

## Water Services

### Sub Activities:

**Kaikoura Urban Water Supply,  
East Coast Rural Water Supply,  
Kincaid Rural Water Supply,  
Fernleigh Rural Water Supply,  
Oaro Rural Water Supply,  
Peketa Rural Water Supply**

### Goal

To provide water infrastructure that meets the needs of the community, ensures a healthy standard of living, and minimises effects on the environment.

### Key Issues for 2007/2008

The Kaikoura Township is now supplied from the new ground water source, which is proving to be water of exceptional quality, needing only residual chlorination for the infrastructure. This new source, plus the development of a new booster pump station and replacement of aged pipe infrastructure, means this water supply is in an excellent condition.

For this reason, no further capital works is currently planned for 2007/2008 in the urban area until funds allow, other than the renewal of aging pipe infrastructure which is funded from depreciation reserves.

Likewise, the Kincaid and Fernleigh rural water supplies have both recently been upgraded, and no additional work is currently programmed.

The Peketa rural water supply is in need of a new water treatment facility, and this is planned for the 2007/2008 financial year. Due to the small number of consumers on this scheme, the \$20,000 cost will be funded from Kaikoura Town Water depreciation reserves.

### What's changed since the 2006-2016 LTCCP?

The LTCCP provided for the development of a new water reservoir on the peninsula in 2007/2008, however due to the fact that housing in that area has yet to be built, therefore the increased capacity is not yet required, Council has deferred that work until next year.

The LTCCP does state that, “*While provision has been made in the financial statements for specific dollar values of work to be undertaken, this is indicative only. The capital works listed are proposed to be done progressively, and depending on the timeframes of these projects, may be different to the amounts forecast for each year in the financial statements*”.

## Service Delivery Standards

The following tables describe the levels of service for each of the Kaikoura Urban, and then the Kincaid Rural, water supplies.

### Kaikoura Urban Water Supply

Kaikoura Service Delivery Standard	Target	Currently Achieving
<b>Water Quality</b> Achieve a minimum MoH B grade for the water source and treatment	B	E
<b>Reticulation Network</b> Achieve a MoH B grade for the reticulation system	B	E
Deliver a peak flow of 840 litres/person/day	100% of reticulation	100% of reticulation
Deliver minimum flow of 15 litres per minute to property boundary	100% of reticulation	97% of reticulation
Comply with Fire Service Code of Practice	100% of reticulation	To be assessed

Kaikoura Service Delivery Standard	Target	Currently Achieving
<b>System Pressure</b>  Minimum water pressure at the property boundary should be > 20 metres  The maximum water pressure at the property boundary should be < 30 metres	95% of reticulation  100% of reticulation	90% of reticulation  90% of reticulation

System pressures of greater than 20 metres, for example, means that if there were a burst in the pipe at the boundary, the resulting height of the water column should be higher than 20 metres (but less than 30 metres). This means that a domestic property will have sufficient water pressure to enjoy a comfortable shower, water the garden, and use a washing machine.

<b>Kaikoura Service Delivery Standard</b>	<b>Target</b>	<b>Currently Achieving</b>
<p><b>Continuity of Supply</b>            Unscheduled disruptions shall not exceed:</p> <ul style="list-style-type: none"> <li>• 8 hours</li> <li>• 12 hours</li> </ul> <p>The maximum duration of any scheduled disruption shall not exceed 24 hours</p> <p>The maximum total disruption in any 5 day period shall not exceed 48 hours</p>	<p>&lt; 3 per year &lt; 2 per year</p> <p>&lt; 24 hours</p> <p>&lt; 48 hours</p>	<p>&lt; 1 per year &lt; 1 per year</p> <p>&lt; 24 hours</p> <p>&lt; 48 hours</p>
<p><b>Legislative Requirements</b>            Comply with legislative requirements</p> <p>Fire Hydrants shall be in accordance with the Fire Service Code of Practice</p> <p>The water intake and underground water source shall be operated in compliance with the relevant resource consent conditions</p>	<p>100% of the time</p> <p>100% of reticulation</p> <p>100% of the time</p>	<p>100% of the time</p> <p>85-90% of reticulation</p> <p>100% of the time</p>

<b>Kaikoura Service Delivery Standard</b>	<b>Target</b>	<b>Currently Achieving</b>
<p><b>System Records</b>            The water supply system shall be properly documented by</p> <ul style="list-style-type: none"> <li>• Maintaining accurate as-built records</li> <li>• Making as-built records available to the public</li> </ul>	<p>100% of system</p> <p>&lt; 2 working days</p>	<p>90% of system</p> <p>&lt; 2 working days</p>
<p><b>Public and Emergency Response</b>            An 8 hour public inquiry system shall be operated. Written complaints shall be responded to by:</p> <ul style="list-style-type: none"> <li>• Acknowledgement</li> <li>• Substantive Reply</li> </ul> <p>A 24 hour system failure unit shall be operated. In the event of a service failure report, the service shall be restored, or alternative services provided, for:</p> <ul style="list-style-type: none"> <li>• Low priority works</li> <li>• High priority works</li> </ul>	<p>&lt; 2 working days &lt; 10 working days</p> <p>&lt; 24 hours &lt; 4 hours</p>	<p>&lt; 2 working days &lt; 10 working days</p> <p>&lt; 24 hours &lt; 4 hours</p>

