%	98%	98%	98%	99%	99%	100%	100%	100%	100%	>2 g/m <sup>3</sup>	
<b>Breaches of resource consents</b>													YTD	
Breaches of consent conditions	2	2	1	2	0	1	1	1	1	1	1	1	14	
<b>Resolved WTP source incidents and complaints</b>													YTD	Target
Reportable odour incidents	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Odour complaints	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insect complaints	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Noise complaints	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other complaints (dust)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>0</b>												
<b>Maximum Daily Discharge Volume</b>													Consent limit	
Peak Day (m <sup>3</sup> /day)	4,334	4,326	2,731	4,567	2,681	3,515	3,509	3,221	4,469	2,721	3,291	2,769	<3,200	
Max volume exceeded due to inflow+wet weather infiltration														

FIGURE 16 (CONTINUED)

## Wastewater treatment plant performance – Pukekohe

	Jul 2011	Aug 2011	Sep 2011	Oct 2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	Jun 2012	No 940331 Consent Limits	
<b>Plant load</b>														
<b>10% of 26 fortnightly samples tested to current month</b>														
BOD (% of samples)	0%	0%	0%	0%	4%	4%	4%	8%	8%	8%	8%	8%	>12 g/m <sup>3</sup>	
NFR (% of samples)	4%	4%	4%	8%	8%	15%	15%	15%	15%	15%	19%	23%	>18 g/m <sup>3</sup>	
<b>Maximum of 26 fortnightly samples tested to current month</b>														
BOD (g/m <sup>3</sup> )	5.4	5.4	5.4	11.0	30.0	30.0	30.0	24.0	24.0	24.0	24.0	24.0	<15g/m <sup>3</sup>	
NFR (g/m <sup>3</sup> )	38.6	38.6	38.6	23.6	28.8	26.0	26.0	26.0	26.0	26.0	25.0	22.0	<20 g/m <sup>3</sup>	
<b>Nutrients</b>														
<b>10% of 26 fortnightly samples tested to current month</b>														
Total phosphorus (% of samples)	0%	0%	4%	4%	8%	8%	8%	8%	8%	8%	8%	8%	>8 g/m <sup>3</sup>	
Nitrogen in ammoniacal form (% of samples)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	>10 g/m <sup>3</sup>	
<b>Maximum of 26 fortnightly samples tested to current month</b>														
Total phosphorus (g/m <sup>3</sup> )	7.1	7.1	8.1	8.1	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	<10 g/m <sup>3</sup>	
Nitrogen in ammoniacal form (g/m <sup>3</sup> )	2.9	2.9	4.5	4.5	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	<15 g/m <sup>3</sup>	
<b>Pathogens</b>														
<b>10% of 26 fortnightly samples tested to current month</b>														
Faecal Coliform (% of samples)	4%	4%	0%	4%	4%	4%	4%	4%	4%	4%	4%	4%	>1,000 cfu/100mL	
<b>Maximum of 26 fortnightly samples tested to current month</b>														
Faecal Coliform (cfu/100mL)	11,000	11,000	11,000	9,300	9,300	9,300	9,300	9,300	9,300	9,300	9,300	9,300	<10,000 cfu/100mL	
<b>Breaches of resource consents</b> <span style="float: right;">YTD</span>														
Breaches of consent conditions	0	0	0	0	3	2	0	0	0	0	2	1	8	
<b>Resolved WTP source incidents and complaints</b> <span style="float: right;">YTD Target</span>														
Reportable odour incidents	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Odour complaints	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insect complaints	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Noise complaints	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other complaints (dust)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>0</b>												
<b>Maximum Daily Discharge Volume</b> <span style="float: right;">Consent limit (dry weather flow)</span>														
Peak Day (m <sup>3</sup> /day)	15,607	9,111	11,820	12,431	9,268	11,576	11,863	22,226	15,022	13,805	8,169	11,515	<8,450	
Max dry weather flow volume exceeded due to wet weather flow conditions														

FIGURE 16 (CONTINUED)

Treated wastewater standards – Rosedale

	Standard	Jul 2011	Aug 2011	Sep 2011	Oct 2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	Jun 2012	Annual Median	
<b>Pollutant load</b>		<b>Median</b>													
<b>Monthly median</b>															
BOD (g/m <sup>3</sup> )	<20	2.0	2.0	2.0	2.0	2.0	4.4	4.0	3.6	2.9	2.9	0.7	0.7	2.0	
NFR (g/m <sup>3</sup> )	<35	3.0	4.0	3.0	4.0	5.0	7.3	6.0	5.2	4.4	4.6	4.4	2.4	4.0	
<b>Nutrients</b>		<b>Monthly median</b>													
Dissolved reactive phosphorus (g P/m <sup>3</sup> )	<10	2.3	3.3	4.0	4.2	3.2	3.4	2.1	2.1	3.9	4.1	3.1	4.3	3.4	
Total nitrogen (g N/m <sup>3</sup> )	<30	7.5	15.0	17.0	13.0	8.4	8.8	8.8	6.1	3.0	5.7	5.7	16.0	8.6	
Ammonia (g/m <sup>3</sup> )	<10	0.9	2.2	8.4	4.2	1.4	2.6	4.4	2.9	2.8	1.2	3.1	1.6	2.7	
<b>Bacteriological</b>		<b>Monthly median</b>													
Enterococci (#/100ml)	<100	2	2	2	2	49	68	26	19	37	80	1.6	1.6	15.0	
Faecal Coliforms (#/100ml)	<1,000	2	2	2	2	285	525	160	65	130	530	2	6	46.0	
														<b>Annual 95th Percentile</b>	
<b>Pollutant load</b>		<b>95th Percentile</b>													
<b>Monthly 95 Percentile</b>															
NFR (g/m <sup>3</sup> )	<75	11.8	9.0	6.0	8.8	10.4	15.0	20.6	21.7	10.4	30.4	8.8	7.6	13.7	
<b>Bacteriological</b>		<b>Monthly 95 Percentile</b>													
Enterococci (#/100ml)	<1,000	25.9	7.9	10.5	38.8	96.8	293.5	53.6	24.6	473.5	132	130.4	16	196	
Faecal Coliforms (#/100ml)	<10,000	116	16	110	109	517	1,806	714	160	1,568	2,200	17	46	722	
<b>Resolved WTP source incidents and complaints</b>														<b>YTD</b>	<b>Target</b>
Reportable odour incidents		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Odour complaints		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insect complaints		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Noise complaints		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other complaints (dust)		0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Volumes</b>		<b>Median</b>													<b>Annual Maximum</b>
Total month (Mm <sup>3</sup> )		2,235	1,787	1,845	2,071	1,673	1,999	1,806	1,579	2,180	1,574	1,841	1,734		
Maximum daily discharge (m <sup>3</sup> /s)	6	1.4	1.1	1	1.2	0.9	1.8	1.1	0.8	1.8	0.7	1.2	0.8	1.8	

FIGURE 16 (CONTINUED)

Treated wastewater standards – Army Bay

	Standard	Jul 2011	Aug 2011	Sep 2011	Oct 2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	Jun 2012	Annual Median
<b>Pollutant load</b>	<b>Median</b>													
<b>Monthly median</b>														
BOD (g/m <sup>3</sup> )	<20	2.0	2.0	3.0	2.0	2.0	5.0	4.0	5.0	2.0	1.0	1.0	3.0	2.0
NFR (g/m <sup>3</sup> )	<35	3.8	4.0	5.3	5.0	6.2	9.6	9.1	7.0	3.9	4.1	3.4	5.6	5.2
<b>Nutrients</b>														
<b>Monthly median</b>														
Ammonia (g/m <sup>3</sup> )	<15	0.5	0.7	1.3	1.5	1.2	2.2	1.8	2.3	1.5	0.9	0.9	1.3	1.3
<b>Bacteriological</b>														
<b>Monthly median</b>														
Enterococci (#/100ml)	<100	1	1	4	3	2	43	5	11	14	3	1	2	3.0
Faecal Coliforms (#/100ml)	<1,000	5	1	4	1	8	104	14	3	8	11	42	7	7.5

															Annual 92nd Percentile
<b>Pollutant load</b>	<b>92nd Percentile</b>														
<b>Monthly 92 Percentile</b>															
BOD (g/m <sup>3</sup> )	<35	2.0	2.0	4.0	3.0	3.0	8.0	5.0	7.0	2.0	2.0	2.0	3.0	7	
NFR (g/m <sup>3</sup> )	<75	5.0	5.0	6.2	5.5	8.6	27.0	11.1	17.7	5.3	5.6	4.7	7.6	19	
<b>Bacteriological</b>															
<b>Monthly 92 Percentile</b>															
Enterococci (#/100ml)	<1,000	14	3	7	4	3	125	12	165	94	94	2	3	130	
Faecal Coliforms (#/100ml)	<10,000	140	1	11	4	10	231	77	25	34	12	97	93	151	

														YTD	Target
<b>Resolved WTP source incidents and complaints</b>															
Reportable odour incidents	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Odour complaints	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insect complaints	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Noise complaints	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other complaints (dust)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>0</b>														

Volumes														Annual Maximum
<b>Median</b>														
Total month (m <sup>3</sup> )	367,892	286,126	248,216	299,139	248,137	269,367	290,302	255,920	355,843	267,147	312,018	285,182		
Maximum daily discharge (m <sup>3</sup> /day)	32,147	16,987	10,663	11,321	14,075	10,027	18,757	14,189	11,671	23,799	9,989	16,603	11,549	23,799

FIGURE 16 (CONTINUED)

Treated wastewater standards – Warkworth

	Standard	Jul 2011	Aug 2011	Sep 2011	Oct 2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	Jun 2012	Annual 92nd Percentile	
<b>Pollutant load</b>															
92nd Percentile															
<b>Monthly 92 Percentile</b>															
NFR (g/m <sup>3</sup> )	<30	4.7	7.9	6.9	5.2	6.7	2.8	5.1	4.8	20.5	10.4	8.4	10.6	12	
<b>Bacteriological</b>															
<b>Monthly 92 Percentile</b>															
Faecal Coliforms (#/100ml)	<200	5	4.4	105.8	6.3	16	9	9.8	13.4	25.8	9	10.7	84.3	87	
<b>Nutrients</b>															
<b>Monthly 92 Percentile</b>															
Ammonia (g N/m <sup>3</sup> )	<10	0.9	1.3	2.5	1.7	2.6	0.9	0.6	7.6	1.5	2.8	1.5	0.4	3	
<b>Resolved WTP source incidents and complaints</b>															
														YTD	Target
Reportable odour incidents		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Odour complaints		0	0	0	1	0	0	0	0	0	0	0	0	1	0
Insect complaints		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Noise complaints		1	0	0	0	0	0	0	0	0	0	0	0	1	0
Other complaints (dust)		0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>		<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2</b>								
<b>Volumes</b>															
	Standard													Annual Maximum	
Total month (m <sup>3</sup> )		32,217	26,217	25,125	29,913	23,343	32,932	27,635	22,900	38,731	22,368	28,863	24,005		
Maximum daily discharge (m <sup>3</sup> /day)	8,100	2,728	1,172	1,119	1,789	1,036	3,376	2,111	1,029	4,912	1,256	2,714	962	4,912	

FIGURE 16 (CONTINUED)

## Treated wastewater standards – Wellsford

	Standard	Jul 2011	Aug 2011	Sep 2011	Oct 2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	Jun 2012	Annual 95th Percentile	
<b>Pollutant load</b>															
95th Percentile															
<b>Monthly 95 Percentile</b>															
BOD (g/m <sup>3</sup> )	<20	12.7	2.1	11.6	7.0	3.1	8.0	11.0	13.4	5.2	13.1	2.5	3.1	13	
NFR (g/m <sup>3</sup> )	<30	16.8	17.6	9.6	20.4	37.0	68.0	28.0	15.6	6.4	32.8	15.6	9.6	51	
Dissolved Oxygen (g/m <sup>3</sup> )	>3	7.50	6.30	7.20	5.90	5.40	5.70	5.80	6.60	6.90	7.30	6.70	6.70	7	
<b>Bacteriological</b>															
<b>Monthly 95 Percentile</b>															
Faecal Coliforms (#/100ml)	<1,000	290	133	680	590	800	280	5,200	5,400	1,750	4,066	1,450	200	5,290	
<b>Nutrients</b>															
<b>Monthly 95 Percentile</b>															
Inorganic Nitrogen (g N/m <sup>3</sup> )	<10	21.7	17.4	16.5	15.9	8.0	13.2	13.5	8.3	5.9	3.3	6.9	18.3	20	
<b>Resolved WTP source incidents and complaints</b>														YTD	Target
Reportable odour incidents		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Odour complaints		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insect complaints		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Noise complaints		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other complaints (dust)		0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>		<b>0</b>	<b>0</b>												
<b>Volumes</b>															
	Standard													Annual Maximum	
Total month (m <sup>3</sup> )		36,280	17,950	10,720	16,014	12,795	19,038	20,816	12,516	27,622	17,765	20,010	16,462		
95 Percentile Flow (m <sup>3</sup> /day)	1,260	1,675	938	684	791	653	1,078	1,016	722	1,397	1,036	865	634	1,522	
Maximum daily discharge (m <sup>3</sup> /day)	2,500	2,533	1,069	758	797	731	1,183	1,057	750	1,428	1,083	871	639	2,533	

FIGURE 16 (CONTINUED)

Treated wastewater standards – Omaha

	Standard	Jul 2011	Aug 2011	Sep 2011	Oct 2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	Jun 2012	Annual 95th Percentile	
<b>Pollutant load</b>															
95th Percentile															
<b>Monthly 95 Percentile</b>															
BOD (g/m <sup>3</sup> )	<30	1.6	2.6	2.0	2.4	1.6	1.4	4.7	3.2	1.3	2.6	1.5	3.6	4	
NFR (g/m <sup>3</sup> )	<20	3.5	6.8	4.3	5.2	7.9	7.5	11.6	20.5	4.0	6.3	4.5	5.3	16	
<b>Bacteriological</b>															
<b>Monthly 95% Percentile</b>															
Faecal Coliforms (#/100ml)	<500	1	1	2	1	1	1	1	1	1	4.8	1	1.6		
<b>Resolved WTP source incidents and complaints</b>															
														YTD	Target
Reportable odour incidents		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Odour complaints		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insect complaints		0	0	0	0	0	0	0	0	0	0	0	1	1	0
Noise complaints		0	0	0	0	0	0	0	1	0	0	0	0	1	0
Other complaints (dust)		0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>		<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>2</b>							
<b>Volumes – Jones Road Irrigation Site</b>															
	Standard													Annual	
Total month (m <sup>3</sup> )		7,368	4,080	5,102	7,494	7,647	5,020	4,315	5,519	5,995	9,162	1,855	2,140		
Maximum daily (m <sup>3</sup> /day)	1200	374	195	300	558	570	499	446	387	310	557	319	150	570	
<b>Volumes (m<sup>3</sup>) – Omaha Golf Course Irrigation Site</b>															
Total month (m <sup>3</sup> )		4,415	2,354	758	0	5,747	7,262	7,051	11,443	8,041	2,145	2,322	2,711		
Maximum daily (m <sup>3</sup> /day)	860				0	637	575	541	586	457	292			637	
Maximum daily (1 May to 30 September)	570	241	118	121								207	143	241	

FIGURE 16 (CONTINUED)

## Treated wastewater standards – Dennehurst

	Standard	Jul 2011	Aug 2011	Sep 2011	Oct 2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	Jun 2012	Annual Maximum	
Plant load	Maximum														
<b>Monthly maximum</b>															
BOD (g/m <sup>3</sup> ) – 6 monthly sample only	<15						4.8						4.9	4.9	
NFR (g/m <sup>3</sup> ) – 6 monthly sample only	<15						5.4						6.6	6.6	
<b>Resolved WTP source incidents and complaints</b>														YTD	Target
Reportable odour incidents		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Odour complaints		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insect complaints		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Noise complaints		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other complaints (dust)		0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>		<b>0</b>	<b>0</b>												
Volumes (m <sup>3</sup> )	Standard													Annual	
Total month		453	405	390	403	340	339	355	312	431	328	393	402		
Maximum daily	<14.8	14.8	14.8	14.8	14.6	14.6	14.6	14.6	14.6	14.8	13.6	14.5	14.5	14.8	

## Treated wastewater standards – Matakana

	Standard	Jul 2011	Aug 2011	Sep 2011	Oct 2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	Jun 2012	Annual 95th Percentile	
Plant load															
<b>Monthly 95 Percentile</b>															
BOD (g/m <sup>3</sup> )	<30	33.7	27.4	8.8	23.3	19.4	8.5	29.5	25.4	11.5	20.8	18.6	27.0	31	
NFR (g/m <sup>3</sup> )	<30	13.4	22.0	20.8	24.0	26.8	8.8	24.8	14.0	8.0	21.2	12.8	23.0	26	
<b>Resolved WTP source incidents and complaints</b>														YTD	Target
Reportable odour incidents		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Odour complaints		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insect complaints		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Noise complaints		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other complaints (dust)		0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>		<b>0</b>	<b>0</b>												
Volumes	Standard													Annual	
Total month (m <sup>3</sup> )		3,413	1,880	2,258	3,683	2,544	3,733	2,833	1,977	3,680	2,465	3,708	2,328		
Maximum daily (m <sup>3</sup> /day)	130	300	133	188	252	151	400	250	150	350	104	323	150	400	

FIGURE 16 (CONTINUED)

Treated wastewater standards – Waiwera

	Standard	Jul 2011	Aug 2011	Sep 2011	Oct 2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	Jun 2012	Annual 95th Percentile	
<b>Plant load</b>															
<b>Monthly 95 Percentile</b>															
BOD (g/m <sup>3</sup> )	<45	6.4	6.5	8.6	19.8	26.0	21.1	5.9	43.1	37.4	19.9	14.5	7.5	40	
<b>Plant load</b>															
<b>Monthly 95% Percentile</b>															
Enterococci (#/100ml)	<3,500	200	58	42	88	80	480	1,550	40	800	1,050	840	340	1,275	
<b>Resolved WTP source incidents and complaints</b>														<b>YTD</b>	<b>Target</b>
Reportable odour incidents		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Odour complaints		0	0	0	0	0	0	0	1	0	0	0	0	1	0
Insect complaints		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Noise complaints		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other complaints (dust)		0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>		<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>							
<b>Volumes</b>														<b>Standard</b>	<b>Annual</b>
Total month (m <sup>3</sup> )		416	4,800	3,520	8,640	6,440	3,640	0	5,120	3,840	6,400	0	2,560		
Maximum daily (m <sup>3</sup> /day)	595	320	320	320	320	280	560	0	320	320	320	0		560	

FIGURE 16 (CONTINUED)

Treated wastewater standards – Huapai

	Standard	Jul 2011	Aug 2011	Sep 2011	Oct 2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	Jun 2012	Annual 95th Percentile		
<b>Pollutant load</b>																
Median																
<b>Monthly median</b>																
BOD (g/m <sup>3</sup> )	<5	3.3	2.6	1.9	1.5	1.3	1.3	1.6	1.5	1.3	1.3	1.3	1.5	1.5		
NFR (g/m <sup>3</sup> )	<20	8.6	8.8	7.4	7.0	6.3	3.7	6.4	1.6	3.9	7.0	4.4	12.0	6.7		
<b>Nutrients</b>																
<b>Monthly median</b>																
Ammonia (g N/m <sup>3</sup> )	<0.5	0.4	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.1	0.1	0.4	0.2		
<b>Bacteriological</b>																
<b>Monthly median</b>																
E.Coli (#/100ml)	<15	1	1	1	1	1	1	1	1	1	1	1	4.1	1.0		
Faecal Coliforms (#/100ml)	<15	1	1	2	1	1	1	1	1	1	1	1	11	1.0		
<b>Annual Maximum</b>																
<b>Pollutant load</b>																
Maximum																
<b>Monthly Max</b>																
BOD (g/m <sup>3</sup> )	<20	5.0	2.9	2.0	1.5	1.3	1.3	1.9	1.7	1.3	1.3	1.3	1.7	5.0		
NFR (g/m <sup>3</sup> )	<30	13.8	19.2	9.2	7.0	7.6	4.8	8.2	7.0	5.4	8.6	5.4	12.0	19.2		
<b>Nutrients</b>																
<b>Monthly Max</b>																
Ammonia (g N/m <sup>3</sup> )	<5	0.7	0.3	0.1	0.2	0.1	0.2	0.2	0.4	0.2	0.1	0.1	0.4	0.7		
<b>Bacteriological</b>																
<b>Monthly Max</b>																
E.Coli (#/100ml)	<260	1	3	1	1	1	1	1	1	1	1	1	7	7.0		
Faecal Coliforms (#/100ml)	<200	1	5	1	1	1	1	1	1	1	1	1	21	21.0		
<b>In situ Measurements</b>																
<b>Trigger Levels</b>																
<b>Monthly Minimums</b>																
Dissolved Oxygen (g/m <sup>3</sup> )	5	8.5	8.5	8	7.5	7.8	7.2	7.3	7.3	7.6	8.1	7.3	7.9	8.5		
pH	6	6	6	6	6	7	7	7	7	7	6	6	6	7.0		
<b>Resolved WTP source incidents and complaints</b>														YTD	Target	
Reportable odour incidents		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Odour complaints		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insect complaints		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Noise complaints		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other complaints (dust)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>		<b>0</b>	<b>0</b>	<b>0</b>												
<b>Volumes</b>																
Standard																
<b>Annual</b>																
Total month (m <sup>3</sup> )		2,408	2,217	2,177	2,303	2,035	2,203	2,144	1,959	2,436	1,948	2,185	2,166			
Average Monthly Flow (m <sup>3</sup> /day)	180	78	72	73	74	68	71	69	68	79	65	70	72	72		
Maximum daily discharge (m <sup>3</sup> /s)	206	94	86	93	100	206	104	82	81	109	73	99	95	206		

