

**Report No. 99.173**

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Report to the Utility Services Committee  
from Murray Kennedy, Strategy and Asset Manager

## **Wholesale Water Pricing**

### **1 Purpose**

To obtain approval to change the water pricing methodology from 1 July 1999.

### **2 Background**

In June 1997 the Utility Services Committee directed officers to prepare a new pricing methodology with the intention of applying it from July 1998. The need to change the present pricing methodology was recognised some years ago. Unfortunately, we were not able to obtain agreement with our customers by July 1998 and the present pricing continued for 1998/99. This was approved by the Committee, **Report No. 98.224** is attached as **Appendix 1**.

### **3 Events Since July 1998**

In July last year our customers again indicated a preference for fully volumetric pricing. However, they also indicated other pricing methods could be of interest but these required changes to the Wellington Regional Water Board Act. If there are to be changes to the Act, they may be more appropriate following the Government's current review of the water industry.

Various industry analysts and commentators continue to emphasise the need for water pricing to send appropriate economic signals to water users. In many cases this is a call for universal metering. The Water Group as a wholesaler does not have any direct involvement in charging the end user. We can send signals only through our wholesale pricing.

In early April this year we again sent a pricing proposal to our customers based on 70 percent fixed charges and 30 percent volumetric charging.

## 4 Proposal

The proposal consists of two parts.

- Seventy percent fixed charge (infrastructure charge) based on the volume used in the year prior to the start of the pricing year.
- Thirty percent volumetric charge with higher unit rates over the summer months and late spring period.

The pricing method recognises the peak demand problem we have on a few days in summer.

The proposal is based on revenue of \$25.218 M, as adopted by the Council for its 1999/00 Proposed Annual Plan, and a volume of 55,889 ML, the quantity<sup>1</sup> used in the metering year ended March 1998.

Proposed charges are as follows:

Fixed charge, 70 percent of the estimated total	\$17.653 m
Unit volume rates	
March to October	12 cents/cu.m
November	15 cents/cu.m
December to February	18 cents/cu.m

The fixed charge portion for each city is based on their percentage of the total quantity for the previous year. In future there would be no end of year adjustments as at present. Volumetric charges are based on the meter reading quantities taken each Wednesday. Hence, the number of readings each month will be four or five. Once the current meter upgrading work is completed in about 18 months, it will be possible to obtain meter information for a true monthly period.

## 5 Analysis

One of the criticisms from our customers of the earlier 70 percent fixed 30 percent variable proposal was that the impact on each customer was different. Unfortunately, it is unlikely any significant change in the pricing methodology will have a uniform impact on all four customers, and therefore gaining unanimous agreement for change is also unlikely. Using the volume of water sold in 1998/99 minimises any disadvantage to our customers from changing the pricing. This is because the 1998/99 summer was quite dry and hence a greater quantity of water was used than in a summer with more normal rainfall. **Appendix 2** consists of a series of charts showing the impact of the pricing, as if it had been applied over the last six years. Customers would have paid, in total, \$1.987 M less over the six year period. On an individual customer basis the amounts are:

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<sup>1</sup> With Wednesday readings there were 53 Wednesdays last year, the quantity has not been normalised.

City	Reduced Amount \$000	Percentage of Total Reduction	Percentage of WRC Sales Volume in 1998/99
Hutt	492	24.7	27.4
Porirua	64	3.2	10.5
Upper Hutt	351	17.7	10.2
Wellington	1,080	54.4	51.9
	<b>1,987</b>	<b>100</b>	<b>100</b>

There are some differences between the percentage reduction, which would have occurred, and the sales volume percentage. All cities though would have been better off under the new proposal.

The proposal can be viewed as an average levy reduction of \$330,000 a year, if it had been applied over the last six years.

## 6 Customer Response to Date

Response from our customers has been mixed.

*Hutt City* is receptive to a fixed/variable split but is not in agreement with all the details in the present proposal.

*Porirua City* has decided the proposal is not beneficial to them and are therefore unable to support it.

*Upper Hutt City* have indicated a response will be sent shortly. The Committee will be updated at the meeting.

*Wellington City* has indicated a preference for full volumetric pricing, they would also like changes to the Water Board Act.

It is pleasing to note that Hutt City is in agreement with a two part pricing structure. There is no reason to prevent further refinement of the proposed structure each year. Although the proposed structure does not meet Wellington City's requirements, at least 30 percent of the revenue will be volumetric based whereas they would like 100 percent.

## 7 Water Board Act Requirements

The Wellington Regional Water Board Act of 1972 sets out specific requirements as to how customers are charged. Clause 86 states:

**86. Water supply** – (1) The Board shall charge the constituent authorities a uniform charge for water supplied to those authorities under this Act.

