



## What we do

The water supplies activity comprises the provision of potable water to three urban supply areas, five rural residential supply areas and two farming supply areas.

### Functions carried out in providing the service include.

- Strategic planning and improvement of water networks to provide for growth within the district.
- Planning and implementation of renewal work to ensure infrastructure is maintained.
- Developing of maintenance planning, levels of service and quality standards.
- Management and maintenance of assets and services including monitoring of pressure, flow and water quality.
- Developing of emergency and contingency plans to ensure service is maintained during adverse events.
- Provision of information and education to the public regarding water use and conservation.
- Development of funding policies and systems to enable continuing provision of the service into the future.

### Rotorua's key water supply assets are summarised as follows:

- 9 water sources
- 16 pump stations
- 22 reservoirs
- 24,000 connections
- 688km of pipe work

Council will, in areas where it is cost-effective to do so, provide a supply of drinking water which is "safe." The commercial / industrial sector, including dairy farming, also expects Council (in currently served areas) to ensure there is adequate water provided for these businesses to operate and develop. Council will ensure, through strategies and sound planning, that these services will be available to areas of the district in which growth and development is expected.

The Health Act 1956 (section 23) requires councils to improve, promote and protect public health. Whilst not expressly requiring councils to provide a public water supply, the provision of a safe, potable water supply to dwellings contributes significantly towards this objective.

The Local Government Act 2002 requires councils currently providing public water supplies to continue to do so.

## Why we do it

To provide cost-effective, constant, adequate, sustainable and high quality supply of water.

## Major projects

Over the course of the Long-term Plan a number of projects will be undertaken to change levels of service, catch up on deferred works or to provide for additional growth or demands. These projects include:

What is planned?	Why?	Background	Costs	Other options considered
Investigation into potential alternative source for Ngongotaha.	The resource consent for the existing Taniwha Springs expires in 2018. Council will need a water supply with an adequate water source beyond 2018.	Local iwi Ngati Rangiwewehi have a special relationship with the existing spring and its land, and opposed the issuing of the current consent. In the interests of recognising this association with the spring and building a good relationship between Council and Ngati Rangiwewehi, efforts are to be made to find an alternative source.	2013-2015 \$2.15m (if corresponding funding can be obtained towards this work from central government)	<ul style="list-style-type: none"> <li>Seek continuation of existing resource consent.</li> <li>Investigate alternate water sources.</li> </ul>
Reservoir earthquake protection valves	If in an earthquake major water supply pipes are broken and pumps or sources damaged, it is important that stored water is conserved. Automatic shut-off valves can prevent loss of stored water through broken reservoir pipes.	Council has evaluated risks to business continuance resulting from natural disasters, and this is one of the identified risks and is the recommended solution.	2013 and 2014 \$100,000	<ul style="list-style-type: none"> <li>Continued exposure to the existing risk.</li> </ul>
Eastern/Central emergency link	Each of the two water supplies (Eastern and Central) relies on a single water source. In the event of a major failure or problem with one source, a link would enable a limited supply of water to be provided from the neighbouring supply.	Council has evaluated risks to business continuance resulting from natural disasters or source failures. The reliance on single sources requires some form of risk mitigation.	2016 \$500,000	<ul style="list-style-type: none"> <li>Continued exposure to risk.</li> </ul>
Fire main upgrades and connections	Portions of the network do not fully comply with fire fighting flow requirements due to under-capacity pipelines. The upsizing of specific pipes will enable full compliance. This applies in both the Urban and Mamaku network.	Council has adopted the NZ Fire Service Code of Practice for Fire Fighting Water Supplies as the standard to meet for fire fighting capacity in its networks. Areas of deficiency have been identified.	2014/15 Urban \$530,000 2013 Mamaku \$50,000	<ul style="list-style-type: none"> <li>Non-compliance with standards and risk of property loss due to insufficient fire fighting capacity.</li> </ul>