**Kincaid Rural Water Supply**

<b>Kincaid Service Delivery Standard</b>	<b>Target</b>	<b>Currently Achieving</b>
<b>Water Quality</b> Achieve a minimum MoH B grade for the water source and treatment	B	E
<b>Reticulation Network</b> Achieve a MoH B grade for the reticulation system  Deliver a minimum flow as per restrictor requirement per property per day	B  100% of reticulation	E  95% of reticulation
<b>System Pressure</b> Minimum water pressure at the property boundary should be > 20 metres  The maximum water pressure at the property boundary should be < 60 metres	100% of reticulation  100% of reticulation	95% of reticulation  90% of reticulation
<b>Storage</b> The combined reservoir volume shall equate to 24 hours storage at average daily flow	24 hours storage	4 hours storage

<b>Kincaid Service Delivery Standard</b>	<b>Target</b>	<b>Currently Achieving</b>
<b>Continuity of Supply</b> Unscheduled disruptions shall not exceed: <ul style="list-style-type: none"> <li>• 8 hours</li> <li>• 12 hours</li> </ul> The maximum duration of any scheduled disruption shall not exceed 24 hours  The maximum total disruption in any 5 day period shall not exceed 48 hours	 < 3 per year < 2 per year  < 24 hours  < 48 hours	 < 1 per year < 1 per year  < 24 hours  < 48 hours
<b>Legislative Requirements</b> Comply with legislative requirements  The water intake shall be operated in compliance with the relevant resource consent conditions	100% of the time  100% of the time	100% of the time  100% of the time
<b>System Records</b> The water supply system shall be properly documented by <ul style="list-style-type: none"> <li>• Maintaining accurate as-built records</li> <li>• Making as-built records available to the public</li> </ul>	100% of system  < 5 working days	40% of system  Nil

Kincaid Service Delivery Standard	Target	Currently Achieving
<p><b>Public and Emergency Response</b>            An 8 hour public inquiry system shall be operated. Written complaints shall be responded to by:</p> <ul style="list-style-type: none"> <li>• Acknowledgement</li> <li>• Substantive Reply</li> </ul> <p>A 24 hour system failure unit shall be operated. In the event of a service failure report, the service shall be restored, or alternative services provided, for:</p> <ul style="list-style-type: none"> <li>• Low priority works</li> <li>• High priority works</li> </ul>	<p>&lt; 2 working days            &lt; 10 working days</p> <p>&lt; 24 hours            &lt; 4 hours</p>	<p>&lt; 2 working days            &lt; 10 working days</p> <p>&lt; 24 hours            &lt; 4 hours</p>

Council will report on system pressure and continuity of supply of Urban and Kincaid Water Supplies in its Annual Report.

### Performance Measures to assess progress towards achievement of Community Outcomes

Community Outcome	How the Water Services Activity Contributes	Performance Measure	2007/2008 Target	10 Year Target
<b>Sustainable Development</b>	By providing adequate water and wastewater infrastructure, appropriately funded, to meet future development needs.	Ensure Asset Management Plans (AMPs) include 10 year projections of growth	Projections included in AMP	Projections included in AMP
<b>Quality Water and Wastewater Services</b>	Improve water supply quality and reliability, improving alternate supply sources, and increasing storage capacity, to meet the reasonable requirements of each community.	<b><u>Kaikoura Urban:</u></b> Achieve a minimum MoH B grade for water source, treatment and reticulation  Reticulation provides sufficient quantity and pressure for fire fighting purposes  Reservoirs provide 24 hours storage	B grade for water source  90-95% of reticulation  11 hours	B grade for reticulation  100% of reticulation  24 hours
		<b><u>Kincaid:</u></b> Achieve a minimum MoH B grade for water source, treatment and reticulation  The combined reservoir volume should equate to 24 hours storage at average daily flow	Bb  4 hours	Bb  24 hours

Community Outcome	How the Water Services Activity Contributes	Performance Measure	2007/2008 Target	10 Year Target
Quality Water and Wastewater Services	Improve water supply quality and reliability, improving alternate supply sources, and increasing storage capacity, to meet the reasonable requirements of each community.	<u>East Coast, Oaro, and Peketa:</u> Achieve a minimum MoH C grade for each water source and treatment	Not graded	C grade within 10 years
	Provide for the improvement of infrastructural services in small communities, by investigating the provision of water supply systems where the community requests it or the legislation requires it.	Asset Management Plans may be modified according to the results of Council's Assessment of Water and Sanitary Services, and following consultation with each community.	Implement practical recommendations from Councils assessment of Water Services	Implement practical recommendations from Councils assessment of Water Services
Quality Standard of Affordable Housing	Ensure that new dwellings have access to a potable water supply, which is provided at an affordable cost.	Total operating cost of service per connection (Kaikoura Urban).	Increase to be less than 5% pa	Increase to be less than 5% pa
Environmental Protection and Enhancement	Ensure the sustainable management of resources by promoting water conservation	Reduction of water consumption per annum (cubic litres used by each resident and tourist over the whole district)	Reducing by at least 5% per annum	Reducing by at least 5% per annum

## Capital Works 2007/2008

While significant upgrading works are programmed for the ten years contained within the LTCCP 2006-2016, very little capital works is planned for the 2007/2008 financial year. This is because the housing developments that would have placed pressure on the existing infrastructure have yet to be built, so this work has been delayed allowing Council to secure funds therefore reducing the need to borrow once the work is required.