FIGURE 16 (CONTINUED)

Treated wastewater standards – Helensville

	Standard	Jul 2011	Aug 2011	Sep 2011	Oct 2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	Jun 2012	Annual 95th Percentile	
Pollutant load	95th Percentile														
<b>Monthly 95 Percentile</b>															
BOD (g/m <sup>3</sup> )	<20	9.2	6.9	7.1	11.3	14.3	19.4	42.8	31.9	36.0	27.7	32.4	53.0	47	
NFR (g/m <sup>3</sup> )	<30	16.4	16.4	44.0	50.0	66.8	138.0	90.0	112.0	118.0	114.0	90.0	81.0	127	
Dissolved Oxygen (g/m <sup>3</sup> )	>5	5.4	5.4	5.4	5.3	5.3	6.1	6.5	6.5	6.3	5.8	5.8	5.7	7	
<b>Resolved WTP source incidents and complaints</b>														<b>YTD</b>	<b>Target</b>
Reportable odour incidents		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Odour complaints		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insect complaints		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Noise complaints		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other complaints (dust)		0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>		<b>0</b>	<b>0</b>												
<b>Volumes (m<sup>3</sup>) – Omaha Golf Course Irrigation Site</b>															
Total month (m <sup>3</sup> )		48,868	27,646	30,205	37,081	19,646	27,619	25,890	20,428	35,426	19,827	25,453	25,525		
Average Flow 1 November to 30 May (m <sup>3</sup> /day)	800					655	891	835	704	1,143	661	821	851	729	
Average Flow 1 June to 30 October (m <sup>3</sup> /day)	1,600	1,576	1,063	1,079	1,196									983	
Maximum daily discharge (m <sup>3</sup> /s)	5,000	3,502	1,789	1,695	2,703	1,304	3,246	2,226	1,484	2,601	891	1,435	1,390	3,502	

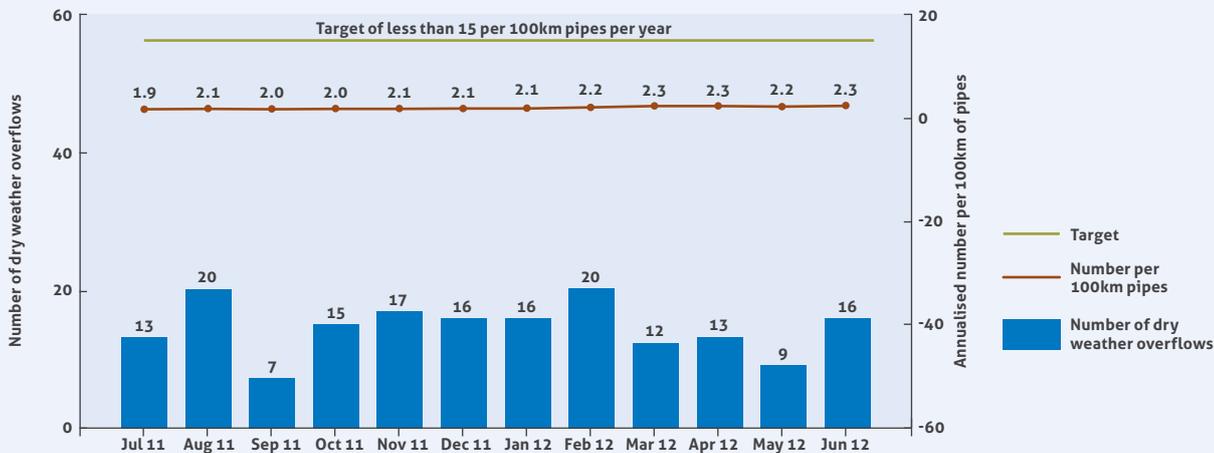
FIGURE 16 (CONTINUED)

Treated wastewater standards – Snells/Algies

	Standard	Jul 2011	Aug 2011	Sep 2011	Oct 2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	Jun 2012	Annual Median
<b>Bacteriological</b>														
Median														
<b>Monthly median</b>														
Faecal Coliforms (#/100ml)	<7,500	1,165	344	500	1,220	1,275	2,125	1,225	1,150	2,500	1,050	480	270	1,157.5
														<b>Annual 92nd Percentile</b>
<b>Pollutant load</b>														
92nd Percentile														
<b>Monthly 92 Percentile</b>														
BOD (g/m <sup>3</sup> )	<80	6.2	4.3	4.3	4.4	10.4	13.5	16.1	14.8	19.3	12.0	9.0	5.3	16
NFR (g/m <sup>3</sup> )	<100	13.2	15.6	12.0	31.9	32.4	71.3	79.4	59.7	46.7	47.5	43.0	25.5	72
<b>Bacteriological</b>														
<b>Monthly 92 Percentile</b>														
Faecal Coliforms (#/100ml)	<50,000	100	194	542	786	1,086	1,285	3,160	1,964	1,472	2,875	634	1,934	2,909
<b>Resolved WTP source incidents and complaints</b>														
Reportable odour incidents		0	0	0	0	0	0	0	0	0	0	0	0	0
Odour complaints		0	0	0	0	0	0	0	0	0	0	0	0	0
Insect complaints		0	0	0	0	0	0	0	0	0	0	0	0	0
Noise complaints		0	0	0	0	0	0	0	0	0	0	0	0	0
Other complaints (dust)		0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>		<b>0</b>												
<b>Volumes</b>														
Standard														
Total month (m <sup>3</sup> )		32,567	21,524	21,622	31,013	19,292	26,754	31,339	19,813	36,277	21,930	27,022	23,074	Annual Maximum
Maximum daily discharge (m <sup>3</sup> /day)	4,680	1,529	792	1,057	2,179	754	1,650	2,018	1,170	1,985	1,132	1,445	976	2,179

FIGURE 17

Overflows from wastewater system



Note:

The annual target is to achieve no more than 15 dry weather overflows per 100km of pipe length.

**FIGURE 18**  
Sewer breaks and chokes interruption frequency



Note:

The annual target is to maintain the frequency of sewer breaks and chokes to less than 10 interruptions per 1,000 properties.

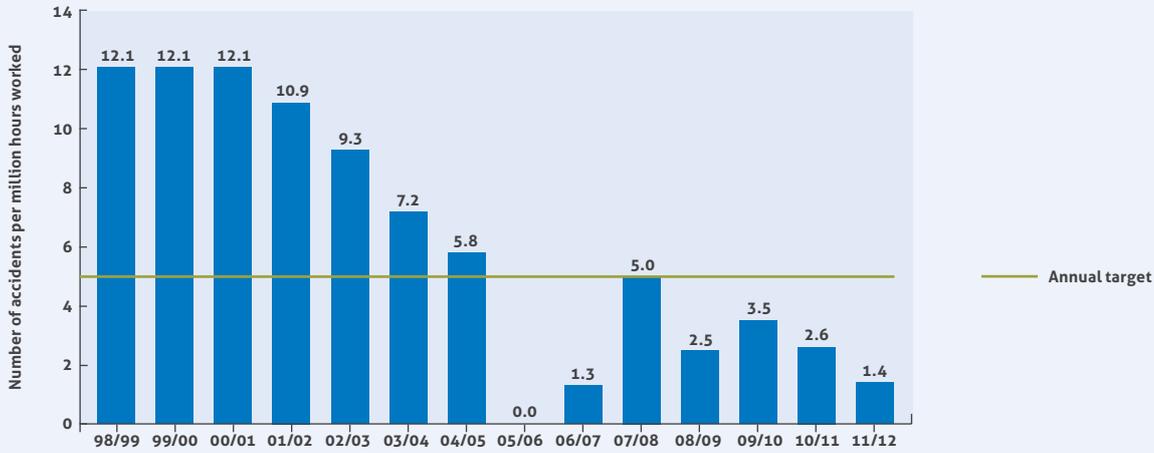
**FIGURE 19**  
Response to wastewater blockages within one hour



Note:

The annual target is to ensure that at least 98% of wastewater blockages are responded to within contract requirements.

**FIGURE 20**  
**Lost-time injury frequency rate**



**Note:**

The annual target for staff lost-time injury frequency rate is less than five per million hours worked.

The lost time injury frequency rate for 2011/2012 is 1.4 and well below the target of 5.

Under the G3 reporting framework Watercare is required to provide information on G3 labour practices and decent work indicator LA7, relating to occupational health and safety. This additional information has been included to meet G3 criteria.

## FIGURE 21

### Health and safety notes

#### Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs. (G3-LA6)

A formal Health and Safety Committee structure exists within Watercare.

A total of eleven health and safety committees operate within Watercare, meeting on a monthly basis to cover health and safety requirements, accidents and other issues. There is a total of 65 committee members.

A total of 648 permanent staff / 65 committee members = 9.97%.

Formal committee meeting minutes are kept.

#### Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities by region. (G3-LA7)

Formal reporting requirements include – near miss, first aid injury, medical treatment injury, lost time injury, all injury and total injury expressed as a rolling 12 months. A company-wide Occupational Safety and Health Manual is maintained on the intranet to provide health and safety guidance policy and reporting processes.

All injury metrics are reported in accordance to the AS 1885.1 Workplace injury and disease recording standard.

Watercare complies with the Health and Safety in Employment Act 1992.

Watercare complies with the ACC Workplace Safety Management Practice Requirements (Tertiary Level)

Watercare is registered with Telarc SAI Limited – Compliance with AS/NZS 4801:2001

#### Education, training, counselling, prevention, and risk-control programmes in place to assist workforce members, their families, or community members regarding serious diseases. (G3-LA8)

The company has engaged medical professionals Primary Corporate Health (PCH) to overview and provide medical expertise regarding work related health issues.

All employees in key or high risk roles undergo annual medical assessments.

Watercare operates a comprehensive Employee Assistance Programme providing all employees with access to a wide range of confidential counselling services. The service is also used in any incident requiring crisis intervention.

All employees required to work in a wastewater environment are immunised against hepatitis A and B, polio, tetanus and typhoid at company cost.

All employees are offered free influenza immunisation on an annual basis.

All new employees and contractors receive an initial site specific and generic safety induction onto Watercare sites and are then required to attend regular refresher training.

Employees receive Health and Safety training appropriate to their role. Training includes: first aid, confined space, working at heights, working on the road, fork hoist, and chemical handling.

The company sets a target of 440 safety inspections each year. An inspections report is completed each month.

Watercare works closely with ACC providing comprehensive rehabilitation and return to work programme for work and non-work related injuries.

#### Health and safety topics covered in formal agreements with trade unions. (G3-LA9)

Union representatives and members participate in Health and Safety Committees and are involved in selection and trials of personal protective equipment.

Collective Agreements have a commitment to the health and safety of employees.

Union representatives and members are involved in selection and trials of personal protective equipment.

The right to refuse unsafe work is recognised as part of the Health and Safety Management System and is a legal requirement.

Complaints are noted by means of a hazard reporting process.

#### Note:

Under the G3 reporting framework Watercare is required to provide information on G3 labour practices and decent work indicators LA6, LA7, LA8 and LA9, relating to occupational health and safety. This additional information has been included to meet G3 criteria.

**FIGURE 22**  
**Staff wellness and absenteeism**



Note:

As a measure of staff wellness Watercare monitors and report the percentage of staff hours lost through illness. During 2011/2012 the number of work hours lost through illness decreased to 1.8% of available hours, this is within the target of 2.5%.

Note:

Under the G3 reporting framework Watercare is required to provide information on G3 labour practices and decent work indicator LA7, relating to occupational health and safety. This additional information has been included to meet G3 criteria.

**FIGURE 23**  
**Staff voluntary turnover**



Note:

Voluntary staff turnover for the year July 2011 to June 2012 was 11.81%, which is within the target range of 10 - 12%.

**FIGURE 24**  
Investment in staff

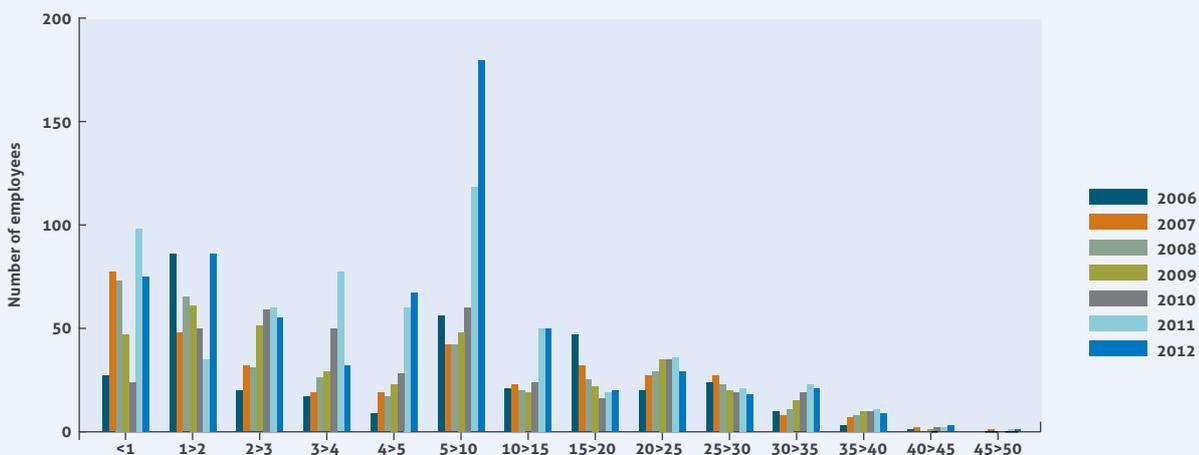
	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	\$000	\$000	\$000	\$000	\$000	\$000	\$000
Total remuneration	24,954	27,292	29,185	31,739	29,713	46,480	55,575
Expenditure on training	428	519	598	664	538	501	604
Health care expenditure	94	90	91	143	111	189	137
Life and disability insurance	173	199	227	227	300	417	543
	25,649	28,100	30,101	32,773	30,662	47,587	56,859

**Note:**

Under the G3 reporting framework Watercare is required to provide information on G3 economic indicator EC5 and human rights indicator HR3, relating to market presence and investment and procurement practices. Expenditure on external training for 2011/12 increased by 20% over the 2010/11 period. In addition there was significant levels of internal training given for systems upgrades and projects. No specific training on human rights is given. However, the company has human resources policies in place to ensure the welfare and consistent treatment of all employees, in line with New Zealand government legislation. Watercare applies a total remuneration policy which is inclusive of company-funded life and disability insurances. No Watercare permanent employee is paid less than 28% above the legal minimum wage.

Lowest paid permanent employee – Trainee Water Treatment Operator – \$17.31 per hour  
1/4/2012 Minimum Wage \$13.50

**FIGURE 25**  
Staff service profile

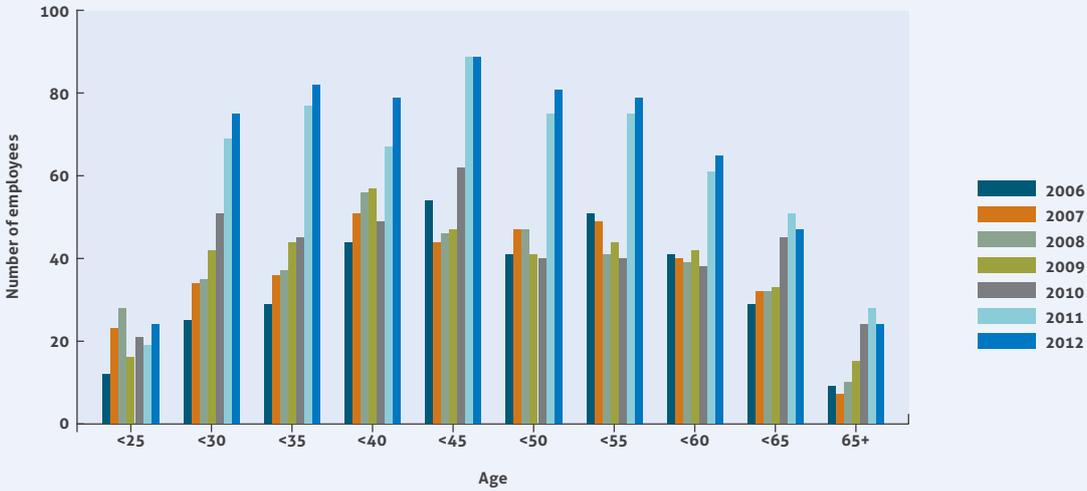


**Note:**

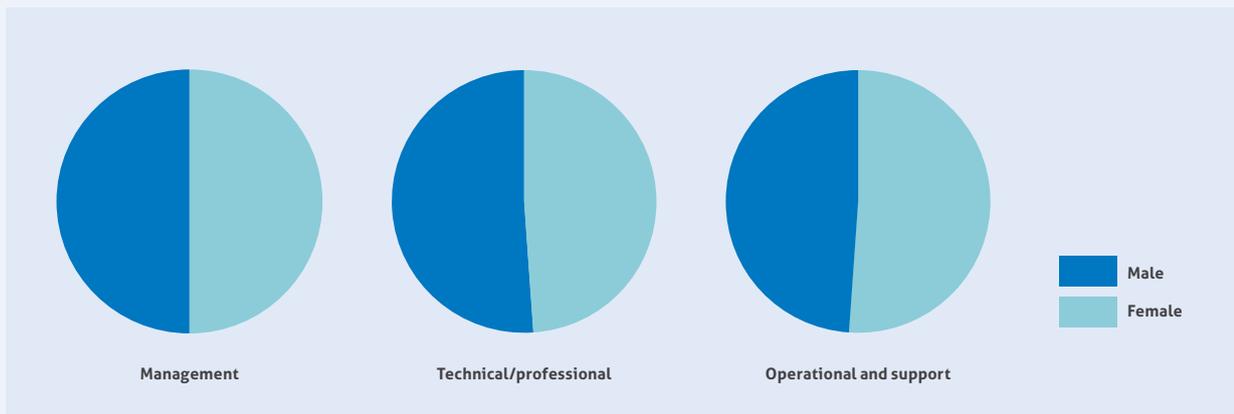
The graph shows the levels of staff service. With the amalgamation of Watercare and the Local Network Operators (LNOs) in November 2010 there has been significant change in some areas of service profiles, with 76% of staff now having less than 10 years service. It should be noted that staff joining from LNO and Councils as part of the amalgamation retained their service with those organisations and this is reflected in the data.

Under the G3 reporting framework Watercare is required to provide information on G3 labour practices and decent work indicators LA2, relating to employment. This additional information has been included to meet G3 criteria.

**FIGURE 26**  
**Staff demographics**  
**Employee age profile**



**Salary Level Ratio Men : Women**



**Notes:**

This represents average male salary to average female salary, by grade level. Executive level excludes CEO as there is only one incumbent at that level. Actual salary levels are not reported so as to protect individual's confidentiality.

There have been no instances of discrimination or violation of the rights of indigenous people. G3 indicators HR1, HR5, HR6 and HR7 are not considered applicable to Watercare as operations are only in New Zealand.

Security is provided by professional contractors and there is full compliance with legislation, thus G3 indicator HR8 is not considered applicable.

Under the G3 reporting framework Watercare is required to provide information on G3 labour practices and decent work indicators LA2, LA13 and LA14, and human rights indicators HR1, HR4, HR5, HR6, HR7, HR8 and HR9, relating to employment, diversity and equal opportunity, investment and procurement practices, non-discrimination, freedom of association and collective bargaining and child labour.

One criteria reported under the G3 framework is the comparison of salary levels paid to men and women for similar roles. This analysis has been prepared in four salary bands. At Executive and Senior Management levels the average salary ratio for women compared to men is 96%, for Management and senior supervisory levels the ratio is 101%; at the technical and professional level the ratio is 97%, and at the operational and support levels the ratio is 103%.

There have been no instances of discrimination or violation of the rights of indigenous people. As Watercare's operations are restricted to New Zealand, G3 human rights indicators HR1, HR5, HR6, and HR7 are not considered applicable to Watercare. Indicator HR8 regarding security practices is also not considered applicable as security is provided by professional external contractors.

**FIGURE 27**  
Average staff numbers



**Note:**

The data includes all permanent Watercare staff members but does not include staff on fixed term contracts, contractors, casual staff or students on work experience.

Under the G3 reporting framework Watercare is required to provide information on economic indicator EC7 relating to market presence. This additional information has been included to meet G3 criteria.

**FIGURE 28**  
Workforce by employment type, contract, and region

**Headcount**

	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
Individual Employment Agreements (IEA)	232	252	275	278	295	306	512	541
Collective Employment Agreements (CEA)	82	81	81	82	82	80	96	104
WSL apprentices	3	2	3	2	2	1	0	0
Part-time FTEs	4	2	2	1	1	1	3	2.5
<b>Subtotal</b>	<b>321</b>	<b>337</b>	<b>361</b>	<b>363</b>	<b>380</b>	<b>388</b>	<b>611</b>	<b>648</b>
F/Term Individual Agreements (IEA) >1yr	3	2	2	4	6	7	5	4
F/Term Individual Agreements (IEA) <1yr	11	14	9	8	9	7	17	14
Temps	-	1	-	-	-	-	-	-
Students	1	2	-	2	-	-	-	-
Casual FTEs	3	6	5	4	8	10	2	2.8
<b>Total head count on payroll</b>	<b>339</b>	<b>362</b>	<b>377</b>	<b>382</b>	<b>403</b>	<b>412</b>	<b>635</b>	<b>668</b>

**Note:**

Under the G3 reporting framework Watercare is required to provide information on G3 labour practices and decent work indicators LA1, LA3, LA4 LA5, LA11 and LA12, relating to employment, labour/management relations and training and education. This additional information has been included to meet G3 criteria.