## Major projects cont.

What is planned?	Why?	Background	Costs	Other options considered
Network sectorisation/ pressure management	In order to quantify and limit losses in the network, it is necessary to be able to analyse small portions one at a time. Changes to the network have been identified which will enable this, and to manage pressures in specific areas, which will reduce leakage and losses.	The Rotorua District Water Conservation Strategy 2009 has evaluated options to improve system efficiency, and this work is recommended	2013-2015 \$1.53m	<ul style="list-style-type: none"> <li>Universal metering could assist with quantifying losses, but not with loss reduction.</li> <li>Continue with current unacceptable level of losses.</li> </ul>
Eastern and Victoria Street Arterial services moving	Large roading reconstruction projects always carry a requirement for replacement or moving of underground services within the road corridor. whilst some are funded by the roading project budget, there are invariable costs which have to be met by the relevant utility authority.	Both these roading projects have been planned for some time, and are now within the ten year horizon of this plan.	2017-2018 Eastern Arterial \$600,000 2016 Victoria Street \$400,000	<ul style="list-style-type: none"> <li>There are no other options.</li> </ul>



## Measuring our achievements

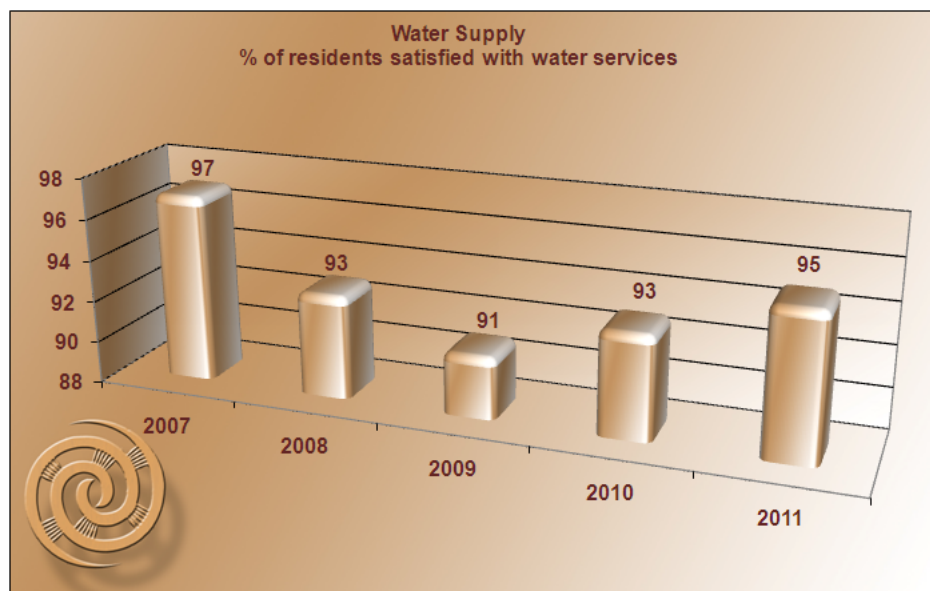
Council will measure its achievements towards the objectives by monitoring the following set of performance measures and targets:

Community outcome	How council contributes	Level of service (What we will do)	Performance measure	Performance targets					
				Current performance 2010/11	Data source	2012/13	2013/14	2014/15	2016 to 2022
 <p>Safe and Caring</p>	<ul style="list-style-type: none"> <li>By ensuring safe public places.</li> <li>By minimising risks from nuisances and offensive behaviour</li> </ul>	Provide water to households that is safe to drink, sustainable and has adequate pressure and flow.	100% compliance with the Drinking Water Standards New Zealand monitoring requirements.	Not achieved	Water information NZ database records	100%	100%	100%	100%
			Achieve MOH gradings of minimum Cc across all water supplies.	Ec	MOH gradings report	Achieved	Achieved	Achieved	Achieved
			Less than 3 per 1000 properties lodge a complaint regarding low pressure during normal operating conditions.	New measure	Complaints system	Achieved	Achieved	Achieved	Achieved
			90% of customers satisfied with water services as measured by annual survey.	95%	Customer satisfaction survey	90%	90%	90%	90%
		95% of breaks responded to within 1 hour.	New measure	Asset management work order system	95%	95%	95%	95%	
		Provide educational programmes to ensure efficient use of water.	3 education programmes delivered per year.	New measure	Programme register	3	3	3	3
 <p>Excellent Facilities and Services</p>	<ul style="list-style-type: none"> <li>By protecting and preserving public health.</li> <li>By providing effective responses to developing health issues.</li> </ul>	Provide an adequate water supply for fire fighting purposes within urban fire districts.	95% of hydrants within the urban fire district meet the requirements of the NZFS CoP for Firefighting Water Supplies under normal operating conditions.	98%	NZFS random flow testing results	95%	95%	95%	95%

## Performance

In order to plan for the future and ensure services are meeting our community's needs and expectations we assess past performance and feedback from the community.

