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**CITY OF KELOWNA**

**MEMORANDUM**

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**Date:** January 19, 2005

**To:** City Manager

**From:** Water/Drainage Manager

**Subject:** 2005 Water Utility Rates

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**RECOMMENDATION:**

**THAT** council approve a revised water rate structure that includes an increasing block rate component for residential customers and increasing volume component for multifamily and commercial customers.

**AND THAT** Council approve an overall 5.2% increase in Water Revenues for 2005 as follows:

**Residential Revenue Increase of: 4.7%**

**Multi-Family Revenue Increase of: 6.6%**

**Commercial Revenue Increase of: 6.6%**

**Fire Line Revenue Increase of: 4.7%**

**Agricultural flat rate be increased to \$42.00 per acre/year and the Irrigation flat rate be increased to \$100.00 per acre/year.**

**A Bulk Water rate be established at \$0.140 per cubic meter.**

**AND THAT** Council approve the 2005 water rates as to be effective with the first billing cycle in April, 2005.

**AND FURTHER THAT** staff be instructed to prepare the required bylaw for reading consideration by Council.

**BACKGROUND:**

Council recently adopted the concept of a revised water rate structure that incorporates an increasing block and volume rate structure. This report outlines the rates being proposed and the impacts to the water utility customers. Over the past three years a number of initiatives have been completed to better understand the long term impacts of water demand on the utility and how incentive and education programs have assisted in reducing consumption. Work has also been completed to determine if each of the various customer rate classes adequately support the true cost of providing water service to them. The outcome of this work was presented to council on January 17<sup>th</sup> and is summarized in schedule #1. Although a 20% reduction in water use has been

achieved since the implementation of metering and public education programs, the need to increase water rates and create a rate structure to reduce water consumption that is contributing to peak demand is still required. A number of other factors also contribute to the need for a general increase to current water rates. These include:

- The increased costs for capital improvement works to the infrastructure due to market conditions,
- There has not been an increase in water rates to water utility customers since May of 2000 and inflationary impacts have weakened the financial position of the utility,
- The increasing importance of water conservation and water quality initiatives.

A rate structure must be implemented that is designed to provide more equity across all customer rate classes and provides an incentive for high water users to reduce their consumption charges.

**Residential Customers-** The type of rate structure recommended for the residential category is referred to as an “inclining block rate”. This rate structure lowers the fixed monthly charge from \$7.60 to \$6.25 and increases the volume charge as water use increases through various blocks of consumption. The first 30 cubic meters per month will remain at \$0.225/cm, the next 95 cubic meters will increase to \$0.32/cm and over 125 cubic meters per month will be charged at \$0.42/cm. It is designed so that low to average water users will see no significant change in their monthly bill while high water users will pay more for their excessive consumption. This approach addresses the goal of reducing peak demand that is generated from high water users by applying a cost incentive to reduce to average or acceptable levels of consumption. Increasing block rate strategies are used in many other locations and have been designed to more aggressively promote water conservation during outside water use periods. Schedule #2 shows the change in monthly costs for residential customers at different consumption levels. Based on the average 2003 water consumption this rate change will increase the **annual** water bill by \$8.31 or 3.8%. Overall the changes should increase residential revenues by 4.7%.

**Multi-Family Customers** – The recommended change for multi-family customers is a reduction of 20% in the monthly service charge and an increase in the volume charge from \$0.125/cm to \$0.163/cm. The volume charge will still be considerably below the residential charge but will be phased higher as per the cost of service study that indicated this class should be increased. It is important to note that although overall revenues will increase by 6.6% from 2004, with the rate structure change individual customers will be impacted differently depending on their water usage.

**Commercial Customers** – The recommended change for commercial customers is a reduction of 20% in the monthly service charge and an increase in the volume charge from \$0.100/cm to \$0.140/cm. Similar to the multi-family class the volume charge will be phased higher as per the cost of service study that indicated this class should be increased. Overall revenues will increase by 6.6% from 2004 but individual customers will again be impacted differently.

**Irrigation and Agricultural Customers** – Irrigation and agricultural customers currently pay a flat rate of \$90.30 and \$31.62 per acre per year, respectively. The cost of service review that was completed recommended that significant adjustments to these rate classes were required within a short time frame; however it is recommended that a

phased in approach be used. It is recommended that the agricultural rate be adjusted from \$31.62 per acre per year to \$42.00 per acre per year to more adequately reflect the charges currently levied by other purveyors in the community. It is also recommended that the irrigation rate be adjusted from the current charge of \$90.30 per acre per year to \$100.00 per acre per year.