With the exception of a 1 person satellite Laboratory operated in Queenstown, Watercare only operates within the Auckland region.

15.5% of total workforce are covered by 6 Collective Agreements negotiated on a bi-annual basis.

84% of the total workforce (being all salaried staff and a number of wages staff) have formal performance reviews on an annual basis.

All employment agreements (individual and collective) provide for prior consultation where restructuring is likely to impact on individual roles.

All permanent staff receive the same benefits, with the exception of staff over the age of 65 who do not qualify for group life and income protection insurance.

Only citizens and permanent residents qualify to join Kiwisaver and gain the employer subsidy.

Where staff are to be made redundant a minimum one month period of notice is given and outplacement training and other support is provided.

FIGURE 29

Customer satisfaction with the contact centre



Note:

A sample of customers receiving maintenance work are surveyed by TNS on their contact centre work experience. Overall the Contact Centre satisfaction was 7.7. All scores are out of a maximum score of 9. To obtain an overall score an average of the Contact Centre surveys scores was taken and scaled up to a percentage.

FIGURE 30

Grade of service

Min Date	Year Month	Offered Calls	Abandoned Calls	Answered Calls	GOS	Abandoned Calls SL1	Answered Calls <SL2	Abandoned %	AHT
1/07/2011	2011-7	29,800	475	29,325	83.82%	81	24,911	1.59%	328.4
1/08/2011	2011-8	32,480	461	32,019	86.67%	70	28,089	1.42%	300.8
1/09/2011	2011-9	27,256	588	26,668	82.27%	70	22,366	2.16%	312.5
1/10/2011	2011-10	29,232	890	28,342	74.51%	126	21,686	3.04%	306.0
1/11/2011	2011-11	31,225	566	30,659	80.55%	86	25,082	1.81%	284.8
1/12/2011	2011-12	23,201	484	22,717	81.13%	81	18,758	2.09%	289.1
3/01/2012	2012-1	25,000	541	24,459	79.79%	76	19,887	2.16%	298.5
1/02/2012	2012-2	27,671	629	27,042	77.80%	84	21,463	2.27%	281.7
1/03/2012	2012-3	28,579	1,103	27,476	69.33%	132	19,723	3.86%	276.1
2/04/2012	2012-4	25,282	612	24,670	81.89%	76	20,642	2.42%	298.4
1/05/2012	2012-5	32,267	416	31,851	88.72%	67	28,567	1.29%	321.6
1/06/2012	2012-6	29,565	249	29,316	92.72%	45	27,370	0.84%	328.1
<b>TOTAL</b>		<b>341,558</b>	<b>7,014</b>	<b>334,544</b>	<b>81.8%</b>	<b>994</b>	<b>278,544</b>	<b>2.05%</b>	<b>302.8</b>

Key

GOS: Grade of Service  
AHT: Average Handling Time

**FIGURE 30 (CONTINUED)**  
Grade of service and call volume



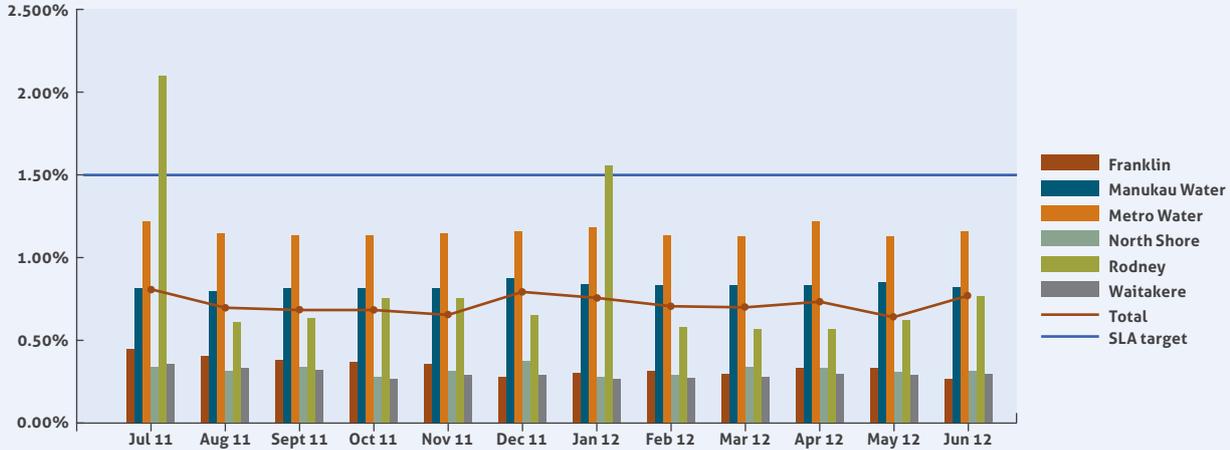
**FIGURE 31**  
Complaint types and response rates

Month Received	Complaints				Correspondence				Combined			
	Number Received	Resolved in SLA	% within SCI	SCI Target	Number Received	Resolved in SLA	% within SCI	SCI Target	Number received	Resolved in SLA	% within SCI	SCI Target
Jul 11	241	238	98.8%	95%	1,902	1,902	100.0%	95%	2,143	2,140	99.9%	95%
Aug 11	192	190	99.0%	95%	1,824	1,823	99.9%	95%	2,016	2,013	99.9%	95%
Sep 11	188	183	97.3%	95%	1,843	1,843	100.0%	95%	2,031	2,026	99.8%	95%
Oct 11	126	113	89.7%	95%	1,866	1,865	99.9%	95%	1,992	1,978	99.3%	95%
Nov 11	114	106	93.0%	95%	2,294	2,294	100.0%	95%	2,408	2,400	99.7%	95%
Dec 11	67	65	97.0%	95%	2,072	2,072	100.0%	95%	2,139	2,137	99.9%	95%
Jan 12	58	55	94.8%	95%	1,458	1,456	99.9%	95%	1,516	1,511	99.7%	95%
Feb 12	66	64	97.0%	95%	2,201	2,200	100.0%	95%	2,267	2,264	99.9%	95%
Mar 12	70	68	97.1%	95%	2,359	2,357	99.9%	95%	2,429	2,425	99.8%	95%
Apr 12	84	80	95.2%	95%	2,063	2,059	99.8%	95%	2,147	2,139	99.6%	95%
May 12	72	68	94.4%	95%	2,572	2,562	99.6%	95%	2,644	2,630	99.5%	95%
Jun 12	77	76	98.7%	95%	2,953	2,933	99.3%	95%	3,030	3,009	99.3%	95%
YTD	1,355	1,306	96.4%	95%	25,407	25,366	99.8%	95%	26,762	26,672	99.7%	95%

Note:  
The service level agreement (SLA) for resolution is 10 working days.

**FIGURE 32**  
Household affordability

Average weekly billed value as percentage of weekly household income.



**FIGURE 33**  
Community impact of operations

Under the G3 reporting framework, Watercare is required to provide information on G3 society indicator SO1, relating to community.

Watercare actively maintains positive relationships with communities affected by its business. Watercare’s Statement of Corporate Intent lays out the activities to be undertaken by Watercare and sets specific economic, social and environmental objectives for the company. This process inherently includes consideration of the impacts Watercare’s business will have on the wider community.

At a local level, Watercare fosters active relationships with affected communities through forums and individual relationships, as well as carrying out impact assessments as part of the process of applying for resource consent approvals for all major projects. These principles of community consideration apply through all stages of Watercare’s business, from the start of a new project or operation through to its conclusion.

Project teams identify potential effects on communities and assess options to avoid, remedy or mitigate adverse effects. Information is gathered using a number of sources, including stakeholders identified through relevant legislation or by local authorities; general stakeholders; iwi; and local knowledge and advisory groups.

This approach has been highly effective in mitigating negative and maximising positive impacts. For example, Project Manukau – the \$450 million upgrade of the Mangere Wastewater Treatment Plant – involved extensive consultation with the local community, culminating in the return of the harbour for community use and the removal of the plant oxidation ponds. Watercare maintains working relationships with a wide range of stakeholders including the Environmental Advisory Group and local community groups around various projects.

Following the 1 November 2010 integration of the Auckland water authorities, Watercare’s interactions with the community increased as the company gained responsibility for local water and wastewater networks spread over a greater geographical area. Accordingly, Watercare has developed and maintained strong linkages with a wider range of communities and their representatives, including Auckland’s newly-created Local Boards. In May 2011, the company appointed a dedicated executive to directly manage relationships with Local Boards.

More recently, wide ranging consultation has taken place on the Hunua No. 4 water transmission pipeline and the Central Interceptor wastewater project. Public consultation with iwi, community groups and Auckland Council Local Boards has been effective and is ongoing.

Note: Under the G3 reporting framework Watercare is required to provide information on the society indicator SO1 relating to the community. This additional information has been included to meet G3 criteria.

**FIGURE 34****Public policy participation**

Under the G3 reporting framework Watercare is required to provide information on G3 society indicators SO5 and SO6, relating to public policy. Watercare is an active participant in the development of relevant legislation and policy initiatives.

**Significant issues and core position****New Zealand Coastal Policy Statement 2010.**

The Government released and adopted the revised New Zealand Coastal Policy Statement in 2010. This sets the policy direction for managing the coastal environment, including discharges to the coastal marine area. Regional and local governments are now required to give effect to the Coastal Policy Statement through their regional plans.

**National Policy Statement for Freshwater Management 2011.**

The Government has now adopted the National Policy Statement for Freshwater Management. Regional and local governments are now required to give effect to the NPS in their regional plans.

**Land and Water Forum.**

Watercare is a plenary member of the Land and Water Forum. The Forum consists of representatives from various organisations with an interest in fresh water. Its task, through a stakeholder led process, is to recommend outcomes, goals and long-term strategies for fresh water in New Zealand. Initially, the Forum reported to the Minister for the Environment and the Minister of Agriculture in August 2010. Currently, the Forum is preparing a series of reports on a range of other subjects including Water Allocation and Governance.

**The Auckland Regional Council (ARC) Air, Land & Water Plan.**

Watercare made a series of submissions related to policies and rules related to water supply and wastewater activities. Watercare has been actively working with Auckland Council to resolve the outstanding appeals. All but a few final matters have now been resolved.

**Environment Waikato Water Allocation Variation to Regional Plan.**

Watercare was supportive of proposed changes which aim to protect domestic and community water supplies and to ensure that sufficient water is retained for in-stream requirements during periods of water shortage. Watercare worked in collaboration with other municipal water supply authorities in the region to present a united front on these issues. The Environment Court decision was issued in November 2011. The outcome was favourable to Watercare and the other municipal water supplier insofar as it provides for priority for municipal water supply through its final policies, objectives, and rules.

**New Zealand Standard Ecological Flows and Water Levels.**

Watercare lodged a submission to this standard to ensure appropriate standards are established with respect to its storage and takes of surface and aquifer water supply. The submission process has been completed. The Ministry has put this work on hold pending the outcomes from the work being done by the Land and Water Forum. The Land and Water Forum report on limits has been released to the Government but as yet no final position has been adopted.

**Auckland Plan.**

The Auckland Council was required by legislation to prepare a spatial plan (called the Auckland Plan) to set the strategic direction of the growth and development of the Auckland Region for the next 30 years. Watercare made a comprehensive written and oral submission the Plan, and worked with Council to address issues related to the provision of water supply and wastewater infrastructure in Auckland. The Plan was formally launched in March 2012.

**Auckland Council Unitary Plan.**

The Auckland Council is currently preparing a new Unitary Plan that will replace the existing Regional Policy Statement, four regional plans, and seven district plans. Council is planning to publicly notify this plan at the end of 2013. Watercare has been actively working with and providing feedback on the development of objectives, policies and rules across the wide range of issues that affect Watercare's core activities.

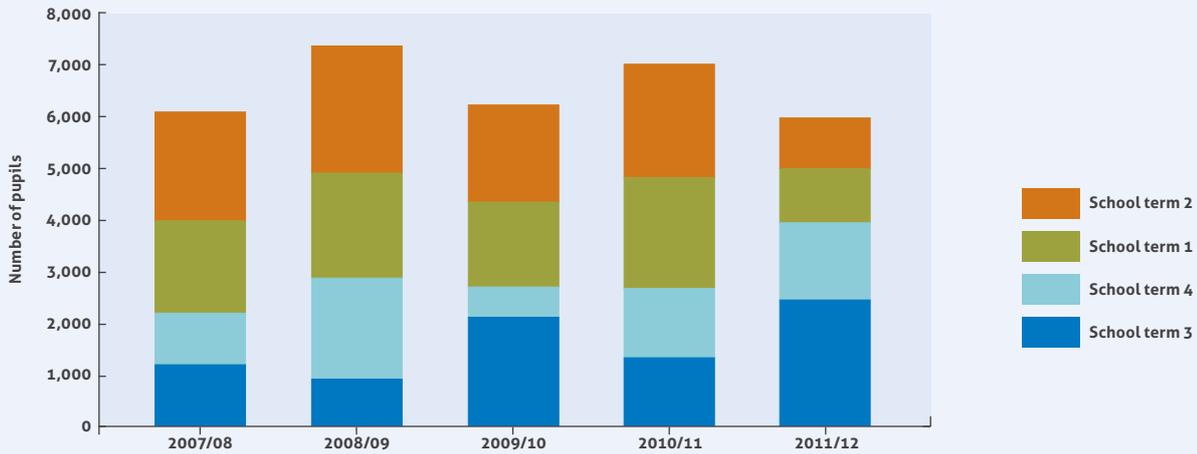
**FIGURE 35**  
Rain Forest Express passengers and trips

Year ending 30 June	2002	2003	2005	2006	2007	2008	2009	2010	2011	2012
Total passengers	17,497	9,515	10,850	9,244	14,623	13,037	11,435	12,318	19,287	14,372
School trips	76	36	25	21	49	47	40	38	67	24
Charter trips	124	61	92	68	84	81	80	79	90	79
Scheduled trips	179	104	170	129	178	158	161	185	286	242
Total trips	379	201	287	218	311	286	281	302	440	345

**Note:**

The Rain Forest Express runs on a six-kilometre tram line in the Waitakere Ranges. It is still used for the maintenance of the Upper Nihotupu Dam. It is a community asset offering the public an opportunity to see a supply dam, tunnels, glow worms, cave weta and natural flora. The Rain Forest Express is available for school groups and community use.

**FIGURE 36**  
Adopt A Stream pupil numbers



**Note:**

Adopt A Stream is a practical environmental education resource to help students learn about water and the health of their local stream. It is free for schools in the Auckland Council region. The annual information covers the period from 1 July to 30 June, i.e. from term 3 to term 2.

FIGURE 37

## Watercare's greenhouse gas emissions

Year ending 30 June	1990	2005	2006	2007	2008	2009	2010	2011	2012
<b>Scope 1: Emissions from fossil fuels, nitrogen compounds and methane releases: (non-renewable)</b>									
<b>Methane and nitrous oxide gas emissions from wastewater networks and treatment plants</b>									
Mangere	105,790	12,590	12,317	11,278	11,690	12,843	14,382	14,166	12,199
Rosedale	24,465	2,418	2,467	2,518	2,569	2,622	2,675	2,730	673
Army Bay	678	683	696	711	725	740	755	771	779
Orewa	588	0	0	0	0	0	0	0	0
Waiwera	19	23	23	24	24	25	25	26	26
Wellsford/Te Hana	131	157	160	164	167	170	174	177	177
Warkworth	172	115	117	119	122	124	127	129	119
Snells/Algies	171	206	210	214	219	223	228	232	232
Omaha	35	42	43	44	45	46	47	48	82
Matakana	26	31	31	32	33	33	34	35	35
Helensville	180	217	221	225	230	235	240	244	245
Huapai	10	12	12	13	13	13	14	14	19
Denehurst	0	0	0	0	13	13	14	14	14
Owhanake	0	1	1	1	1	1	1	1	3
Kawakawa bay									20
Beachlands	120	88	89	91	93	95	97	99	110
Kingseat	6	5	5	5	5	5	6	6	6
Clarks Beach	80	96	98	100	102	104	106	108	112
Waiuku	376	452	461	471	480	490	500	510	454
Pukekohe/Tuakau	751	901	920	939	958	977	997	1,018	892
Bombay	4	4	4	4	4	4	4	4	3
Motor vehicles owned by Watercare (6)	300	120	120	120	120	565	580	630	591
<b>Total for Scope 1</b>	<b>133,903</b>	<b>18,159</b>	<b>17,997</b>	<b>17,072</b>	<b>17,613</b>	<b>13,450</b>	<b>14,961</b>	<b>20,961</b>	<b>16,791</b>
<b>Scope 2: Greenhouse gas from energy imports and exports</b>									
From hydro-generators (8)									
From generators at wastewater treatment plant (8)									
Energy imports (7)									
Water	2,000	6,150	6,230			197	81	4,067	3,446
Wastewater	3,000	9,270	9,140			487	171	9,583	9,534
Business premises	400	460	450					324	304
<b>Total for Scope 2</b>	<b>5,400</b>	<b>15,880</b>	<b>15,820</b>	<b>560</b>	<b>580</b>	<b>684</b>	<b>253</b>	<b>13,974</b>	<b>13,284</b>
<b>Total for Scope 1 and 2</b>	<b>139,303</b>	<b>34,038</b>	<b>33,817</b>	<b>17,631</b>	<b>18,193</b>	<b>14,133</b>	<b>15,214</b>	<b>34,935</b>	<b>30,075</b>
<b>Scope 3: Greenhouse gas from business travel, suppliers and construction materials</b>									
Air travel	50	100	90	70	80	61	51	24	28
Motor vehicles used by Watercare but not owned by Watercare	10	40	70	90	100	100	68	40	41
Waste		13	13	10	11	12	12	12	12
Transmission and distribution line losses for purchased electricity									
<b>Total for Scope 3</b>	<b>60</b>	<b>153</b>	<b>173</b>	<b>170</b>	<b>191</b>	<b>173</b>	<b>131</b>	<b>76</b>	<b>81</b>
<b>Net total for Scope 1, 2 and 3 (8)</b>	<b>139,363</b>	<b>34,191</b>	<b>33,990</b>	<b>17,802</b>	<b>18,384</b>	<b>14,306</b>	<b>15,344</b>	<b>35,012</b>	<b>30,156</b>

## Notes:

- Watercare has undergone a rigorous assessment of its greenhouse gas measurements, analysis and assumptions. It has recalculated its historical and current emissions more conservatively and comprehensively. This has resulted in additional emissions sources being identified and some of the 1990 numbers being reduced.
- Oxidisation pond emissions have been recalculated using IPCC recommendations.
- Biosolids are used in land rehabilitation. It is assumed that the remaining organic compounds decompose over 30 years and that only a fraction of the potential methane is emitted due to bacterial and chemical processes within the landfill. The number is reported from field measurements.
- Nitrous oxide contribution is estimated using 50 per cent of the IPCC 2006 recommendations.
- New engines run on natural gas/biogas instead of diesel.
- Motor vehicles owned by Watercare excludes staff travelling on company business in their own vehicles (see Scope 3).
- Electricity use has been assumed to produce 0.23 kilograms of carbon dioxide per kilowatt hour except for 2003/04 when 0.18 was used.
- Watercare has not counted a credit for the 62,000 tonnes of carbon sink from the 14,600ha of native bush and exotic forests within the Hunua and Waitakere ranges water supply catchments area (mostly owned by Auckland Council).

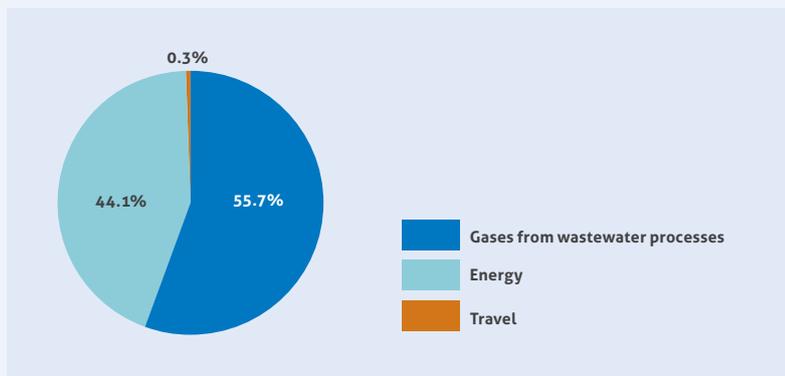
**FIGURE 38**  
**Initiatives to reduce greenhouse gas emissions**

Initiative	CO <sub>2</sub> equivalent per annum (tonnes)	
	Estimated reduction that has been achieved from 1990	Further reduction that could be achieved
Decommissioning of oxidation ponds	34,049	
Construction of further hydro generators	600	200
Use of hybrid cars in vehicle fleet	100	100
Reduction of nitrogen discharged at wastewater treatment plant	3,016	500
Minimisation of biosolids to rehabilitation site	21,237	
Removal of sludge lagoons	59,791	
Maximising methane collection at wastewater treatment plant		720
Minimise fugitive emissions at wastewater treatment plant		8,300
<b>Total for Watercare</b>	<b>118,793</b>	<b>9,820</b>

**Note:**

Under the G3 reporting framework Watercare is required to provide information on G3 environment indicator EN18, relating to emissions, effluents and waste. This additional information has been included to meet G3 criteria.