### Community Satisfaction Survey Results



## Asset management

### Key assets

The key assets associated with this activity are the:

- Buildings
- Land
- Structures (reservoirs, civil works)
- Pipelines
- Mechanical and electrical plant

## Issues/Risks/Negative impacts

Potential negative effects associated with undertaking the activity are described below along with actions undertaken to mitigate the effect. Effects from the activity can influence the social, cultural, environmental and economic wellbeing of the community/district. The negative effect could be physical or a perception.

Issue/Risk/Negative impact	Action Plan
Unable to renew resource consent for water abstraction of Ngongotaha	Work with local iwi to work towards agreement for renewal of resource consent. Investigate potential new water sources should new resource consent not be granted.
Input of water into wastewater system	Rotorua District Council has in place and follows a water conservation strategy and a trade waste bylaw to regulate discharges to the waste water system.
High cost of water abstraction	All water schemes are paid for by users.

### Maintaining our assets

Council assets are maintained as per agreed specifications within service contracts. The performance of assets is regularly reviewed to ensure that current levels of service/community expectations are still being met by the asset/s. Major works are competitively tendered out to specialised contractors ensuring that the final product is of a high standard and delivered at a competitive cost to Council. A separate Asset Management Plan details the full lifecycle management of the asset/s.

## Major changes planned for assets

Reason for change	What will be done?	Year 1 (\$000)	Year 2 (\$000)	Year 3 (\$000)	Year 4-10 (\$000)
Increase level of service/backlog	Additional logging equipment	7	-	-	-
	Eastern reservoir reticulation upgrade development contribution funded	-	-	-	354
	Extension to Mamaku water network	50	-	-	-
	General Eastern reservoir 3 partially development contribution funded	50	310	1,921	-
	Network improvement	1,093	2,160	1,953	4,433
	Ngongotaha bore source	50	52	-	-
	Pump improvements development contribution funded	238	246	-	-
	Pump station plant improvements	19	19	20	161
Increased demand	Eastern duplicate rising improvements development contribution funded	-	-	-	441
	Eastern reservoir reticulation upgrade development contribution funded	-	-	-	2,121
	Pump improvements development contribution funded	1,162	1,202	-	-
	Wharenui trunk reticulation improvements	-	-	-	2,018
Renewal and replacement	Meter renewals	37	38	40	318
	Monitoring equipment replacement	10	10	11	86
	Plant renewals	85	-	33	642
	Pump station plant renewals	1	1	1	10
	Urban mains renewals	1,150	1,190	1,228	10,993
	Urban reservoirs plant renewals	453	34	-	677
<b>Total</b>		<b>4,405</b>	<b>5,262</b>	<b>5,206</b>	<b>22,254</b>

## Activity assumptions used in providing this activity

This activity has been prepared in line with council's significant forecasting assumptions.

