

Activity 12.1: Water Conservation

Accountable Manager: Mark Christison

What services are provided?

- Educate the community to minimise water use and encourage better utilisation
- Detect water leaks

Why do we provide these services?

Christchurch enjoys a safe and reliable public drinking water (potable) supply. The more the population increases, the greater the demand placed on this valuable resource and the greater the risk to sources of the public drinking water supply.

The water conservation service is provided to the community to:

- Preserve our potable water resources
- Ensure that our water sources meet our drinking water needs now and in the future
- Promote and enhance the value that the community places on this valuable resource

What outcomes are we trying to achieve?	How do the services contribute to desired outcomes?
<ul style="list-style-type: none"> • The Council's water supplies meet the public's reasonable needs 	<p><i>The Council manages the abstraction of water, at levels that will preserve water resources and ensure its availability now and in the future, by</i></p> <ul style="list-style-type: none"> –encouraging the community to use water efficiently –detecting and repairing network leaks –operating a maintenance, renewals and replacement programme
<p>Water is used efficiently and sustainably</p>	<p><i>The Council monitors the public drinking water supply network to detect and repair leaks and operates a maintenance, renewals and replacement programme to ensure water loss is minimised.</i></p>
<p>Stream and river flows are maintained</p>	<p><i>The Council's water conservation education and promotion programmes can increase awareness of the need for efficient and sustainable water use, encourage water conservation and enhance the value that the community places on water resources.</i></p>

Which group or section of the community will benefit from this activity?:

Christchurch residents, visitors to Christchurch, ratepayers, commercial and industrial businesses, local iwi, developers.

Key legislation:

- Local Government Act 1974 and 2002
- Resource Management Act 1991
- Natural Resources Regional Plan
- Resource Management (National Environmental Standards for Sources of Human Drinking Water) Regulations 2007
- Health (Drinking Water) Amendment Act 2007
- Drinking-Water Standard for New Zealand (as revised)
- Water Related Services Bylaw 2008
- National Policy Statement for Freshwater Management 2011
- National Environmental Standards
- Building Act 2004

Customer

What business results must we deliver to our customers, to deliver on the outcomes?

Performance Standards for LTP

Performance Standards for LTP	Current performance	Benchmarks	Recommended LOS	Rationale	LTP Committee Direction
Educate the community to minimise water use and encourage better utilisation					
12.1.1 Manage the supply of potable water for Christchurch	<p>Current performance is: 369m³ / property served / year (54.3M m³ total water abstracted for the City and Banks Peninsula for the public water supply)</p> <p><i>The trend of consumption per property served per year is as follows:</i></p> <p>2009/10: 364 2010/11: 355 2011/12: 301</p> <p>Note: data taken from flow monitoring spreadsheet</p>	<p>Waikato 274m³ Waitakere 165m³ Gisborne 249m³ Auckland 183m³ Wellington 356m³ New Plymouth 225m³ per property served / year</p> <p>New median = 242m³ per property served / year</p> <p>National Performance Report Urban Utilities Australia 2010/11: 136-264 m³ water supplied / property</p> <p>Median 149m³ water supplied/ property from 11 utilities of greater than 100,000 people</p>	<p>12.1.1.1 Manage the supply of water, so no more than 55 million cubic metres of potable water abstracted per year</p> <p>12.1.1.2 2013/14 Manage the supply of water, so no more than 342m³ +10% water is abstracted per property served per year</p> <p>2014/15 No more than 339m³ +10% water is abstracted per property served per year</p> <p>2015/16 No more than 335m³ +10% water is abstracted per property served per year</p> <p>2016/17 No more than 332m³ +10% water is abstracted per property served per year</p> <p>2017/18 No more than 328m³ +10% water is abstracted per property served per year</p> <p>2018/19 No more than 325m³ +10% water is abstracted per property served per year</p> <p>2019/20: No more than 321m³ +10% water is abstracted per property served per year</p>	<p>Key business driver: Water reduction measured on a per property basis should occur through education as well as a consequence of the change of lot size through intensification which is likely to reduce the requirement for garden watering.</p> <p>Measuring the volume of water abstracted/drawn from sources per property allows direct comparison with other cities, and may encourage customers to think about their individual consumption. Also supports Council's Water Supply Strategy.</p> <p>Note: water abstraction/drawn is that pumped from City-owned wells and Banks Peninsula surface sources for the public water supply, and excludes wells at the Christchurch Wastewater Treatment Plant, the Botanic Gardens and some parks.</p>	Accepted

Customer

What business results must we deliver to our customers, to deliver on the outcomes?

Performance Standards for LTP

Performance Standards for LTP	Current performance	Benchmarks	Recommended LOS	Rationale	LTP Committee Direction
Detect water leaks					
12.1.2 Detect leaks	2009/10: 155 litres/connection/day 2010/11: 165 litres/connection/day 2011/12: 250 litres/connection/day (post-EQ)	114 litres per connection per day (Watercare Annual Report 2010/11 - based on 17.7m m3 and 425,550 households served) Capacity (Wellington) 120 litres/connection/day	By detecting leaks, aim to return leakage rates to no more than average of 155 litres / connection / day* by 2020 (based on city pressure zones) <i>* Returning to 2009/10 performance standard</i>	<i>Key Business Driver:</i> It is important that the Council actively locates and repairs leaks on the water supply network to ensure that quantity of water lost from the network does not increase over time. The infrastructure rebuild programme will see a higher level of leak detection on the network during the reconstruction period. This programme is being finalised between the Council and SCIRT.	Accepted
Educate the community to minimise water use and encourage better utilisation (cont'd)					
12.1.3 Increase/maintain public awareness of water conservation	2009/10 Target: At least 70% Result 61% 2010/11 No survey 2011/12 Target: At least 70% Result 91%* *Campaign incorporated management of city-wide water restrictions for the first time since 1991	Yarra Valley Water (Aust): Resident question: Have you seen, heard or read anything about water conservation from Yarra Valley Water in the last month? Results Jan-Jun 2008: 39% Jul-Dec 2008: 45% Jan-Jun 2009: 43%	At least 70% public awareness of sustainable water use	Greater public awareness of sustainable water use should help drive down demand.	Accepted