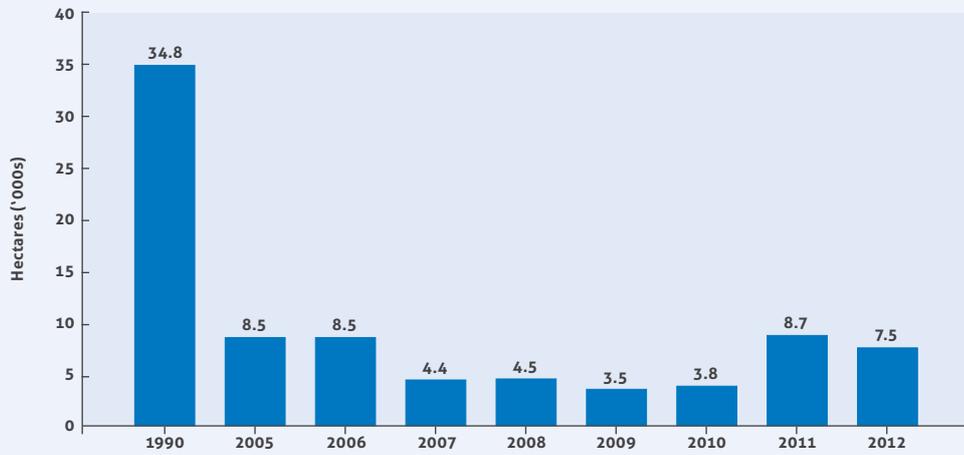
**FIGURE 39**  
**Sources of emissions**



**Note:**

This table summarises the source of Watercare's greenhouse gas emissions.

**FIGURE 40**  
Watercare’s ecological footprint



**Note:**

An ecological footprint helps gauge progress towards sustainability. It calculates the equivalent land area coverage in hectares required to absorb the greenhouse gas emissions for the year from Scope 1 and 2 emissions. The reduction from 1990 was due to decommissioning the oxidation ponds at the wastewater treatment plants.

1990 is the baseline year referenced by the Kyoto agreement.

The 1990 and 2012 figures include estimated emissions for all facilities now controlled by Watercare.

The 2011 figure was relatively high due to Watercare taking on legacy council assets and emissions at integration.

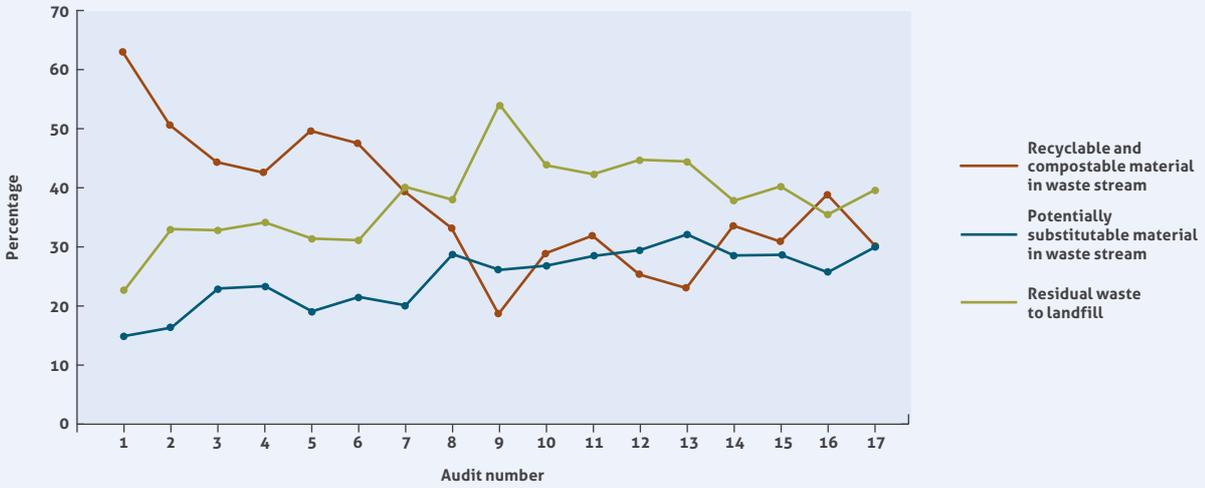
**FIGURE 41**  
Internal energy usage

Energy Summary for 2010/11	MWh	%
Produced by water supply (hydro)	5,976	4.1
Produced by wastewater treatment (biogas) – Mangere	32,178	22.3
Produced by wastewater treatment (biogas) – Rosedale	6,138	4.3
<b>Internally sourced energy</b>	<b>44,292</b>	<b>30.7</b>
Total Energy Consumed	144,291	100.0
Energy produced internally as % of total energy consumed	31%	

**Note:**

1MWh = 1,000kWh which is a measure of energy used.

**FIGURE 42**  
**Recycling in general waste**



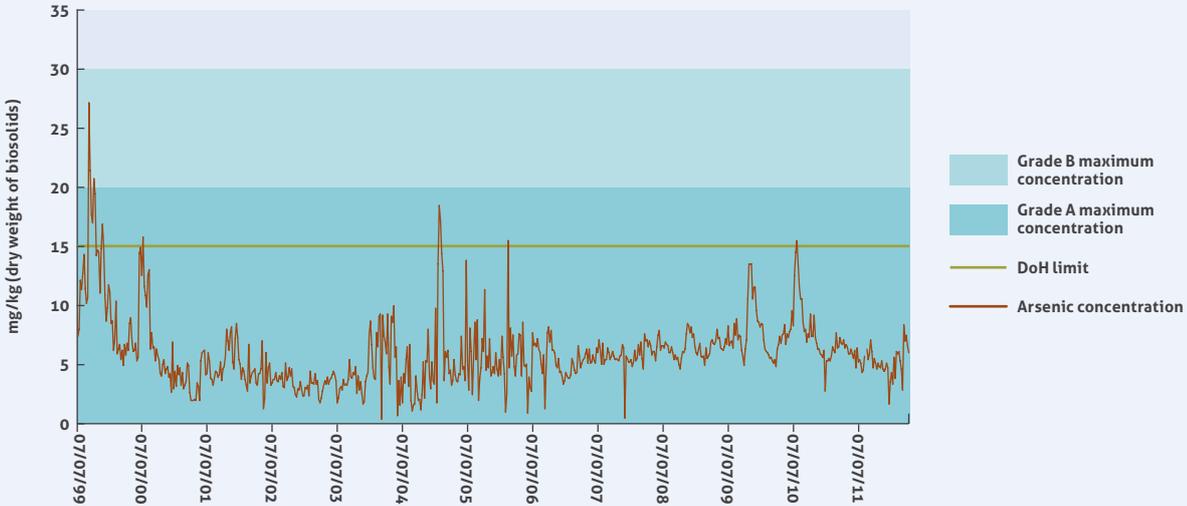
**Note:**

As part of our Zero Waste commitment, Watercare aims to divert all waste streams away from disposal to landfills. The initial target is to remove all Recyclable and Compostable material from the waste stream. When this program started in 2003, these accounted for 62% of Watercares waste, but are now 30% of our waste.

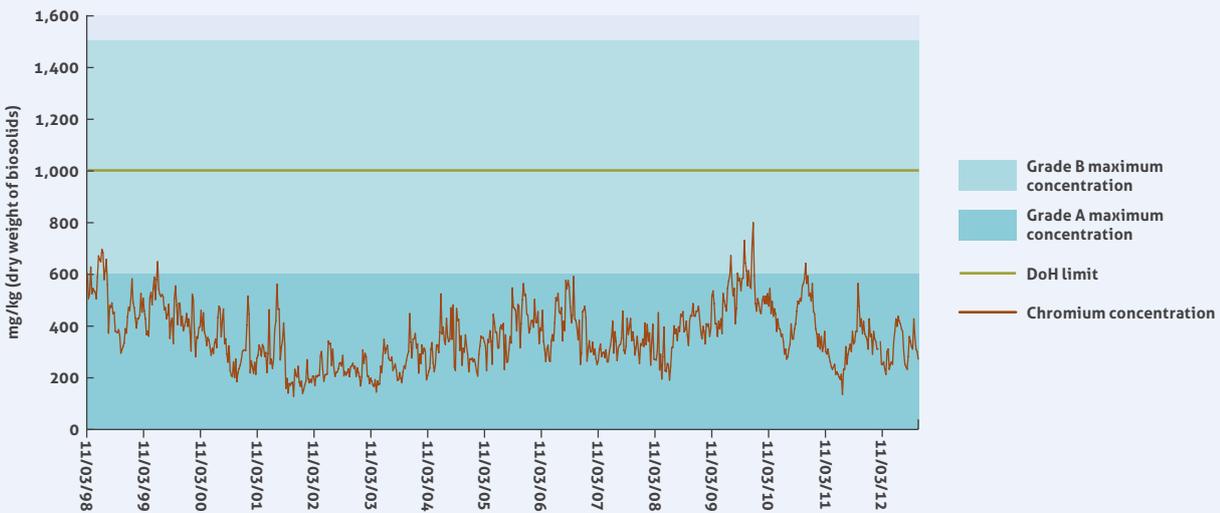
The above are the results of audits designed to identify materials that can be diverted from landfill through the establishment of recovery systems and the substitution of materials.

The audits were begun in 2003 and have been undertaken every six months or so.

**FIGURE 43**  
**Mangere WWTP biosolids arsenic levels**



**Mangere WWTP biosolids chromium levels**



**Mangere WWTP biosolids lead levels**

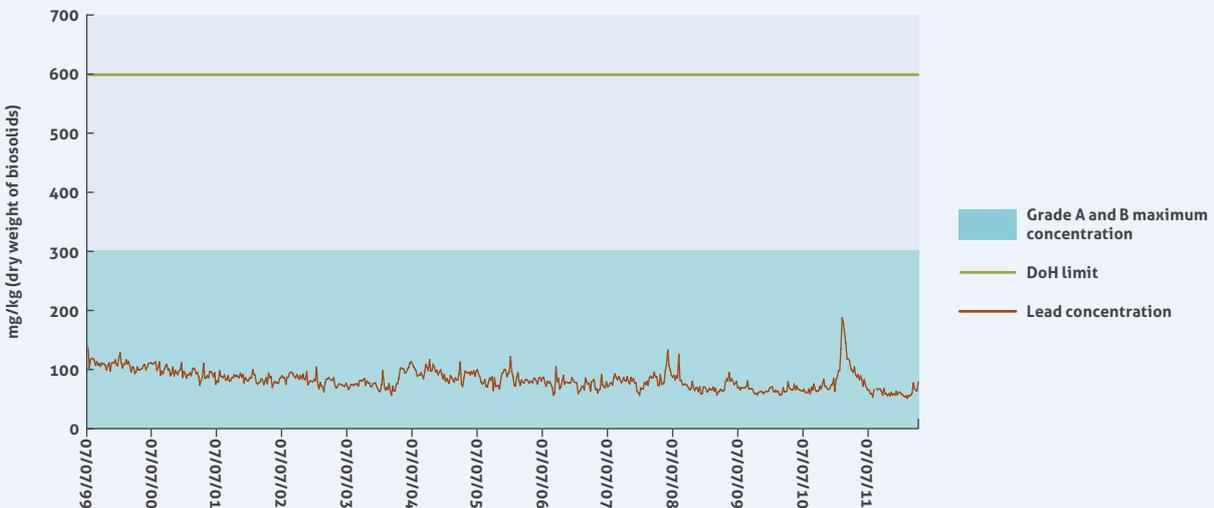
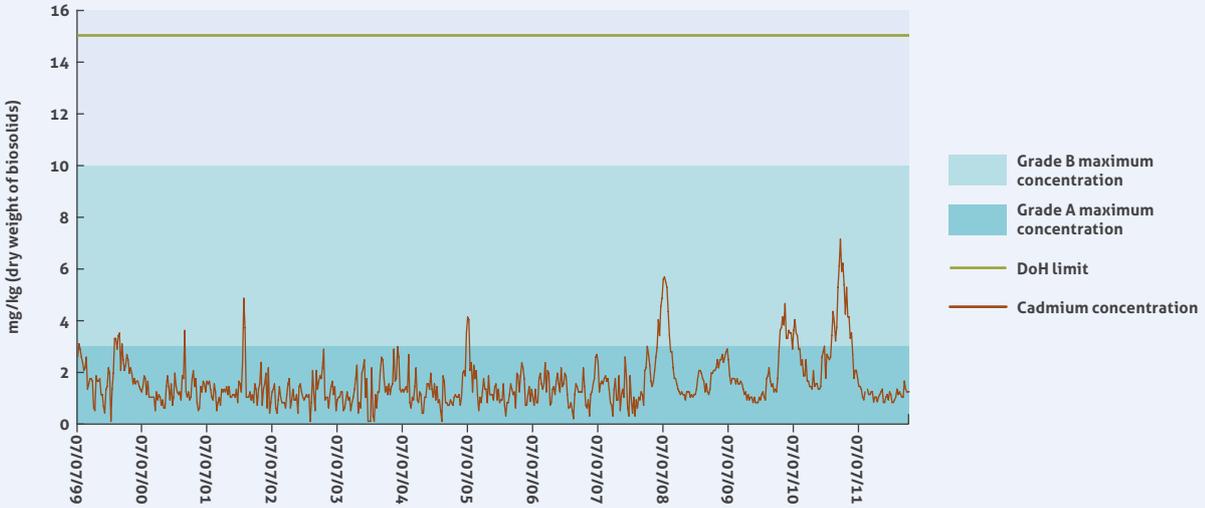
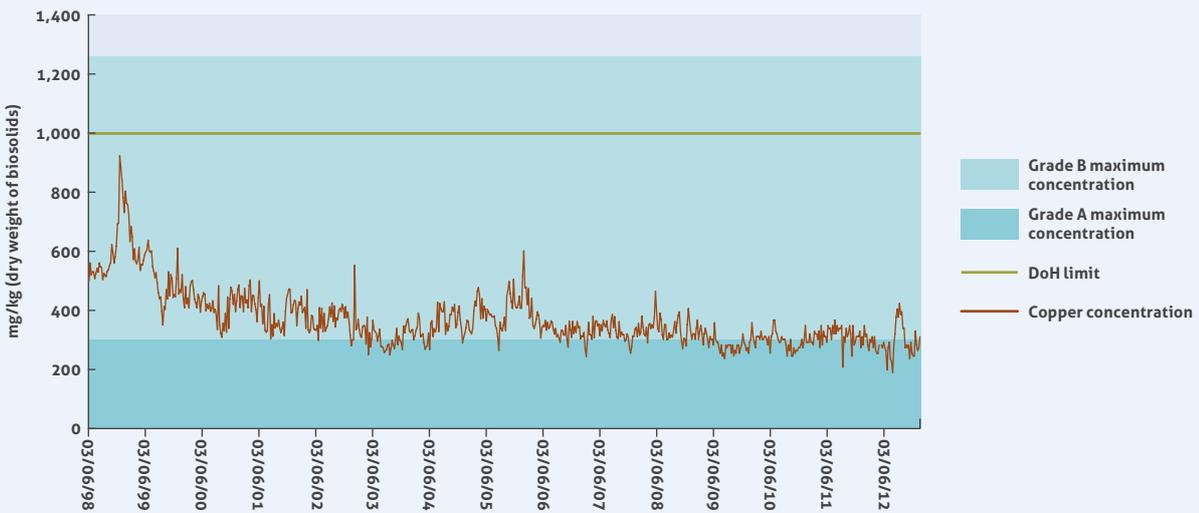


FIGURE 43 (CONTINUED)

Mangere WWTP biosolids cadmium levels



Mangere WWTP biosolids copper levels



Mangere WWTP biosolids mercury levels

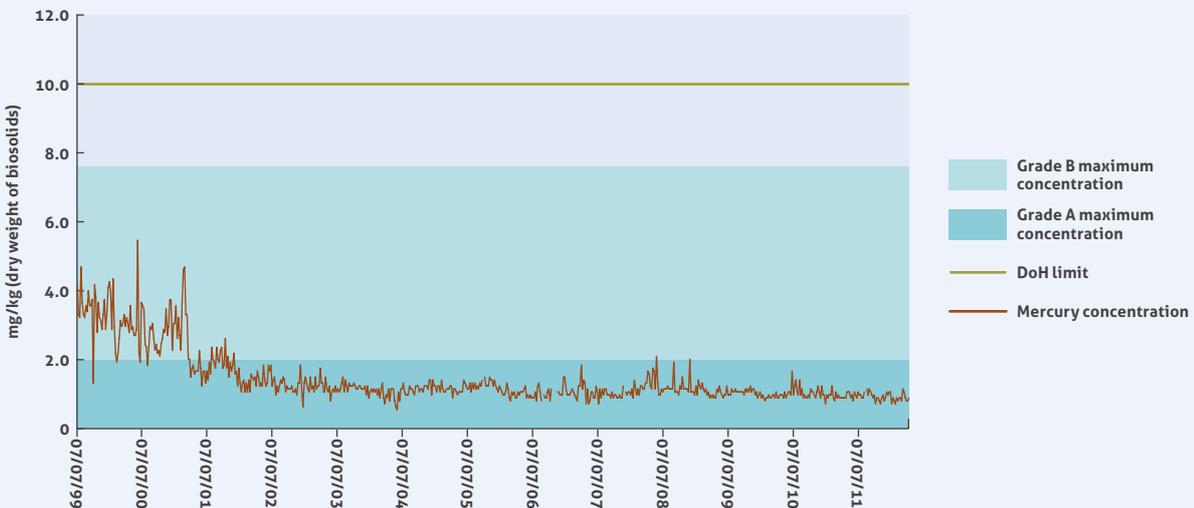
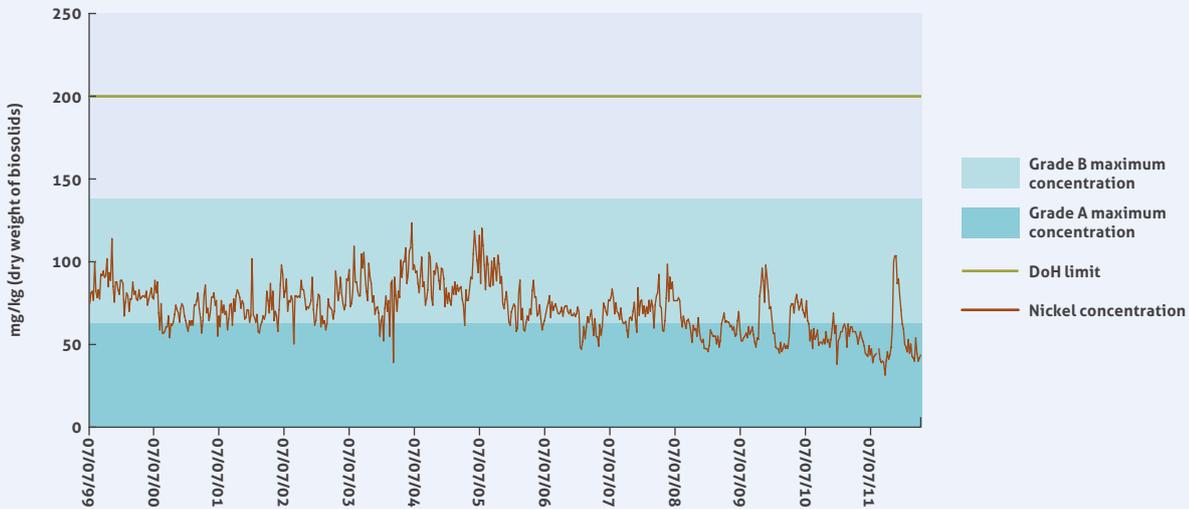
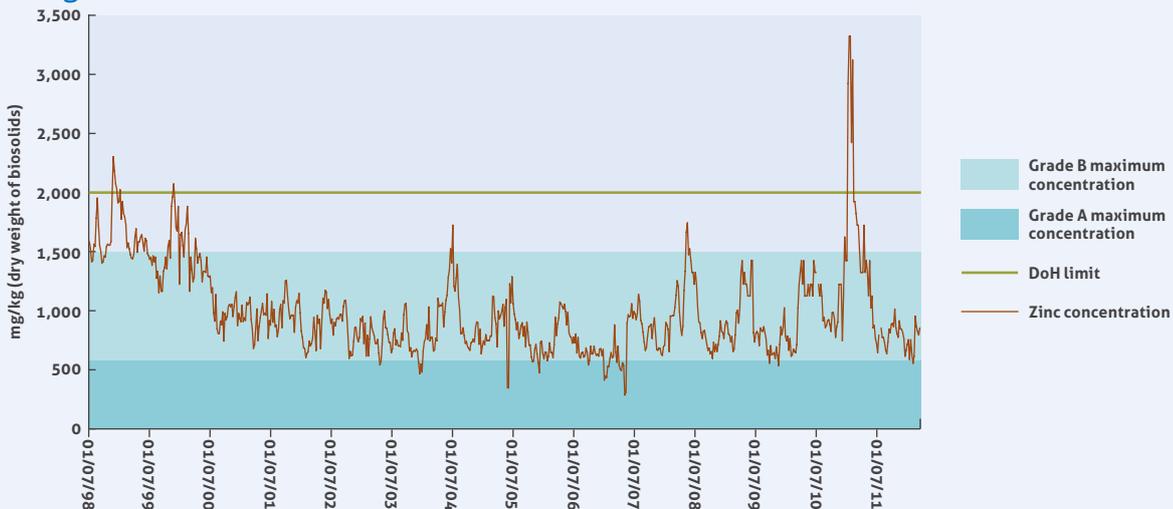