## Water Supplies - Funding Impact Statement

	Annual Plan	Long-term Plan Budget >>									
	Budget 2011/12 (\$000)	2012/13 (\$000)	2013/14 (\$000)	2014/15 (\$000)	2015/16 (\$000)	2016/17 (\$000)	2017/18 (\$000)	2018/19 (\$000)	2019/20 (\$000)	2020/21 (\$000)	2021/22 (\$000)
<b>Sources of operating funding</b>											
General Rates, uniform annual general charges, rates penalties	-	-	-	-	-	-	-	-	-	2	3
Targeted rates (other than a targeted rate for water supply)	3,387	3,521	3,778	4,045	4,292	4,553	4,807	5,073	5,367	5,684	6,014
Subsidies and grants for operating purposes	-	-	-	-	-	-	-	-	-	-	-
Fees, charges and targeted rates for water supply	3,592	3,786	4,106	4,448	4,784	5,108	5,407	5,709	6,041	6,397	6,768
Internal charges and overheads recovered	1,719	1,869	1,916	1,972	2,041	2,105	2,145	2,205	2,283	2,340	2,410
Local authorities fuel tax, fines, infringement fees and other receipts	318	2	95	191	305	315	331	349	480	684	933
<b>Total operating funding (A)</b>	<b>9,016</b>	<b>9,178</b>	<b>9,895</b>	<b>10,656</b>	<b>11,422</b>	<b>12,081</b>	<b>12,690</b>	<b>13,336</b>	<b>14,171</b>	<b>15,107</b>	<b>16,128</b>
<b>Applications of operating funding</b>											
Payments to staff and suppliers	1,467	591	780	816	976	1,097	993	1,042	1,170	1,074	1,137
Finance costs	359	653	776	825	1,046	1,185	1,198	1,105	1,078	1,094	1,113
Internal charges and overheads applied	5,219	6,281	6,465	6,660	6,885	7,075	7,245	7,448	7,686	7,917	8,130
Other operating funding applications	-	30	8	2	3	5	3	3	-	-	-
<b>Total applications of operating funding (B)</b>	<b>7,046</b>	<b>7,555</b>	<b>8,029</b>	<b>8,303</b>	<b>8,910</b>	<b>9,362</b>	<b>9,439</b>	<b>9,598</b>	<b>9,934</b>	<b>10,085</b>	<b>10,380</b>
<b>Surplus (deficit) of operating funding (A - B)</b>	<b>1,970</b>	<b>1,623</b>	<b>1,866</b>	<b>2,353</b>	<b>2,512</b>	<b>2,719</b>	<b>3,251</b>	<b>3,738</b>	<b>4,237</b>	<b>5,022</b>	<b>5,748</b>
<b>Sources of capital funding</b>											
Subsidies and grants for capital expenditure	200	80	1,125	2,950	877	80	82	84	87	90	93
Development and financial contributions	86	75	78	80	105	130	156	182	210	240	270
Increase (decrease) in debt	63	7	(1)	-	-	1	(1)	1	-	-	(1)
Gross proceeds from sale of assets	-	-	-	-	-	-	-	-	-	-	-
Lump sum contributions	-	-	-	-	-	-	-	-	-	-	-
<b>Total sources of capital funding (C)</b>	<b>349</b>	<b>162</b>	<b>1,202</b>	<b>3,030</b>	<b>982</b>	<b>211</b>	<b>237</b>	<b>267</b>	<b>297</b>	<b>330</b>	<b>362</b>
<b>Applications of capital funding</b>											
Capital expenditure											
- to meet additional demand	523	1,161	1,201	-	2,471	2,100	-	-	-	-	-
- to improve the level of service	551	1,508	2,789	3,895	2,014	601	434	449	465	483	502
- to replace existing assets	1,578	1,736	1,274	1,312	2,068	1,708	1,979	1,549	1,615	1,936	1,870
Increase (decrease) in reserves	(334)	(2,620)	(2,196)	176	(3,059)	(1,479)	1,075	2,007	2,454	2,933	3,738
Increase (decrease) in investments											
<b>Total applications of capital funding (D)</b>	<b>2,319</b>	<b>1,785</b>	<b>3,068</b>	<b>5,383</b>	<b>3,494</b>	<b>2,930</b>	<b>3,488</b>	<b>4,005</b>	<b>4,534</b>	<b>5,352</b>	<b>6,110</b>
<b>Surplus (deficit) of capital funding (C - D)</b>	<b>(1,970)</b>	<b>(1,623)</b>	<b>(1,866)</b>	<b>(2,353)</b>	<b>(2,512)</b>	<b>(2,719)</b>	<b>(3,251)</b>	<b>(3,738)</b>	<b>(4,237)</b>	<b>(5,022)</b>	<b>(5,748)</b>
<b>Funding balance ((A - B) + (C - D))</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>

Footnote: Capital revenue in 2013/14 – 2015/16 relates to central government funding for alternative water source investigations at Ngongotaha. If this funding is not granted the capital expenditure will not go ahead.