Water Supply

Of the average annual bill for each Christchurch ratepayer, which is around $750, $63.90, or just under nine per cent is currently spent on maintaining the City's fresh water supply.

Every year 55 million cubic metres of water is pumped through 1,300 km of water mains and 2,000 km of water sub mains in Christchurch. The City's 95,000 residential and 5,800 commercial water users are supplied by 150 wells at 53 sites, eight main storage reservoirs, 37 service reservoirs and 26 secondary pump stations.

Service Options

There are four areas of service to consider in determining what standard of water supply Christchurch people wish to pay for. These are:—

Pressure and flow

Maintaining consistent pressure and flow in the City's water supply currently accounts for $47.90 of the average individual annual rates bill. In some parts of the City, from Halswell north and west through an arc incorporating Ilam, Papanui, Harewood, Mairehau, Redwood, Belfast and Parklands, a lower water pressure was installed than in the rest of Christchurch. To increase the pressure in the north and west to a level equivalent to the rest of the City would require new pumping equipment and water mains, which would increase the amount spent by the average ratepayer on maintaining consistent pressure and flow through the water supply to $72.70 every year.

Restrictions

Restrictions, such as banning the use of garden sprinklers or irrigation, are placed on the Christchurch water supply from time to time to reduce overall consumption during times of shortage. The frequency of restrictions is determined by climatic conditions and the overall reserve capacity of the City's water supply in terms of wells, pumps and pipes. Water restrictions are imposed once every ten to 15 years. At these times one in three residents are affected. To maintain this level of service accounts for $10.00 of the average individual annual rates bill. However, with the population of Christchurch forecast to grow, the frequency of water restrictions would increase if investment is not made to improve the capacity of the water supply system. Cutting back on this investment would result in the frequency of water restrictions rising to a moderate level every one to two years, but would reduce this part of the average annual rates bill to $6.00. To cut the frequency of restrictions to around half its current level would increase the amount spent by the average ratepayer to $18.00 every year.

Water Quality

Ensuring Christchurch water is clean, pure and of the highest quality currently accounts for $2.00 of the average individual annual rates bill. One in 20 residents experience some colouring or sand in their water up to ten times every year. Similarly, minute levels of harmless bacteria are found in no more than one per cent of test samples. Cutting this component of the rates bill to $1.60 would double the number of residents who experience colouring or sand in their water and double the number of positive bacteria tests. Improving the quality of Christchurch water to halve the incidence of colouring, sand and positive bacteria tests would increase the amount spent on water quality to $2.15.

Service: Pressure and flow

Lowest possible:	$47.90
Current Spend:	$47.90
Premium:	$72.70
Minimum acceptable:	$47.90

Service: Restrictions

Lowest possible:	$6
Current Spend:	$10
Premium:	$18
Minimum acceptable:	$10

Service: Water Quality

Lowest possible:	$1.60
Current Spend:	$2
Premium:	$2.15
Minimum acceptable:	$2

Service: Reliability

Lowest possible:	$2
Current Spend:	$4
Premium:	$10
Minimum acceptable:	$4

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Reliability

A number of quality control measures are in place throughout the design of the Christchurch water supply system to ensure its reliability. These account for $4 on the average annual rates bill. Some residents can lose their water supply on average up to two or three times a year for a maximum of four hours at a time. Investing less in ensuring supply reliability would equate to these residents losing water as often as six to ten times per year for a maximum of 24 hours at a time, which would cut the reliability component of the rates bill to $2 every year. Measures to eliminate all but one or two disruptions per year, lasting no longer than four hours at a time, would increase the amount spent by the average ratepayer on ensuring water supply reliability by $10 every year.

Summary

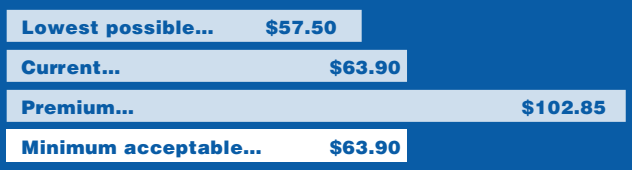
Maintaining and enhancing the Christchurch water supply currently costs the average ratepayer around **$63.90** every year.

To provide a service at a lower standard, with all the possible savings identified, would cut this amount back to **$57.50.**

To make all the improvements suggested would raise this amount to **$102.85.**

To provide a service consistent with the Minimum Acceptable Standards decided by Council would cost **$63.90.**

Summary of the costs of Water Supply



What do you think?

If you wish to make a submission on the 1998 Annual Plan, these are some of the questions you might like to consider:

- What do you regard as most important in the Christchurch water supply: pressure and flow, fewer restrictions, water quality or reliability?
- Are you prepared to pay higher rates to improve the service in any of these areas? If so, which one or which ones?
- Would you rather pay less in rates for a lower standard of service?
- Are you content that the present service at the present cost is about right?

Please fill in and return the submission form at the rear of this book to make your views known on the maintenance and development of the City's water supply.

Christchurch's water supply is one of the few in the world serving such a large population with natural, untreated water. This service meets and surpasses international and national drinking water standards, using water direct from underground aquifers. Retaining current levels of service without chlorinating the water as the City expands requires careful management of the resource and education of Christchurch residents.

contact

If you would like further information on the service options and the cost implications facing Christchurch in relation to water supply, please contact

Bruce Henderson on

371 1324.