FIGURE 43 (CONTINUED)

Mangere WWTP biosolids nickel levels



Mangere WWTP biosolids zinc levels



Note:

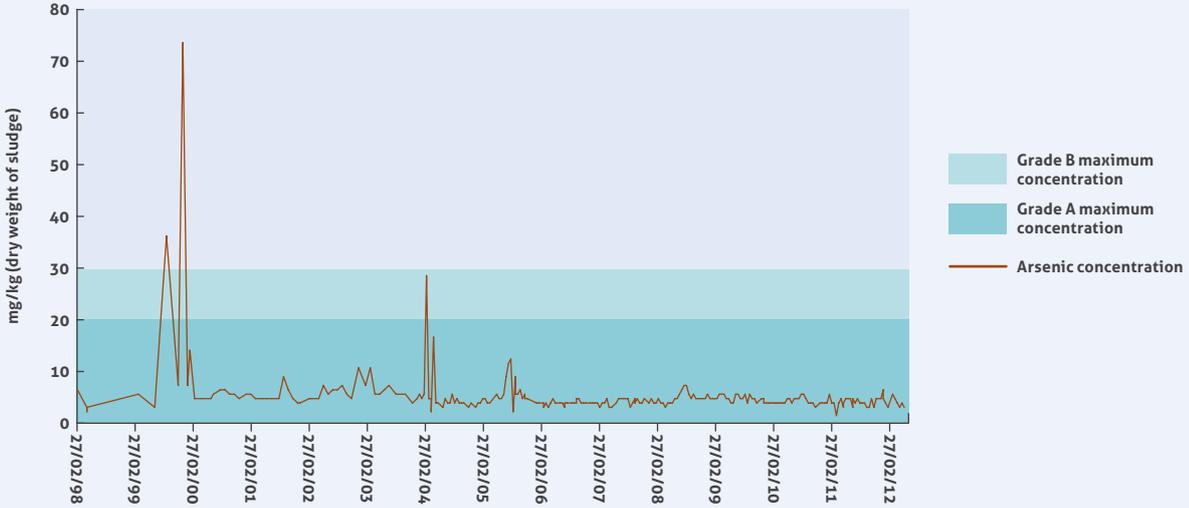
Watercare's largest discharge to land is the biosolids generated as a byproduct of the wastewater treatment process. A significant proportion of metals and pathogens are removed with the solids. Approximately 107,000 tonnes of biosolids were produced at the Mangere Wastewater Treatment Plant in the 2011/12 year. The graphs show the metal levels in the biosolids at the Mangere Wastewater Treatment Plant. The levels have trended downward over time. Arsenic, cadmium, chromium and zinc have decreased over the last year after an increasing trend immediately prior. Arsenic, chromium, and lead has remained within the Grade 'a' limit over the past year, while cadmium copper, mercury and nickel have remained mostly within Grade 'a' limits for the past year. Zinc levels over the past year have remained within the Grade 'b' limit and at times within the Grade 'a' limit. Zinc levels are related to contaminants in stormwater run-off to sewer as a result of the combined sewer system. In general there has been a decline in all metals over the past year compared to previous years.

The Department of Health (DoH) limit is the previous DoH guideline limit for the safe beneficial use of biosolids on land. In August 2003 these were replaced by national guidelines for beneficial reuse of biosolids that grade biosolids for unrestricted use (grade 'a') or restricted use (grade 'b') depending on their contamination loads.

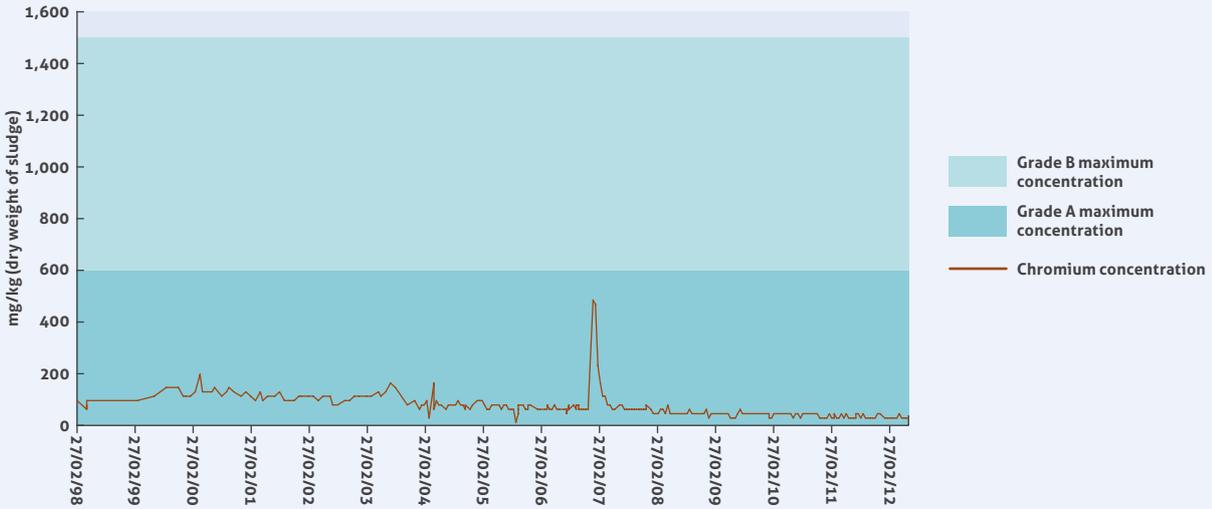
The limits are significant as Watercare is looking to find a beneficial use for biosolids, one option being a forest soil conditioner. The limits proposed in the Auckland Regional Council Air, Land and Water Plan, which were scheduled to come into effect from 2012, are also shown.

FIGURE 43 (CONTINUED)

Rosedale WWTP sludge arsenic levels



Rosedale WWTP sludge chromium levels



Rosedale WWTP sludge lead levels

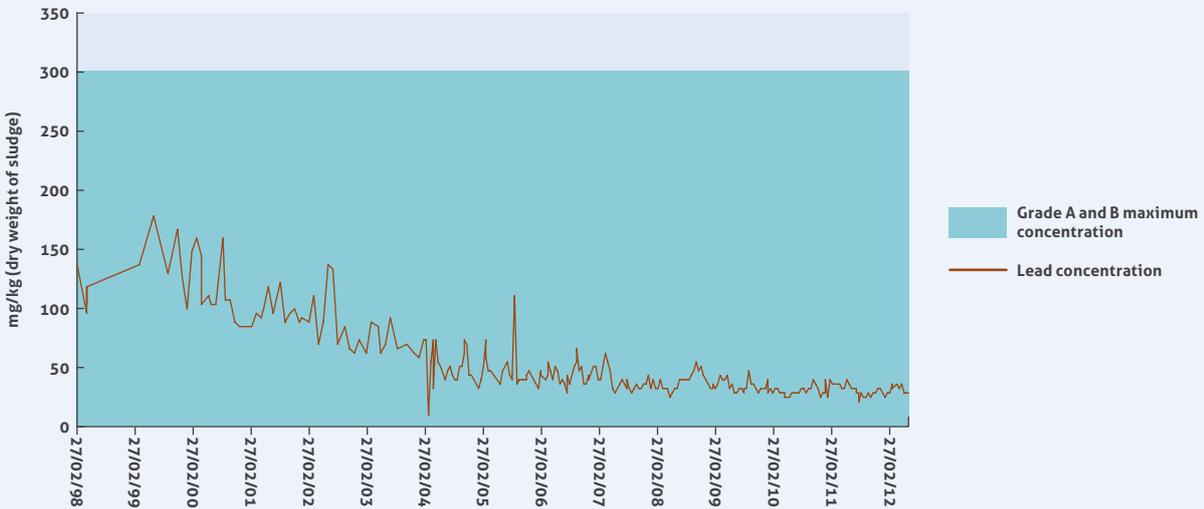
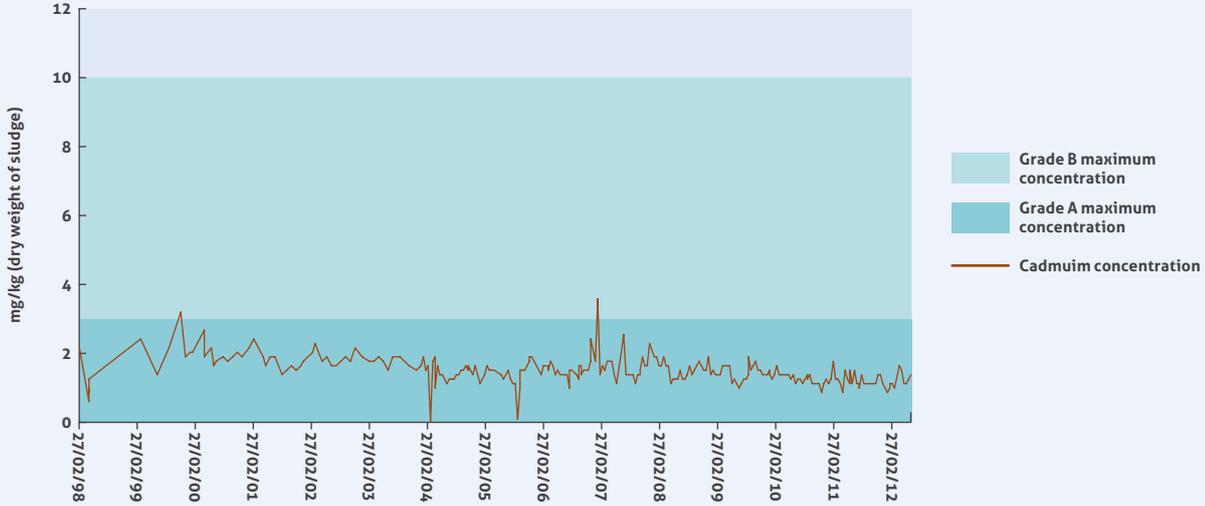
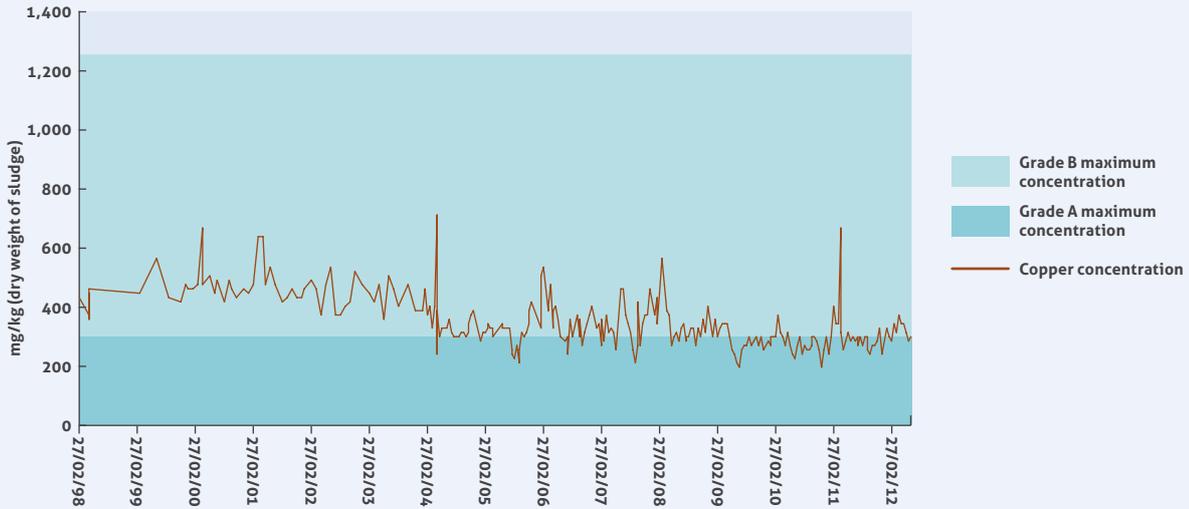


FIGURE 43 (CONTINUED)

Rosedale WWTP sludge cadmium levels



Rosedale WWTP sludge copper levels



Rosedale WWTP sludge mercury levels

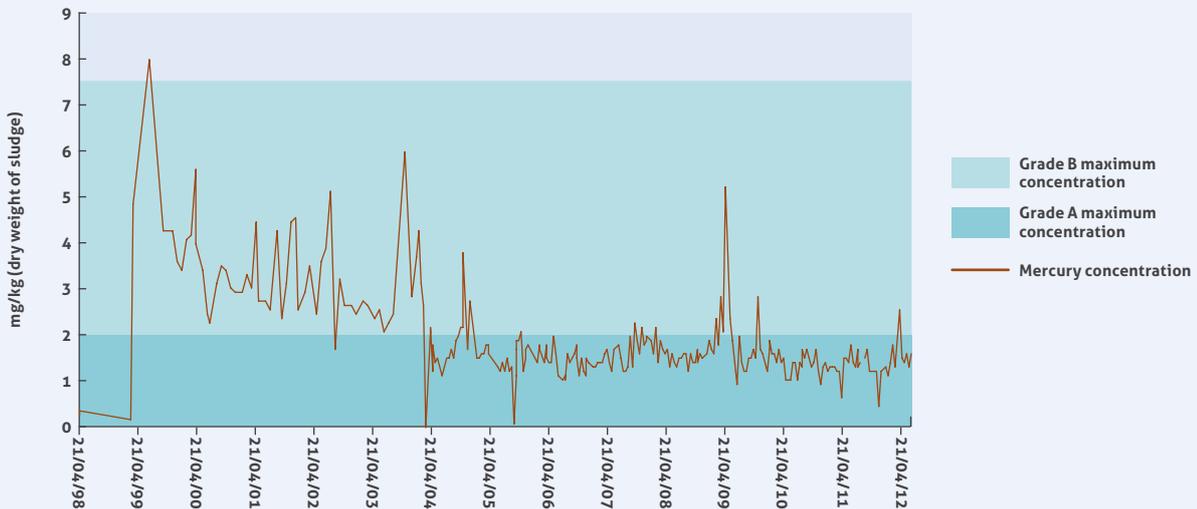
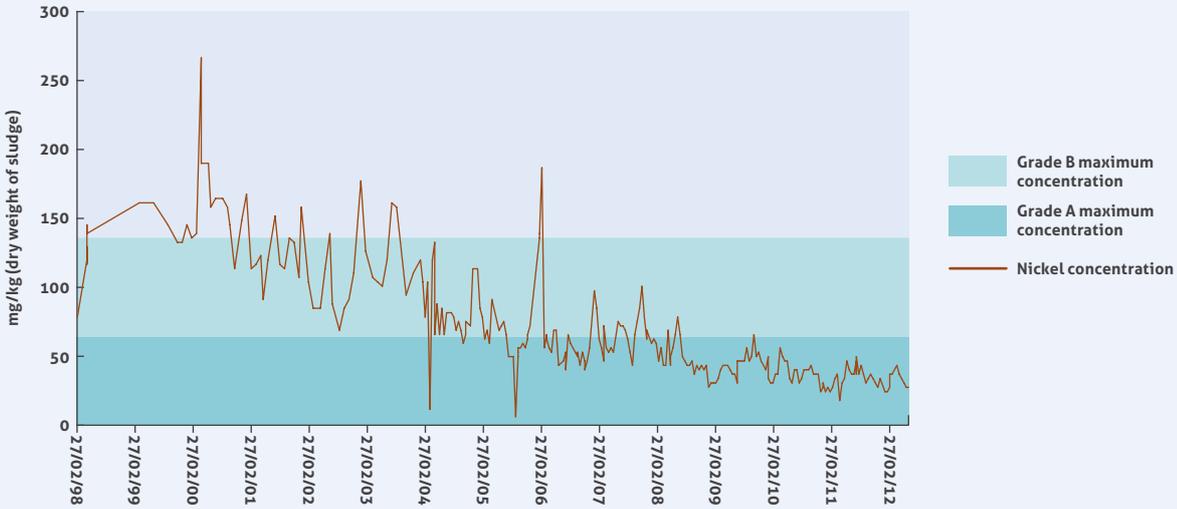
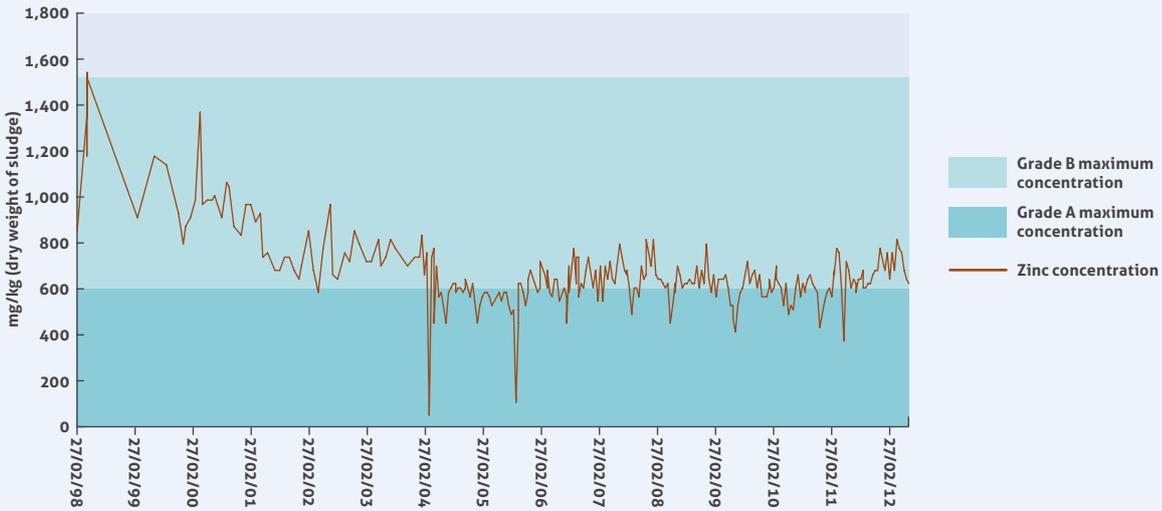


FIGURE 43 (CONTINUED)

Rosedale WWTP sludge nickel levels



Rosedale WWTP sludge zinc levels



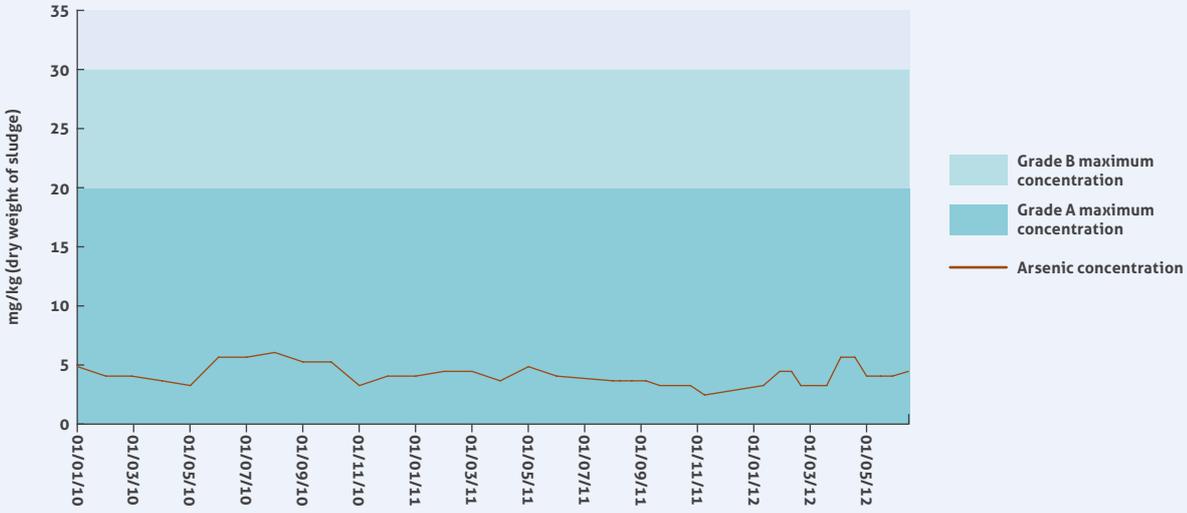
Note:

Approximately 14,794 tonnes of dewatered sludge were produced at the Rosedale Wastewater Treatment Plant in the 2011/12 year. The graphs show the metal levels in the dewatered sludge at the Rosedale Wastewater Treatment Plant. Levels of all metals show a downward trend over time.