(2) The amount payable by each constituent authority to recover the net expenditure chargeable in respect of the water supply account under section 85 of this Act shall be calculated by the Board on the basis of a peak or total

consumption or a combination of both in such manner as the Board, after consultation with the constituent authorities, from time to time determines:

Provided that, for the purpose of this subsection, actual peak or total consumption during any period may be adjusted if it is unusually high owing to any circumstances beyond the control of the constituent authority.

(3) Charges for water shall be payable by the constituent authorities to the Board by such instalments and at such times as the Board, after consultation with the constituent authorities, from time to time determines.

The proposed charging methodology and the consultation process are in compliance with the Act.

## 8 **Justification for Change**

With the current pricing mechanism there is no economic incentive for customers to reduce the maximum demand solely in summer. Rather, the incentive for any one city is to reduce overall annual consumption relative to the other cities. This then decreases the percentage of the levy paid by a city reducing its relative quantity. For seven to eight months of the year there is excess raw water available in the rivers and aquifer.

Supplying the quantity of water used over the summer period and meeting the demand on peak summer days are key issues facing the Water Group.

In due course a new source will need to be developed. Development of the Akatarawa catchment, if it is the next source to be developed, will cost tens of millions of dollars. Prior to that there are some minor opportunities at a lesser cost. For example, development of the Moera aquifer.

Just stumbling into the development of a new source would not be good stewardship.

Rather, starting to send a light economic signal now about the summer water situation provides our customers with an element of choice. They can respond to it by promoting greater summer conservation in conjunction with the Water Group, or accept the costs of a new development sooner rather than later. **Appendix 3** is a chart which shows the daily demand and rainfall over the last summer. Daily consumption drops, often significantly, following initial rainfall after a dry spell. Our summer advertising campaign has promoted wise watering of gardens. More needs to be achieved to reduce the summer peaks, hence the proposed economic signal to our customers.

## 9 **Risks**

The Water Board Act constraints mean it is not possible to obtain a return on the assets employed. Instead, pricing is sufficient to cover costs, including interest and principal repayment of loans. If there is a surplus in any one year it is applied to additional debt repayment.

Because the required revenue in each year is set to cover costs there is limited scope to cover pricing risk. Had our revised proposed pricing methodology been applied over

the past six year's revenue would have been up to \$350,000 above or below the required figure. It is suggested that this range is manageable and can be covered by a small reserve. Reserve funds could be used during a "wet" year when revenue is below expectation. After a dry year additional funds would need to be placed in the reserve. An initial reserve of \$300,000 is suggested.

## 10 **Contract**

For the last two years we have been working with our customers to conclude a water supply agreement. The agreement addresses issues such as quality of supply, performance measures and how to deal with adverse situations. Such issues are only covered lightly, or not at all in the Water Board Act. Our intention was that pricing would have also been covered as part of the agreement. Given that the annual transaction with our customers is in excess of \$25 M, an agreement seemed entirely appropriate for a modern business relationship.

Our customers have now decided not to proceed with the agreement. Various reasons have been cited including possible industry reorganisation and an apparent unwillingness by some Councils to put the time into the final stages of concluding the agreement.

## 11 **Revenue**

At present the Council is consulting about the levy for 1999/00. The formal decision to set the levy is usually taken at Policy and Finance Committee/Regional Council meetings when it finalises the Annual Plan (this year on 7 July). The actual charges for the new pricing method can wait until the July meeting. As noted in section 5 of this report, the average expected revenue in any one year (based on an average of the past six years) should be approximately \$330,000 less than under the present pricing method. The \$330,000 represents a reduction in cost to the cities of approximately 1.3 percent compared with the 1998/99 levy which they do not seem to want to realise. Nevertheless, it is the view of officers that change is overdue and should be made with effect from 1 July 1999.

With the present levy pricing method there is always an end of year financial adjustment to take account of the difference between provisional quantities set at the start of the year and the actual quantities. These debits and credits, which are neutral to the Water Group, take place as 12 payments by, or refunds to, each customer in the following financial year. This would still continue for one year to wind up the present pricing method. It would be separate from the new pricing method which does not require an end of year adjustment.

## 12 Recommendations

*The Committee recommend that Council:*

- (i) Change the pricing methodology for wholesale water supply with effect from 1 July 1999 to a new methodology which has a nominal seventy percent set as a fixed fee with thirty percent of the revenue obtained from volumetric charging.*
- (ii) Set the actual charges for the 1999/2000 year at Policy and Finance Committee/Regional Council meetings on 7 July 1999.*

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Attachments:   Appendix 1   Report No. 98.224  
                  Appendix 2   Charts showing impact of the pricing  
                  Appendix 3   Daily Demand Chart