Work	Location	Cost
<b>Urban Water</b>		
Renewals of Infrastructure	Urban Area	\$61,913
<b>Rural Water</b>		
Water Treatment System	Peketa	\$20,000
Fencing of Water Reservoir	Oaro	\$1,000
Renewals of Infrastructure	Kincaid	\$11,763

None of these projects will require additional borrowing. Depreciation reserves will be utilised in each case. Due to the small number of users on the Peketa rural water supply, the treatment system work will be funded by the Kaikoura Urban water reserve.

## How will the cost of Water Services affect my Rates?

There are no significant changes to the water rates for 2007/2008, other than the Water Loan Uniform Annual Charge, which has increased to reflect the additional borrowing of 2006/2007.

In summary the differences in these rates are:

	Rates 2006/2007 \$	Rates 2007/2008 \$
<b>Urban Water</b>		
Water Loan Uniform Annual Charge	65.98	93.10
Water Uniform Annual Charge (Full)	172.02	175.22
Water Uniform Annual Charge (Half)	86.01	87.61
<b>Rural Water</b>		
East Coast Water Unit Charge	238.42	241.26
Kincaid Water Unit Charge	108.31	112.57
Fernleigh Water Unit Charge	14.18	-
Oaro Water Loan Charge	162.97	162.90
Oaro Water Unit Charge	172.02	175.22
Peketa Water Unit Charge	255.65	254.80
Suburban Water Unit Charge	124.50	122.66

## Forecast Cost of Service Statement – Water Services

	LTCCP 2006/2007	LTCCP 2007/2008	Annual Plan 2007/2008
<b>Operating Expenses</b>			
<u>Kaikoura Urban Water Supply</u>			
Operations	307,478	359,765	<b>338,096</b>
Loan Interest	47,850	58,497	<b>73,211</b>
Depreciation	126,936	136,221	<b>189,189</b>
	<u>482,263</u>	<u>554,483</u>	<u><b>600,496</b></u>
<u>Rural Water Supplies</u>			
East Coast	85,600	88,150	<b>96,704</b>
Kincaid	58,504	68,057	<b>53,941</b>
Fernleigh	25,739	26,661	<b>26,078</b>
Oaro	25,378	26,261	<b>22,529</b>
Peketa	4,090	4,230	<b>5,211</b>
	<u>199,312</u>	<u>213,358</u>	<u><b>204,463</b></u>
<b>Total Operating Expenses</b>	<u>681,575</u>	<u>767,842</u>	<u><b>804,959</b></u>
<b>Funded by:</b>			
Targeted Rates & Charges	437,802	502,064	<b>509,928</b>
Water Meter Charges	144,100	158,510	<b>140,000</b>
User Fees & Charges	4,000	4,000	<b>8,000</b>
Development Contributions	232,960	183,181	<b>183,181</b>
Subsidies	-	-	-
	<u>818,862</u>	<u>847,755</u>	<u><b>841,109</b></u>
<b>Activity Surplus/(Deficit)</b>	<b>137,287</b>	<b>79,913</b>	<b>36,150</b>

	LTCCP 2006/2007	LTCCP 2007/2008	Annual Plan 2007/2008
<b>Capital Expenditure</b>			
<u>Kaikoura Urban Water Supply</u>			
New/Upgrade Assets	325,000	276,130	-
Renewals	77,000	64,688	<b>61,913</b>
Increasing Level of Service	-	-	-
	<u>402,000</u>	<u>340,818</u>	<u><b>61,913</b></u>
<u>Rural Water</u>			
New/Upgrade Assets	190,000	-	<b>21,000</b>
Renewals	-	11,763	<b>11,763</b>
Increasing Level of Service	-	-	-
	<u>190,000</u>	<u>11,763</u>	<u><b>32,763</b></u>
<u>Capital Debt Servicing</u>			
Loan Principal	54,346	74,172	<b>77,863</b>
	<u>54,346</u>	<u>74,172</u>	<u><b>77,863</b></u>
<b>Total Capital Expenditure</b>	<u><b>646,346</b></u>	<u><b>426,753</b></u>	<u><b>172,539</b></u>
<b>Funded by:</b>			
Reserves	59,840	(6,051)	<b>(166,181)</b>
Loans	210,000	100,000	-
Depreciation	239,219	252,890	<b>302,570</b>
Activity Surplus/(Deficit)	137,287	79,913	<b>36,150</b>
	<u><b>646,346</b></u>	<u><b>426,753</b></u>	<u><b>172,539</b></u>