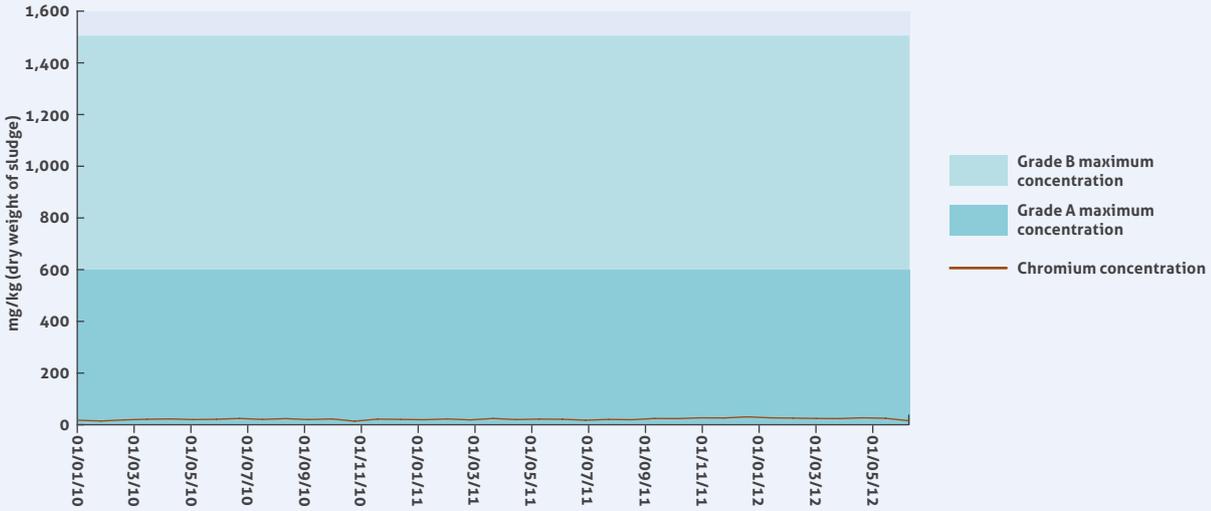
National guidelines for beneficial reuse of biosolids that grade biosolids for unrestricted use (grade 'a') or restricted use (grade 'b') depending on their contamination loads have been included.

FIGURE 43 (CONTINUED)

Army Bay WWTP dewatered sludge arsenic levels



Army Bay WWTP dewatered sludge chromium levels



Army Bay WWTP dewatered sludge lead levels

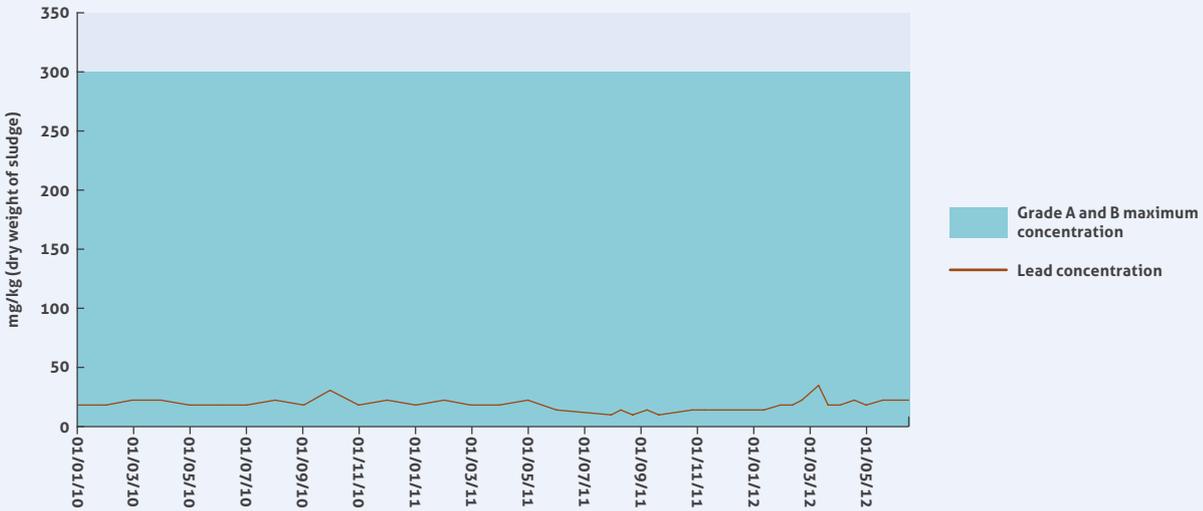
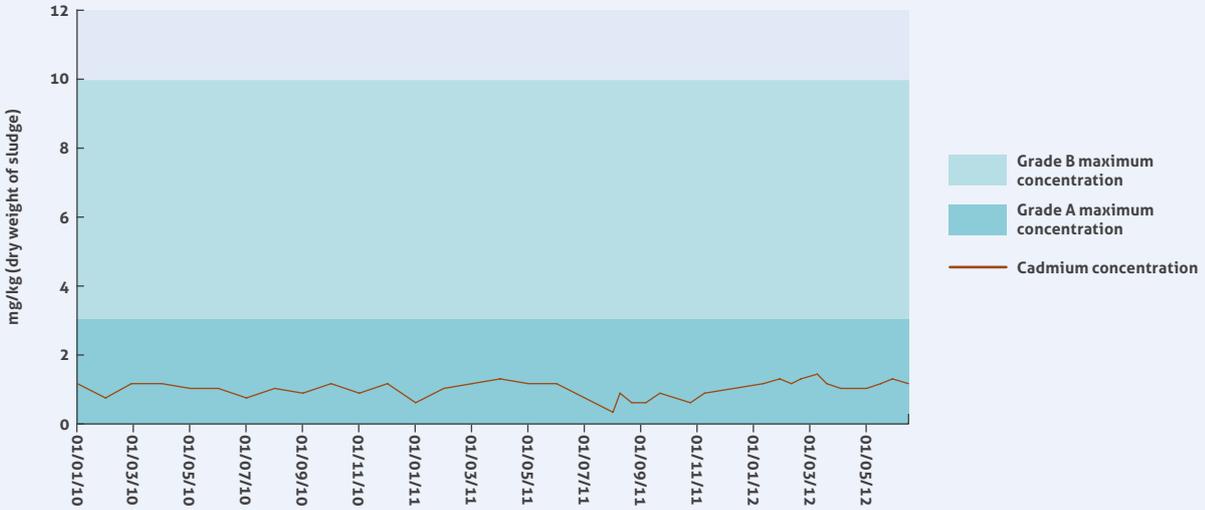
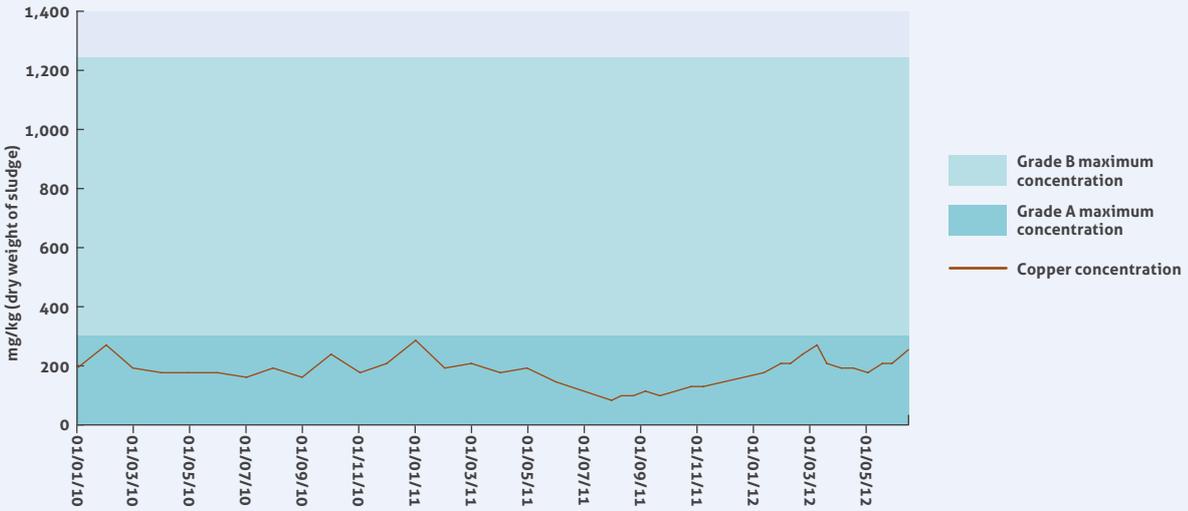


FIGURE 43 (CONTINUED)

Army Bay WWTP dewatered sludge cadmium levels



Army Bay WWTP dewatered sludge copper levels



Army Bay WWTP dewatered sludge mercury levels

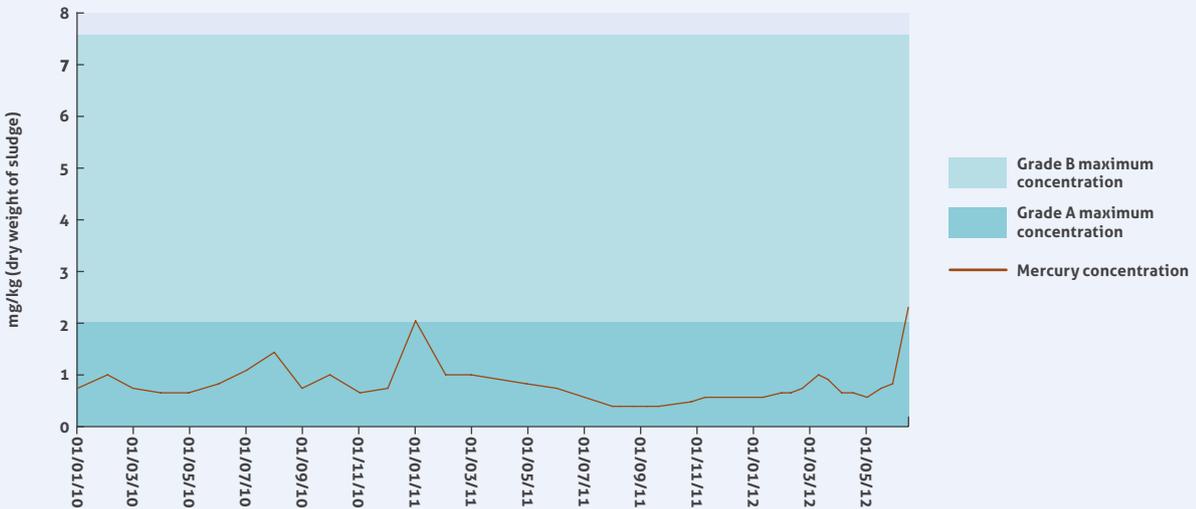
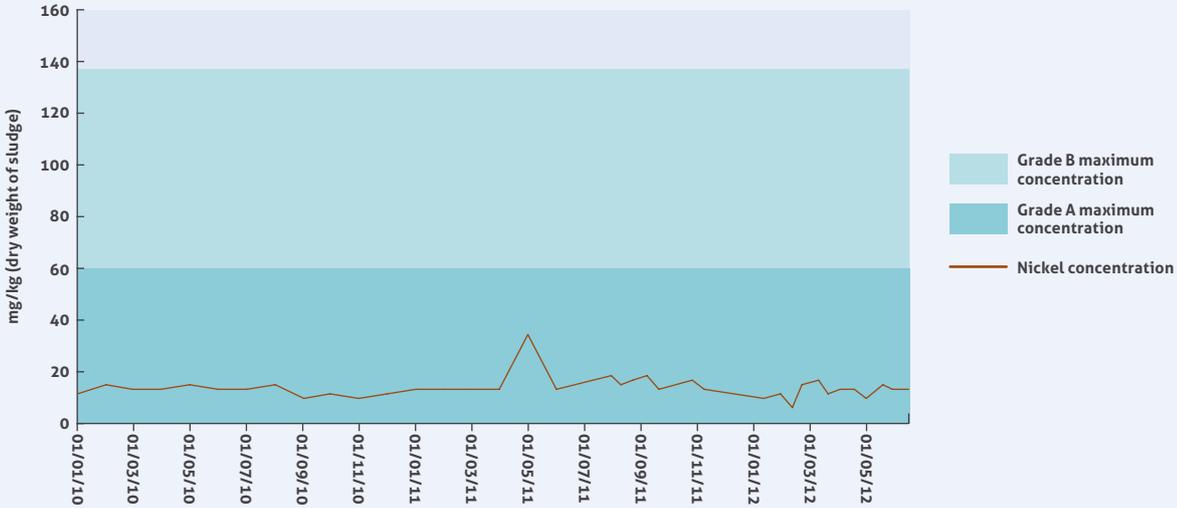


FIGURE 43 (CONTINUED)

Army Bay WWTP dewatered sludge nickel levels



Army Bay WWTP dewatered sludge zinc levels

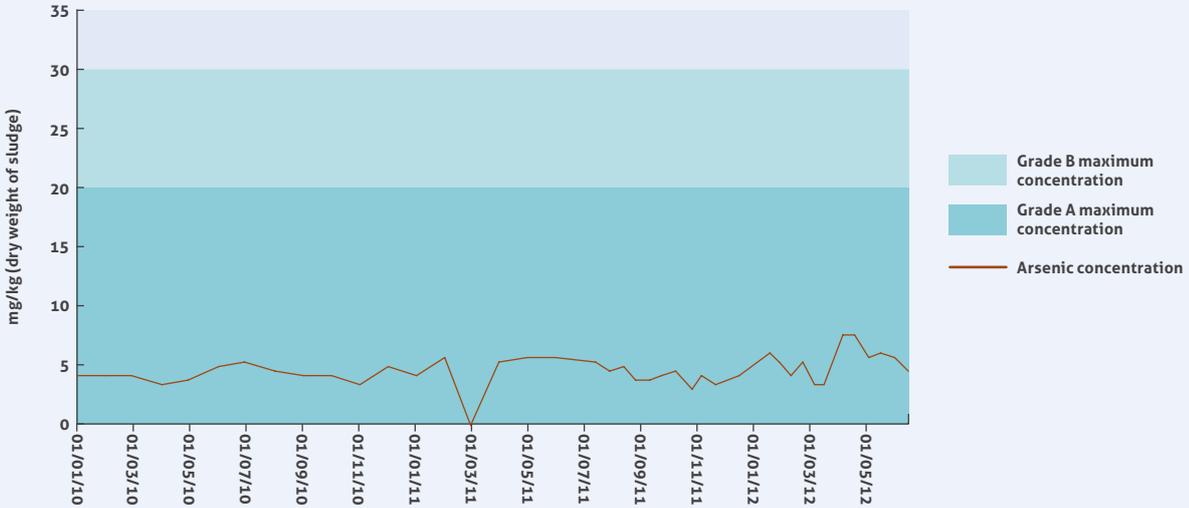


Note:

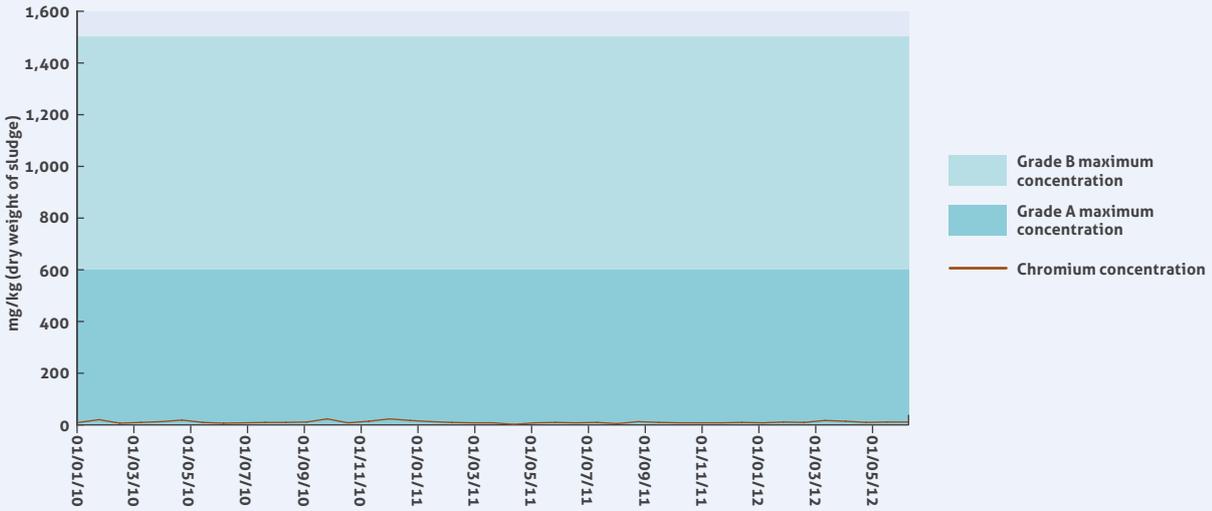
Approximately 4,372 tonnes of dewatered sludge were produced at the Army Bay Wastewater Treatment Plant in the 2011/12 year. The graphs show the metal levels in the dewatered sludge at the Army Bay Wastewater Treatment Plant. All metals except zinc have remained within the Grade 'a' levels over the year. A major source of zinc is related to contaminants in stormwater run-off to sewer. National guidelines for beneficial reuse of biosolids that grade biosolids for unrestricted use (grade 'a') or restricted use (grade 'b') depending on their contamination loads have been included.

FIGURE 43 (CONTINUED)

Warkworth WWTP dewatered sludge arsenic levels



Warkworth WWTP dewatered sludge chromium levels



Warkworth WWTP dewatered sludge lead levels

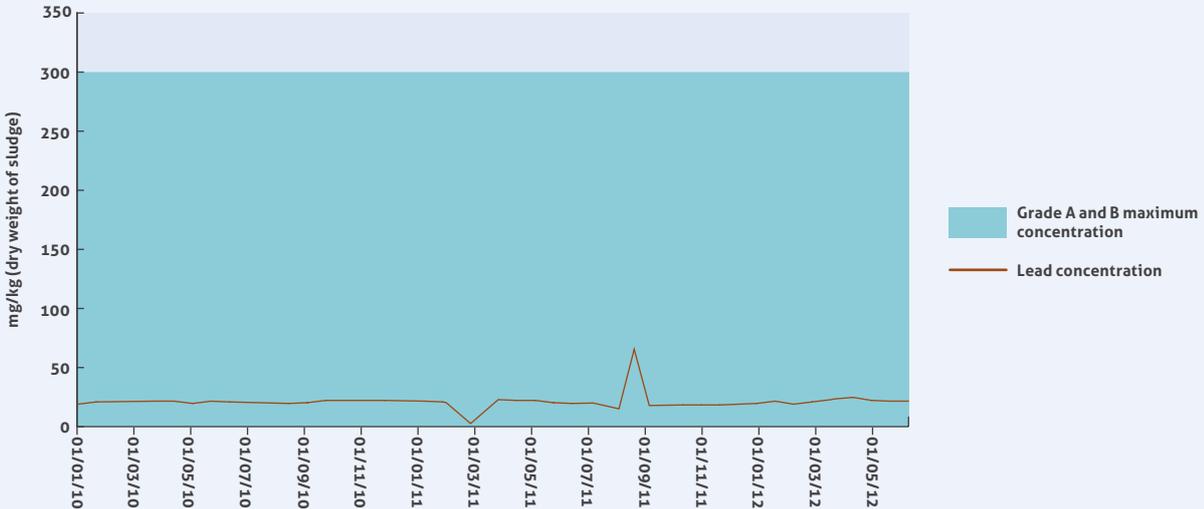
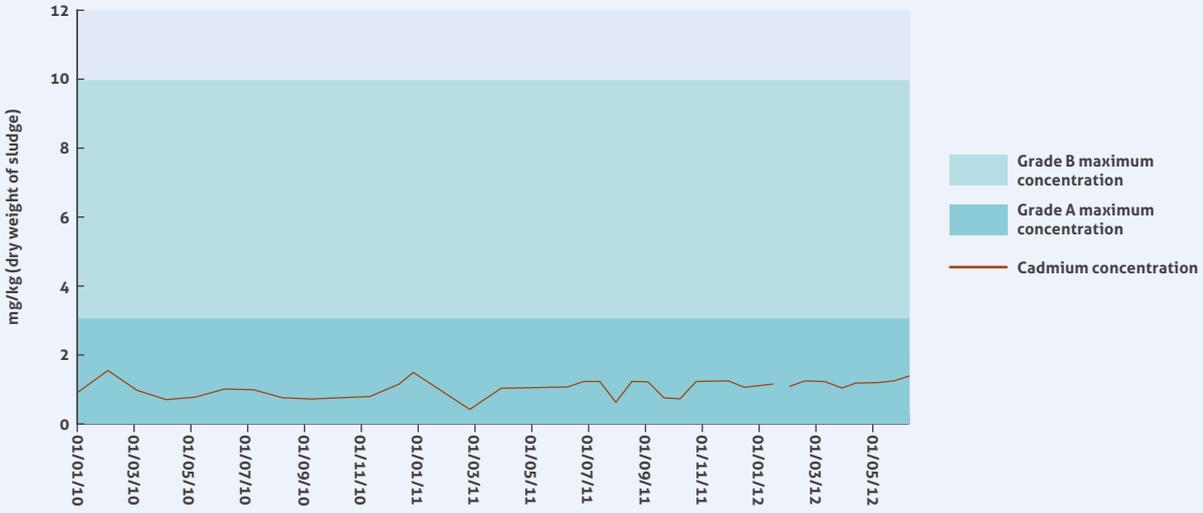
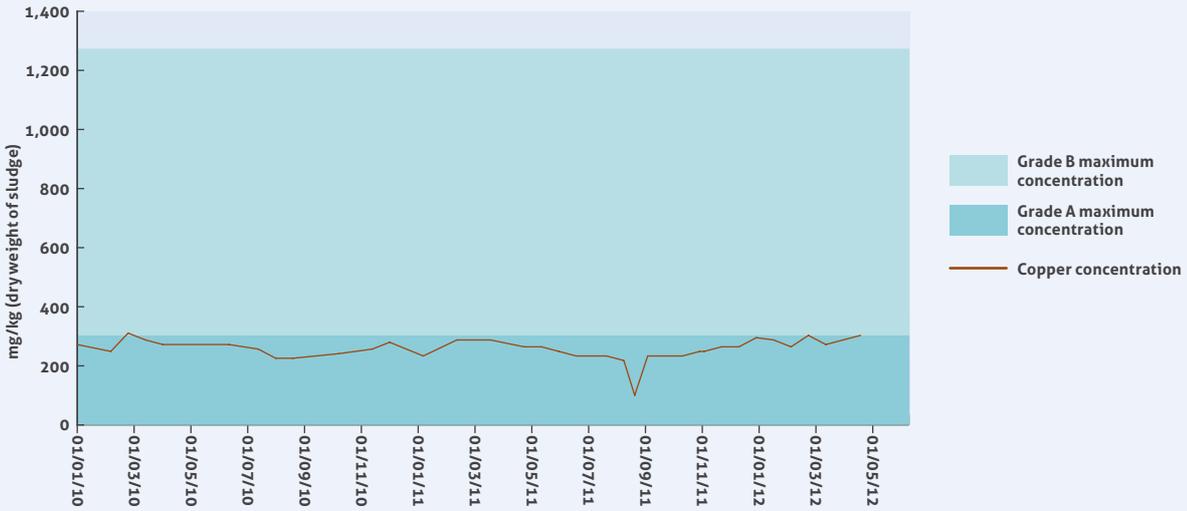