**Bulk Water Users** – There is currently no rate class for this group of users and a new customer class will be established. Most bulk water use is seasonal and is currently provided by applying for a hydrant use permit. A nominal fee is charged to recover the cost of inspecting the hydrant after use however there is no set charge for water volume that adequately reflects the cost of the volume of water provided. The cost of service review recommends that a rate class be developed for these users and charged on the basis of a commercial customer rate, \$0.140 per cubic meter.

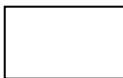
**Private Fire Protection** - The annual charge for private fire line protection will be increased by 4.7% from \$12.65 to \$13.25 per month.

The rate changes are based on a strategy that will phase closer to the cost of service for all customer classes to ensure each customer class pays its proportionate share for water service. The parcel tax is currently at \$50 per year and will begin to be reduced by \$10 per year starting in 2006 so that it is phased out at the same time as the wastewater parcel tax.

Although the rate changes will significantly affect some higher use customers the City of Kelowna water rates will still be much lower than other municipalities in the Okanagan and in southern British Columbia. Current water rates from other communities have been reviewed and are included for comparison in Schedule #3.

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Don Degen,  
Water Manager



Approved for inclusion:  
John Vos  
Director of Works & Utilities

Attach.

cc: Financial Planning Manager

## **SCHEDULE #1**

### **Water Utility Consumption Review Outcomes**

The outcome from work completed by the water utility over the past 3 years related to water use by customers and potential rate changes has concluded the following:

- The Water utility continues to recognize the importance of reducing water consumption within its own facilities as well as the need for certain segments of the customer base to reduce consumption to ensure sustainability of the water resource. Kelowna continues to be one of the highest per capita water users in the province and in the country.
- A reduction in peak water demand which occurs during periods of outside water use will significantly reduce the capital expenditure required for future infrastructure expansion. The most recent 20 year servicing plan suggests that over \$20 million in cost savings can be realized over this period if peak demand can be reduced by 16%
- Customer education and incentive programs that have been piloted over the past 3 years with residential customers have resulted in water reductions as high as 25%
- Average irrigation water use requirements by lot size have been defined and can be used as a guideline to determine specific customer needs to ensure water use beyond what is required can be prevented.
- Certain segments of the customer base are creating unnecessary peak demand. Approximately 20% of our overall customer base is considered to be high to extreme water users.
- Some historical rate inequities exist between various customer classes. The cost of service analysis has identified the need to reallocate water service costs among the various customer classes to ensure each class is paying their proportionate share.
- The completion of a comprehensive cost of service and rate design study has provided the true cost of service to our various customer types and will ensure reduction goals are met.

To meet the utility's objective of reducing overall consumption and peak water demand two primary initiatives must be undertaken; continued emphasis on customer education and implementation of a revised rate structure.

## SCHEDULE #2

### **RESIDENTIAL RATE COMPARISON**

#### **BASED ON THE FOLLOWING RATES:**

	<i>CURRENT</i>	<i>NEW</i>
<i>Service Chg</i>	7.60	6.25
<i>First 30 CM3</i>	0.225	0.225
<i>Next 95 CM3</i>	0.225	0.320
<i>Over 125 CM3</i>	0.225	0.420

<b>MONTHLY % INCREASE FOR CITY OF KELOWNA RESIDENTIAL CUSTOMERS</b>				
<u>CM3 USED</u>	<u>CURRENT RATE</u>	<u>NEW RATE</u>	<u>DIFFERENCE</u>	
0	7.60	6.25	(1.35)	
10	9.85	8.50	(1.35)	
20	12.10	10.75	(1.35)	
<b>30</b>	<b>14.35</b>	<b>13.00</b> *	<b>(1.35)</b>	
40	16.60	16.20	(0.40)	
50	18.85	19.40	0.55	
75	24.48	27.40	2.93	
<b>100</b>	<b>30.10</b>	<b>35.40</b> **	<b>5.30</b>	
125	35.73	43.40	7.68	
150	41.35	53.90	12.55	
200	52.60	74.90	22.30	

\* Average single family residential (Winter) 30 CM3 per month.

\*\* Average single family residential (Summer) 104 CM3's per month.

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### **SCHEDULE #3**

#### **Residential Billing Rate Comparison by Community**

City	Cost of 30 Cubic Meters Per Month	Cost of 125 Cubic Meters Per Month
Kelowna (new)	\$14.35	\$35.73
Penticton	\$18.10	\$45.65
Vernon	\$27.00	\$93.50
Nanaimo	\$23.26	\$245.68
Richmond	\$18.33	\$76.40
Surrey	\$17.00	\$55.00
Chilliwack	\$13.10	\$39.70
Abbotsford	\$16.80	\$70.00
Langley	\$26.36	\$96.66
Kamloops	\$25.93	\$61.08