FIGURE 43 (CONTINUED)

Warkworth WWTP dewatered sludge cadmium levels



Warkworth WWTP dewatered sludge copper levels



Warkworth WWTP dewatered sludge mercury levels

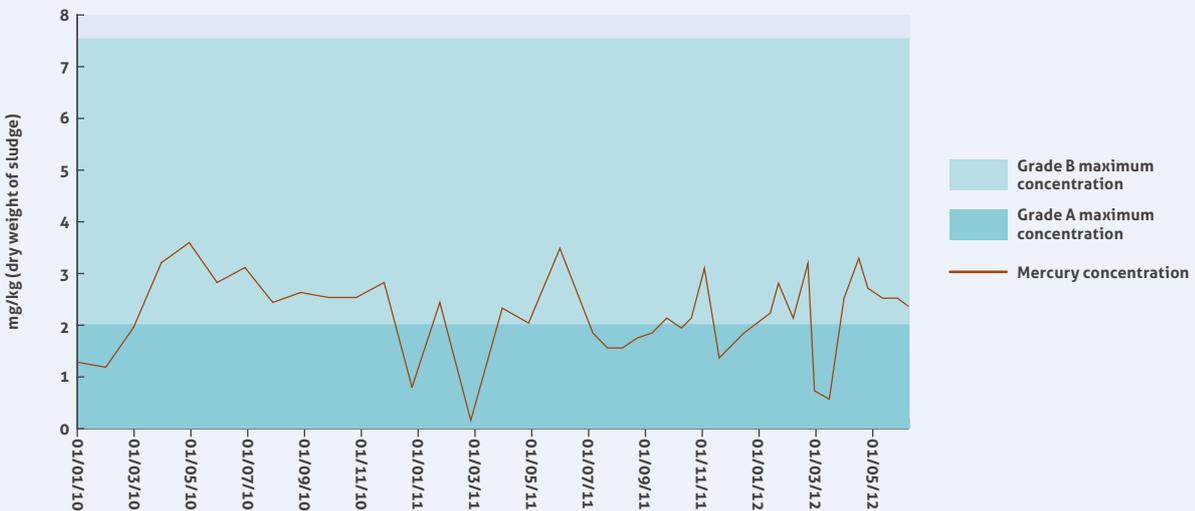
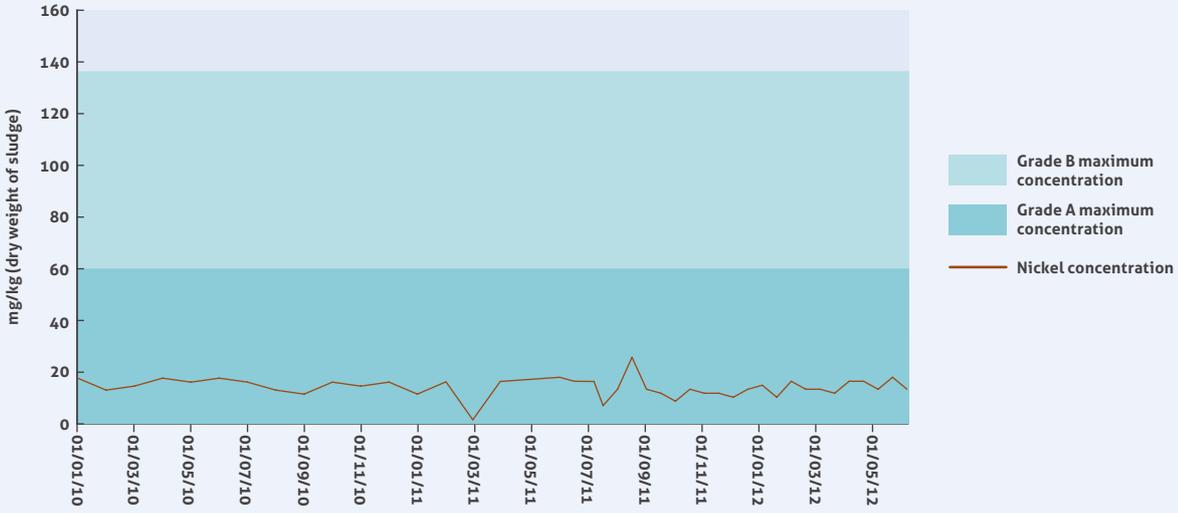
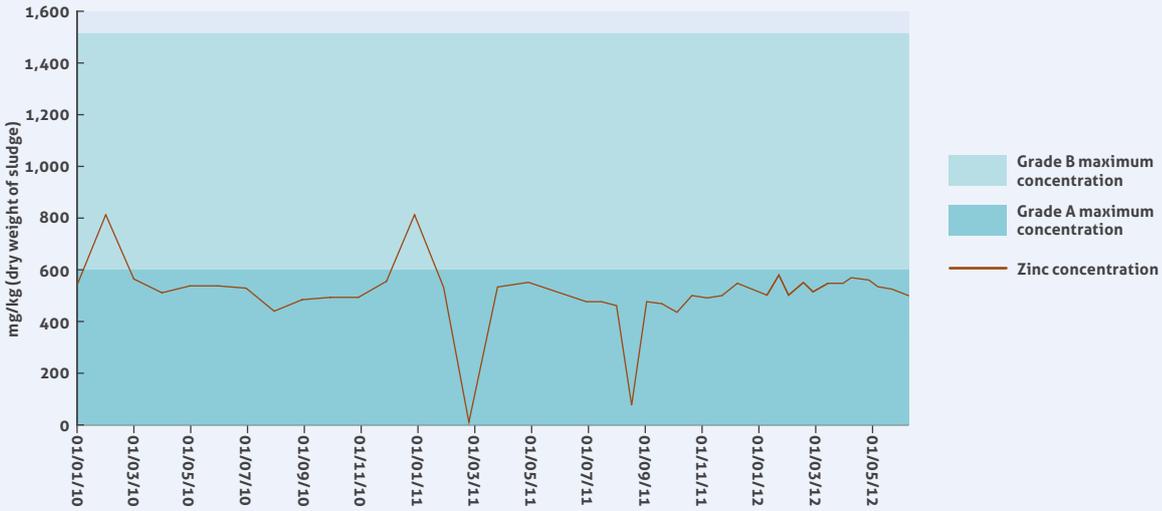


FIGURE 43 (CONTINUED)

Warkworth WWTP dewatered sludge nickel levels



Warkworth WWTP dewatered sludge zinc levels



Note:

Approximately 354 tonnes of dewatered sludge were produced at the Warkworth Wastewater Treatment Plant in the 2011/12 year. The graphs show the metal levels in the dewatered sludge at the Warkworth Wastewater Treatment Plant. All metals except mercury and zinc have remained within the Grade 'A' levels over the year. A major source of mercury is waste from dental practices. Dental practices in the Rodney area are required to have amalgam traps fitted and are routinely monitored. A major source of zinc is related to contaminants in stormwater run-off to sewer. National guidelines for beneficial reuse of biosolids that grade biosolids for unrestricted use (grade 'a') or restricted use (grade 'b') depending on their contamination loads have been included.

**FIGURE 44**  
**Solids disposal**

Origin	Strategy	2006/07	2007/08	2008/09	2009/10	2010/11	Total 2011/12
<b>Water treatment sludge (m<sup>3</sup>)</b>							
Ardmore	Onsite	3,315	3,095	3,820	2,895	4,860	5,940
Huia	Parau landfill	4,160	3,430	3,495	3,960	4,150	4,710
Waitakere	Onsite	220	776	688	515	646	376
Waikato	Commercial landfill	1,938	1,130	1,537	1,840	1,575	1,196
<b>TOTAL</b>		<b>9,633</b>	<b>8,431</b>	<b>9,540</b>	<b>9,210</b>	<b>11,231</b>	<b>12,222</b>
<b>Wastewater treatment plant (tonnes)</b>							
Mangere Biosolids* (wet)	Pond 2 rehabilitation	109,363	105,993	106,944	108,329	100,001	115,628
Mangere Grit (wet)	Commercial landfill	1,899	2,254	2,158	2,246	2,156	2,016
Mangere Screenings (wet)	Commercial landfill	2,028	1,920	1,493	1,414	1,302	1,391
Rosedale Biosolids (wet)	Commercial landfill					15,424	14,794
Rosedale Grit	Commercial landfill					141	190
Rosedale Screenings	Commercial landfill					245	247
Pukekohe Screenings and Grit	Commercial landfill					100	44
Army Bay Biosolids	Commercial landfill					3,701	4,382
Army Bay Grit	Commercial landfill					NA	55
Army Bay Screenings	Commercial landfill					NA	21
Beachlands Biosolids	Held on site					300	300
Beachlands Screenings	Commercial landfill					13	13
Beachlands Grit	Commercial landfill					1	1
Warkworth Biosolids	Commercial landfill					322	354
Warkworth Screenings	Commercial landfill					21	8
<b>TOTAL</b>		<b>113,290</b>	<b>110,167</b>	<b>110,595</b>	<b>111,989</b>	<b>123,727</b>	<b>151,666</b>

\* Assuming 28% solids content

**Note:**

This table summarises the amount and disposal methodology of the sludge and grit recovered by Watercare at its treatment plants. The screenings includes the fat balls gathered during the cleaning of primary tanks.

**FIGURE 45**  
**Weight of hazardous substances in waste**

Biosolids (dry weight) 34,102 tonnes

Substance	Concentration (mg/kg)	Disposed weight (tonnes)
Arsenic	5.56	0.19
Cadmium	1.46	0.05
Chromium	265.70	9.06
Lead	39.42	1.34
Mercury	0.74	0.03

**Note:**

Under the G3 reporting framework Watercare is required to provide information on G3 environment indicator EN24 relating to emissions, effluent and waste. The substances outlined in the table are found in biosolids, of which 34,102 dry tonnes were produced. Trace levels of these substances are also found in discharged effluent however the concentrations are well below maximum values allowed for in drinking water. No other hazardous wastes as defined by the Basel Convention are disposed of by Watercare. No waste is shipped internationally.

**FIGURE 46**  
Protected areas of high ecological value

Name	Restored	Location	Operation	Area	Attributes	Protection	Future plans and Strategies
Bycroft Wetland, Onehunga	N/A	In Onehunga where the aquifer naturally discharges.	Watercare provides a constant discharge to the wetland to maintain it.	Approximately one hectare.	Home of rare and endangered moss species, indigenous vegetation and wildlife.	Protected under the local authority district plan.	Maintain constant flow of water from Watercare facility.
Hunua Ranges	N/A	Located south of Auckland.	Contains the water supply catchments for five of Watercare's dams.	Approximately 10,500 hectares, mostly in native bush.	Native bush and wildlife habitat.	Predominantly protected by lease agreement with the Auckland Regional Council.	Monitoring equipment installed downstream which allows Watercare to monitor stream levels and release water when required. Trap and haul of fish where passes are not possible.
Waitakere Ranges	N/A	Located north west of Auckland.	Contains the water supply catchments for five of Watercare's dams.	Approximately 5,000 hectares in native bush.	Native bush and wildlife habitat.	Protected by lease agreement with Auckland Council.	Allow for continuous water flow from dams to streams. Trap and haul of fish where passes are not possible.
Mangere Coastal Walkway	Yes	Located along the coast adjacent to the Mangere Wastewater Treatment Plant.	13 km of coastal walkway and native plantings provided for and maintained by Watercare.	Approximately 13 km of walkway and associated planting between 10 to 100 m in width.	Provision of public walkways, bird roosts and native and marine habitat.	Owned by Watercare and required as a condition for the operation of the wastewater treatment plant.	Maintenance of bird roosts and continued restoration of harbour environment.
Oruarangi Creek	Yes	Located along the coast adjacent to the Mangere Wastewater Treatment Plant.	Estuary previously closed to the sea by the oxidation ponds restored to tidal influences. 4 km of esplanade reserve has been planted by Watercare this last year.	Approximately 30 hectares.	Marine estuarine ecosystems being restored.	Owned by Watercare and required as a condition for the operation of the wastewater treatment plant.	Continued restoration of the marine environment.
Waikato RiverCare	N/A	Along the banks of the Waikato River.	Watercare financial member of a trust that undertakes the planting.	120 km of river bank with target of planting four kilometres per annum.	Riparian planting of along the Waikato River to enhance river water quality and create ecological diversity.	Plantings protected by covenants and agreements with landowners.	Watercare is continuing to take an ongoing interest in the appropriate management of the Waikato River catchment.
Auckland Volcanic Cones	N/A	Watercare has water reservoirs on or in eight volcanic cones distributed around the Auckland urban area.	These reservoirs are an essential part of the water distribution system and were built about 80 to 100 years ago. In many cases their presence has prevented the quarrying of the cones, ensuring the preservation of the cones until protection was given to them by local authorities in more recent times.	Each volcanic cone is set in parkland, with the largest being approximately 120 hectares in area. The cones are typically 100 to 150 meters above the adjacent urban area.	The cones are parks and heritage areas and are a defining feature of Auckland. However many of the cones not used for reservoirs have been quarried away for aggregate.	The cones are protected by local authority district plans and the Historic Places Trust.	Watercare is working with stakeholders interested in the cones with a view to enhance the values of the cones while protecting its water supply assets.
Pukekohe Wastewater Treatment Plant	N/A	Adjacent to Waikato River at Pukekohe Wastewater Treatment Plant	Is maintained by flow of treated effluent	9 hectares	Home of birdlife as an extension of the adjacent wetland owned by Fish and Game	Owned by Watercare. In part protected by Wildlife Refuge status.	Unused ponds to be rehabilitated. Lost wildlife habitat to be provided in operational wetland area.
Puketutu Island	To be restored	Manukau Harbour adjacent to the Mangere Wastewater Treatment Plant.	Plan to rehabilitate the old quarry area and establish most of the island as public parkland	110 hectares	Historically used for pastoral agriculture and as basalt quarry.	Wahi tapu protection, deemed to be of cultural significance.	Former quarry on the island will be rehabilitated with biosolids and the island will be progressively converted to parkland.

**Note:**

Under the G3 reporting framework Watercare is required to provide information on G3 environment indicators EN11, EN13 and EN14, relating to biodiversity.

FIGURE 47

## Significant biodiversity impacts

Location / Impact	Nature	Effect
Water catchments	Protected as part of the regional parks.	The bush catchments are regenerating native bush and provide an environment for native birds and other fauna.
Dams and lakes	The construction of the dams may limit fish passage up and downstream and reduces stream flows. Minimum flows are released from some dams to maintain the downstream minimum flow. Watercare undertakes significant modelling of downstream environments to monitor the quality and health of these environments.	Isolated fish communities have developed behind the dams. Provision of fish passages will open these areas to normal migration of fish, although at some reservoirs Watercare is protecting established fish communities by preventing upstream fish transfer.
Effluent discharge from Metropolitan Wastewater Treatment Plants	The Mangere and Rosedale plants have been recently upgraded which has significantly improved the quality of the discharge to the Manukau Harbour and the Hauraki Gulf.	At Mangere with the plant upgraded – which included the removal of 500 hectares of oxidation ponds and sludge lagoons – the harbour is restoring itself and there are now an increasing number and biodiversity of organisms and species. The improved quality of effluent and the new outfall at Rosedale has resulted in enhancing the marine environment adjacent to the outfall.
Bird roosts along the Mangere Coastal Walkway	Bird roosts have been constructed as part of the Mangere Wastewater Treatment Plant upgrade.	The provision of roost habitats has encouraged the roosting of migratory and rare birds such as dotterels, godwit and wrybill.

## Note:

Under the G3 reporting framework Watercare is required to provide information on G3 environment indicator EN12, relating to biodiversity.

FIGURE 48

## Midge and odour complaints

## Annual report data – Wastewater treatment plants 2011/2012

Wastewater treatment plant	Complaints			
	Midge	Odour	Noise	
Metro	Mangere	2	2	0
	Rosedale	0	0	0
	Army Bay	0	0	0
	<b>Sub total – metro WWTPs</b>	<b>2</b>	<b>2</b>	<b>0</b>
Non Metro	Pukekohe	0	0	0
	Warkworth	0	0	1
	Omaha	1	0	1
	Helensville	0	0	0
	Wellsford	0	0	0
	Snells/Algies	0	0	0
	Waiwera	0	1	0
	Huapai/Kumeu	0	0	0
	Matakana	0	0	0
	Denehurst Drive	0	0	0
	Beachlands	0	1	0
	Owhanake	0	0	0
	Clarks Beach	0	0	0
	Waiuku	0	0	0
	Kingseat	0	0	0
	Bombay	0	0	0
	<b>Sub total – non metro WWTPs</b>	<b>1</b>	<b>2</b>	<b>2</b>
<b>TOTAL</b>	<b>3</b>	<b>4</b>	<b>2</b>	

FIGURE 49

## Trade waste customers

Customer status	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
Customers at beginning of year	635	612	605	605	601	579	1,750
New customers during the year	35	38	51	47	43	1,232	81
Variations issued and re-applications processed during the year	113	100	90	103	127	234	289
Closures during the year	58	45	51	51	65	71	177
Customers at end of year	612	605	605	601	579	1,740	1,654

## Note:

The trade waste customer base was increased by 1,147 in 2010/2011 as a result of integration of the Rodney, North Shore and Franklin areas with Watercare's existing trade waste customer base. A review of customer numbers has led to an adjustment for the start of 2011/2012 from 1,740 to 1,750. Trade waste customer numbers have declined by 96 over the last year. The decline is the result of the closure of smaller businesses particularly in the retail food area i.e. cafes and restaurants. Substances are controlled to protect the health and safety of workers, protect the wastewater assets, ensure that treatment processes are not adversely affected and to ensure that Watercare can comply with the limits set in its consents. Customers are charged on the basis of the volume or flow they discharge to the sewer, the waste characteristics including the biochemical oxygen demand (BOD) or chemical oxygen demand (COD), and the concentration of suspended solids in the discharge. The charges are designed to recover costs for collection, treatment and disposal of these trade wastes.

FIGURE 50

## Trade waste sampling programme

Sampling programme	2009/10			2010/11			2011/12		
	Number of tests	Number of tests out of compliance	% Compliance*	Number of tests	Number of tests out of compliance	% Compliance*	Number of tests	Number of tests out of compliance	% Compliance*
Compliance monitoring	10,736	221	98	9,621	252	97	8,768	232	97
Self-monitoring	3,193	70	98	2,902	81	97	2,998	121	96
Catchment investigations	2			4			3		
Wastewater treatment plant influent	1,632			1,560			1,549		
<b>TOTALS</b>	<b>15,563</b>	<b>291</b>		<b>14,087</b>	<b>333</b>		<b>13,318</b>	<b>353</b>	

## Note:

\* Indicates the percentage of tests undertaken which were in compliance. Following integration in 2010/2011 figures include information from the Rodney, North Shore and Franklin areas in addition to the Auckland area. The significant rise in the number of tests recorded from 2009/10 is a result of a change in recording practices. Organic tests that form part of a suite of tests are now recorded on an individual basis rather than on a suite basis. The results show good levels of compliance have been maintained. The number of results undertaken for 2011/2012 has decreased in line with a drop in customer numbers.

**FIGURE 51**  
Key trade waste substances

Substance	2005/06		2006/07		2007/08		2008/09		2009/10		2010/11		2011/12	
	Total approved mass kg/day	Consents issued												
Arsenic	1	34	1.6	36	1.6	35	1.3	38	1.0	37	1.0	35	0.7	26
Boron	51.8	74	46.2	74	44.0	72	40.2	72	35.3	63	31.6	53	29.1	46
Cadmium	0.2	36	1.0	40	1.1	38	1.2	42	0.5	40	0.4	36	0.2	28
Chromium Total	32.4	89	29.3	83	31.9	106	21.1	57	22.9	103	21.2	91	18.3	80
Chromium 6	3.5	77	4.4	70	4.1	69	2.9	43	3.9	67	4.0	62	2.5	53
Cobalt	1.2	32	2.5	33	2.5	30	2.4	29	1.9	29	1.8	28	0.6	22
Copper	8.4	108	12.1	105	12.4	107	11.4	106	7.9	98	7.7	95	5.5	81
Lead	2.9	61	6.6	60	5.7	62	4.9	61	2.8	56	2.7	54	1.6	47
Manganese	44.3	37	44.3	39	44.4	41	44.6	45	64.4	43	64.0	40	62.1	37
Molybdenum	2.7	37	3.7	37	3.1	34	3.2	34	2.7	27	2.4	23	1.1	22
Nickel	5.7	80	7.8	81	8.1	83	7.3	85	4.6	75	4.4	74	3.7	62
Silver	1	34	2.0	31	1.9	28	1.8	23	1.7	22	1.5	23	0.3	47
Zinc	15	115	18.8	115	19.0	110	17.7	111	14.3	97	17.1	93	13.7	83
<b>TOTAL</b>	<b>170.1</b>	<b>814.0</b>	<b>180.3</b>	<b>804.0</b>	<b>179.7</b>	<b>815.0</b>	<b>160.0</b>	<b>746.0</b>	<b>163.9</b>	<b>757.0</b>	<b>159.8</b>	<b>707.0</b>	<b>139.4</b>	<b>634.0</b>

**Note:**

Watercare controls the entry of substances which could harm the health and safety of workers, the wastewater collection system, treatment plant processes and the environment by issuing trade waste consents that limit the discharge of toxic substances. The table shows the amounts of metals consented for discharge from trade waste sites by mass. The table includes data from Rodney and Franklin but not North Shore as historically mass limits in the North Shore have been contained in the North Shore Trade Waste bylaw and not individual consents. Contribution from the Rodney and Franklin areas is very small and the number of consented sites discharging substances controlled by mass has decreased as has the total mass consented for discharge. It should be noted that totals are presented for indicative year on year trends only as masses of individual substances depends on their density and some consents issued may contain one key substance while others a number of the key substances.

FIGURE 52

## Materials and chemicals (tonnes unless shown otherwise)

Water treatment	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	Purpose	Fate	% Recycled	
Alum (liquid)	5,023	4,629	3,504	3,608	4,216	5,225	4,956	To assist coagulation	Taken up in sludge	0%	
Lime (powder)	1,329	1,303	999	1,416	5,750	1,510	1,442	To control pH	Taken up in sludge	0%	
Fluoride (solution)	718	674	517	543	749.8	769	728	To prevent dental cavities	In treated water	0%	
Salt (powder)	748	749	267	86	100	105	95	For chlorine production for water disinfection	In treated water	0%	
Caustic soda (solution)	156	115	90	66.5	23.53	105	100	pH buffering	In treated water	0%	
Chlorine (gas)	36	31	79	182	184	160	175	To disinfect water	In treated water	0%	
Poly aluminium chloride (solution)	76	43	38	42	43.2	58	47	To assist in clarification and coagulation	Taken up in sludge	0%	
Polyelectrolyte (powder)	20	19	12.5	20	353.5	21	22	To assist in clarification and coagulation	Taken up in sludge	0%	
Carbon dioxide (gas)	312	399	294	384	294	228	239	To control pH	Dissolved in raw water	0%	
Citric acid	25.3	21	22	20.1	18.3	26	29	Cleaning membranes	Neutralised and in discharged water	0%	
Sodium bisulphate	4.3	6.8	8.2	6.75	9.84	7	8	De-chlorination of wasted water	In discharged water	0%	
Sodium hypochlorite	0.8	28	75	100.7	545.72	418	392	Disinfection	In treated water	0%	
Activated carbon	9.9	13.5	43.4	22.4	25.5		0	Organics removal in treatment	Taken to landfill as part of sludge	0%	
<b>Wastewater treatment plant</b>											
Methoprene	0.44	1.2	2.4	2.38	2	2.1	2.89	To control midges	Biodegrades in effluent	0%	
Naturalyte							5L	0	To control midges	Biodegrades in effluent	0%
Agnique spray	0	0	17L	0	0	0	0	To control midges	Evaporates to atmosphere	0%	
Insecticide			212L	200L	90L	203L	355L	To control midges	Biodegrades in soil	0%	
Weed spray (estimated)	400L	400L	400L	400L	400L	540L	500L	To control weeds on sites	Biodegrades in soil	0%	
Lime	6,060	6,551	6,308	5,714	5,857	5,560	7,017	To stabilise and deodorise biosolids	To landfill with the biosolids	0%	
Coagulating polymer	444	425	414	409	390	449	394	To promote solids dewatering	To landfill with the biosolids	0%	
Sodium hypochlorite	267m <sup>3</sup>	267m <sup>3</sup>	348m <sup>3</sup>	398m <sup>3</sup>	398m <sup>3</sup>	307m <sup>3</sup>	342m <sup>3</sup>	To chlorinate recycled water for sprays and wash down	In effluent	0%	
Liquid nitrogen	681m <sup>3</sup>	1,900m <sup>3</sup>	1,955m <sup>3</sup>	1,266m <sup>3</sup>	1,290m <sup>3</sup>	6,300m <sup>3</sup>	13,931m <sup>3</sup>	To remove explosive gases from pipes before maintenance	To atmosphere	0%	
Ferric chloride	1,700	1,748	1,468	1,075	1,079	1,245	1,382	To promote solids capture	To landfill with the biosolids	0%	
Caustic soda	0	0	0	0	0	50L	0	Assist digestion process	To landfill with the biosolids	0%	
Caustic Soda (solution)						184	0	For pH buffering	In treated water	0%	
Soda ash	0	0	0	0	0	0	0	Assist digestion process	To landfill with the biosolids	0%	
Chlorine gas		42	31	28.5	25.7	37.7	56.84	To control bacteria in reactor clarifiers	In effluent	0%	
Iron sponge granules		86	72	108	92	68	46	To purify biogas before use in engines	To landfill	0%	
Sulphuric acid		70m <sup>3</sup>	58m <sup>3</sup>	36m <sup>3</sup>	72m <sup>3</sup>	75m <sup>3</sup>	71m <sup>3</sup>	To strip ammonia from odour scrubber	In effluent	0%	
<b>Wastewater treatment plant</b>											
Lube oil			24m <sup>3</sup>	32m <sup>3</sup>	23m <sup>3</sup>	27m <sup>3</sup>	23m <sup>3</sup>	To lubricate generators	To supplier's reclamation plant	0%	
Activated carbon			10	0	0	3	14	To purify biogas before use in engines	To landfill	0%	
Alum (liquid)						46m <sup>3</sup>	67m <sup>3</sup>	To assist coagulation	Returned to plant pond	0%	
Methanol						32m <sup>3</sup>	26m <sup>3</sup>	To assist in the biological treatment of wastewater	To landfill with the biosolids	0%	

**Note:**

Increases in sodium hypochlorite were due to the reservoir cleaning programme using divers which helps to maintain services, yet requires chlorination before the reservoirs are de-isolated and returned to service. For 2010/11, the information includes all the materials and chemicals used at all plants now integrated into Watercare.

Under the G3 reporting framework Watercare is required to provide information on G3 environment indicators EN1, EN2 and EN27 relating to materials and products and services. Under G3 reclaimed packaging is not reported on as it is not applicable to Watercare.

**FIGURE 53**  
**Capital expenditure programmes**

	2011/12 expenditure	Future expenditure (next five year period)
	(\$ million)	(\$ million)
<b>Water</b>		
Raw water network rehabilitation/replacement	0.96	22.62
Raw water network improvement	0.33	0.62
Energy and Control systems rehabilitation/replacement	0.44	11.26
Energy and Control systems improvement	0.68	2.75
Energy and Control systems expansion	-	0.35
Dam rehabilitation	3.18	27.57
Water sources improvement	0.14	0.68
Regulatory compliance – Water treatment plant	0.30	0.56
Water treatment plant rehabilitation/replacement	8.16	22.67
Water treatment plant improvement	7.90	91.78
Water treatment plant expansion	26.77	32.00
Regulatory compliance – Treated water	-	0.35
Treated water network rehabilitation/replacement	25.77	124.71
Treated water network improvement	2.28	46.19
Treated water network expansion	20.95	232.59
Hunua no.4 water supply scheme	19.36	239.43
CBD storage	-	22.15
Water Demolition	0.99	3.41
<b>Water total</b>	<b>118.21</b>	<b>881.69</b>
<b>Wastewater</b>		
Energy and Control systems rehabilitation/replacement	0.12	6.97
Energy and Control systems improvement	-0.20	3.75
Energy and Control systems expansion	-	3.33
Collection system replacement	13.10	63.12
Collection system improvement	2.82	82.74
Collection system expansion	56.21	148.52
Regulatory compliance – Collection	0.97	1.67
Project Hobson	-	35.50
Project Waitemata	5.69	27.00
Trade Waste	0.04	0.70
Regulatory compliance – Wastewater treatment plant	-	0.62
Wastewater treatment plant rehabilitation/replacement	7.20	33.94
Wastewater treatment plant improvement	3.19	79.47
Wastewater treatment plant expansion	2.85	128.95
Wastewater Demolition	0.59	1.85
<b>Wastewater Total</b>	<b>92.58</b>	<b>618.13</b>
<b>Shared services</b>		
Plant & Equipment Replacements	7.68	29.11
Process Improvement	1.34	32.07
Laboratory	14.87	0.31
Project 1	-	-
<b>Shared services total</b>	<b>23.89</b>	<b>61.49</b>
<b>Grand total (2011/12 \$)</b>	<b>234.67</b>	<b>1,561.31</b>

**Note:**

Future expenditure is in current dollars and does not allow for inflation.

## FIGURE 54

### Infrastructure investments provided for public benefit

Under the G3 reporting framework Watercare is required to provide information on G3 economic indicator EC8 relating to indirect economic impacts.

One criteria reported under the G3 framework is the development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro-bono engagement. As water and wastewater service provider for the Auckland region, all of Watercare's water and wastewater services are designed to fulfil community needs. These needs are determined through the interaction of Watercare both directly with the community and via the Auckland Council. Any requirements identified are fed back to Watercare and built into individual water and wastewater projects.

Watercare has a capital programme totalling approximately \$3.7 billion (in 2012 dollars) over 10 years. The positive impacts of this investment include the support of economic growth in the region and the associated improvement in standards of living for local communities, the maintenance of existing levels of service through replacement of old infrastructure, the provision of security of supply to businesses and local communities, and the improvements in levels of service to local communities such as improved pressures and water quality.

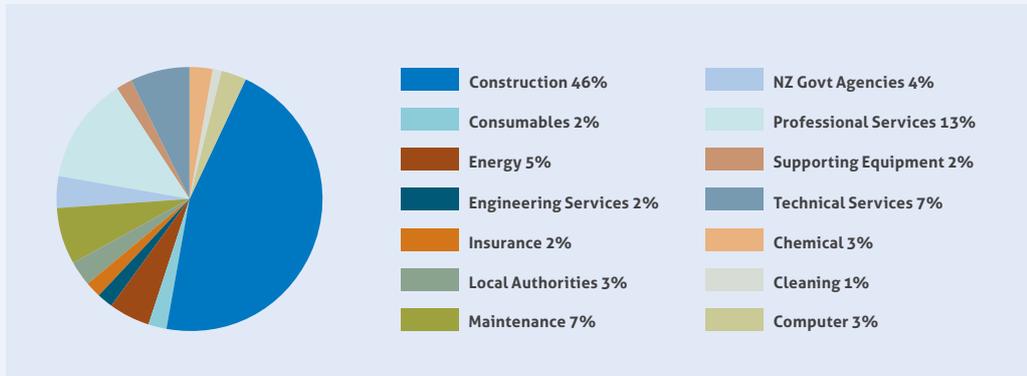
Any impacts on communities and the environment related to the construction of individual projects are largely temporary or mitigated through community engagement and project planning.

FIGURE 55

## Major suppliers and contractors

Vendor	Service	Total 2011/12 expenditure
Fletcher Construction Co Ltd	Construction	26,482,920.21
Thiess Services Limited	Technical Services	21,011,350.22
Lend Lease Infrastructure Serv	Maintenance	17,345,964.70
Pipeline & Civil	Construction	15,177,695.64
HEB Construction Limited	Construction	13,536,372.44
Inland Revenue Department	NZ Govt Agencies	13,254,096.09
Brian Perry Civil	Construction	12,221,068.29
Downer EDI New Zealand Ltd	Construction	11,818,159.39
Drill Tech (1996) Limited	Construction	11,319,928.23
Steelpipe Limited	Construction	11,269,832.38
Contact Energy (Power)	Energy	10,554,481.79
Orica New Zealand Ltd	Chemical	10,337,814.77
Pipeworks Rehabilitation Solutions	Construction	10,254,853.59
Auckland Council	Local Authorities	9,713,297.66
City Care	Construction	7,699,012.68
CH2M Beca Ltd	Professional Services	7,617,521.69
Cassidy Construction Ltd	Construction	6,705,152.85
Hawkins Infrastructure	Maintenance	6,200,906.84
Aecom New Zealand Limited	Professional Services	5,983,163.78
Coast Digger Services	Construction	5,899,375.90
Marsh Ltd	Insurance	4,972,544.25
United Water International Pty	Construction	4,700,197.43
Canadian Pacific Construction	Construction	4,219,305.50
March Cato Ltd	Construction	3,964,131.50
GE Betz Pty Ltd	Supporting Equipment	3,938,030.86
NZ Transport Agency	Professional Services	3,668,878.88
Sinclair Knight Merz	Professional Services	3,665,063.77
GHD Ltd	Professional Services	3,542,628.03
Vector Ltd	Energy	2,830,810.31
Fletcher Macdow Joint Venture	Construction	2,823,741.43
Opus Interntl Consultants Ltd	Professional Services	2,805,716.46
Infor Global Solutions NZ Ltd	Computer	2,757,865.07
Revera Ltd	Computer	2,736,269.48
H2O Engineering Limited	Technical Services	2,479,832.87
Hynds Pipe Systems Ltd	Consumables	2,443,930.79
Genesis Energy	Energy	2,383,832.70
Universal Underground Ltd	Construction	2,343,917.49
Tyco Flow Control Pacific Pty	Construction	2,235,481.69
Tonkin & Taylor Ltd	Professional Services	2,060,167.31
Service Engineers Ltd	Engineering Services	2,041,752.51
URS New Zealand Ltd	Professional Services	2,010,041.84
Tunnel & Civil Ltd	Construction	1,953,645.99
Xylem Water Solutions NZ Limited	Supporting Equipment	1,889,849.52
J A Nicholson Engineering Ltd	Engineering Services	1,884,647.13
Fulton Hogan North Civil	Construction	1,782,005.39
McDonalds Lime Ltd	Chemical	1,781,876.26
Datacol New Zealand Ltd	Consumables	1,764,759.70
MWH New Zealand Ltd	Professional Services	1,710,283.67
Meridian Energy Ltd	Energy	1,683,432.47
Auckland Sandblasters Ltd	Cleaning	1,620,790.34
Tyco Water Manufacturing	Consumables	1,607,029.70
Dimension Data New Zealand Limited	Computer	1,548,212.47
Alliance Construction Limited	Construction	1,541,743.81
Hydrotech Drainage & Plumbing	Construction	1,531,709.21
Harrison Grierson Consult Ltd	Professional Services	1,527,829.84
Russell McVeagh McKenzie Bart	Professional Services	1,473,578.10
AWT New Zealand Ltd	Professional Services	1,460,291.94
Solution Dynamics Limited	Professional Services	1,407,442.97
Mechanical Technology Ltd	Engineering Services	1,373,842.93
Harker Underground Construction	Construction	1,368,173.66
Advanced Pipeline Services Ltd	Maintenance	1,295,992.37
Clarke Energy Australia P/L	Engineering Services	1,285,011.68
Microsoft New Zealand Limited	Computer	1,260,034.80
Stockman General Contractors	Construction	1,168,197.13
Counties Power Ltd	Energy	1,166,990.20
Damwatch Services Ltd	Professional Services	1,081,211.83
Nova Gas Ltd	Energy	1,074,125.63
Fulton Hogan/John Holland	Construction	1,043,311.04
		<b>339,313,129.09</b>

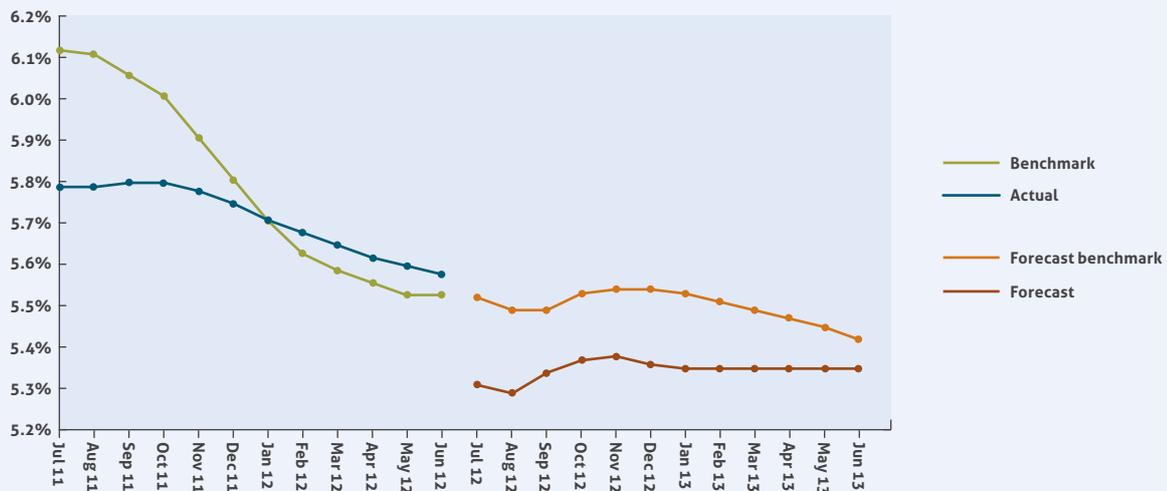
**FIGURE 56**  
Suppliers spend by industry and sector



Note:

Analysis of Watercare’s top 100 suppliers and contractors, by services or goods provided, shows the predominance of construction contracts, reflecting continued investment in significant new assets.

**FIGURE 57**  
Interest rate performance



## FIGURE 58

### Ethics and business integrity

Percentage and total number of business units analysed for risks related to corruption.	Nil
Percentage of employees trained in organisation's anti-corruption policies and procedures.	Nil
Actions taken in response to incidents of corruption.	Not applicable

**Note:**

Under the G3 reporting framework Watercare is required to provide information on G3 society indicator SO2, SO3 and SO4 relating to corruption. This additional information has been included to meet G3 criteria.

Probity guidelines are in place in respect of projects undertaken by the company and the company employs an independent probity auditor.

Watercare produces and promulgates a business conduct and ethics policy.

A high percentage of Watercare staff are registered professionals and bound by the ethical standards required of those professions.

The company also has policies that cover gifts and inducements, conflicts of interest and protected disclosures.

## FIGURE 59

### Product information disclosure

	Water	Wastewater
The sourcing of components of the product or service	Yes	Yes
Content, particularly with regard to substances that might produce an environmental or social impact	Yes	Yes
Safe use of the product or service	Yes	Yes
Disposal of the product and environmental/social impacts	Yes	Yes

**Note:**

Under the G3 reporting framework, Watercare provides additional information on G3 product responsibility indicator PR3, relating to product and service labelling. Watercare is governed by Ministry of Health Drinking Water Assessors and complies with the Drinking Water Standards New Zealand 2005 (revised 2008). Wastewater is governed by the final effluent standards as part of resource consent conditions.

The table above reports whether product and service information is required by Watercare's procedures for product and service information and labelling.

## FIGURE 60

### Product life cycle, health and safety impact assessment

Stage	Yes/No
Development of product concept	N/A
Research and design	N/A
Certification	N/A
Manufacturing and production	Yes
Marketing and promotion	N/A
Storage distribution and supply	Yes
Use and service	Yes
Disposal reuse or recycling	Yes

**Note:**

Under the G3 reporting framework, Watercare is required to provide information on G3 product responsibility indicator PR1 relating to customer health and safety. Watercare supplies water and wastewater services to the Auckland region in accordance with government guidelines and regulations. In addition the company carries out extensive planning for future demand, through documents such as the Asset Management Plan and the Three Waters Strategic Plan.

The G3 indicator table below outlines whether the health and safety impacts of products and services are assessed for improvements.

## FIGURE 61

### Financial implications of climate change

Under the G3 reporting framework Watercare is required to provide information on G3 economic indicator EC2 relating to economic performance and climate change.

Watercare undertakes extensive planning for the future at a regional level, through strategic documents such as the Three Waters Strategic Plan. The document has a 100 year planning horizon and considers the future operating environment for Watercare over the Auckland region, covering many factors including population growth, availability of resources and climate.

Climate change is considered in the plan as affects could influence sources of water for supply, drainage networks and the behaviours of consumers. It is acknowledged that natural variations will continue to affect the New Zealand climate in future, along with long-term climate change trends.

The plan says specific Auckland-based scenarios will be considered for the effect of extreme events, recognising that short-term climate is likely to be a greater driver than long term events.

In addition to the plan, Watercare will continue to assess future business, regulatory and operating requirements in Auckland's changing environment, and has already begun making assessments using available data on any impacts of climate change on its operations.

As more conclusive information on the impacts of climate change in the Auckland region is available, research and planning of asset management options will be undertaken. This will include identification of economic impacts. Implications will be included in future asset management plans and other long term strategies.

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