

# Request for Recommendation Finance Committee



Type of Decision							
Meeting Date	November 24, 2011			Report Date	November 17, 2011		
Decision Requested	X	Yes	No	Priority	X	High	Low
	Direction Only			Type of Meeting	X	Open	Closed

Report Title
Realignment of Meter Equivalency Ratios

Budget Impact/Policy Implication	
X	This report has been reviewed by the Finance Division and the funding source has been identified.
<p>There will be no impact to the total fixed charge revenues collected by the City but there will be water and wastewater rate relief of approximately \$715,000 (base budget) to residential customers. This amount will be passed on to the high volume users, with meter sizes of 1 inch or greater.</p> <p>The adoption of this recommendation will result in a net overall increase on water and wastewater costs for various City operating departments, and will be funded within the 2012 Base Budget.</p>	
X	<b>Background Attached</b>

Recommendation
<p><b>THAT</b> Council approves Option 1, which states that the 2012 monthly fixed charge for the 5/8 or 3/4 inch water meters be frozen at the 2011 rate of \$15.71, and the foregone fixed charge revenue be passed on to the high volume customers with service lines equal to or greater than a 1 inch meter, as outlined in the report from the Chief Financial Officer dated November 17, 2011,</p>
<b>Recommendation Continued</b>

Recommended by the Department
 Lorella Hayes Chief Financial Officer/Treasurer

Recommended by the C.A.O.
 Doug Nadorozny Chief Administrative Officer

Report Prepared By	Division Review
 Paddy Buchanan Manager of Accounting	

## BACKGROUND

During the 2011 budget deliberations, Council directed staff to review the water and wastewater (WWW) rates with specific attention to the distribution of charges between residential and high volume users, such as the non-residential customers. This report sets out the preliminary findings of this review. Over the next several months the Regional Treasurer's Group will be undertaking a WWW rate structure review and it is expected that this work together with the City's review may provide further recommendations in mid 2012.

For the purposes of this report, customers using a 5/8 or 3/4 inch meter will be classified as residential or low volume users. High volume customers are those who connect to the system with a meter 1 inch or greater. There are approximately 45,000 5/8 inch customers and approximately 2,000 customers with metre sizes of 1 inch and greater.

### Current Water and Wastewater Rate Structure

The City's water and wastewater services are provided on a full user-pay (includes operating and capital envelopes) basis excluding fire protection costs. Under the current rate structure, customers are charged a fixed monthly service fee for water that varies based on the size of the water service and a variable consumption charge calculated on a per cubic metre basis of water consumed. Wastewater fees are calculated as a surcharge (percentage) of water rates and as such incorporate both a fixed and variable component. Revenues from the fixed charge comprise approximately 35% of the user fees and the variable charge accounts for 65% of the user fees.

For 2011, the residential customer fixed monthly service charge for water is \$15.71 and the variable consumption charge is \$1.081 per cubic metre of water consumed. The 2011 wastewater surcharge is 111.9% of water rates.

### Alternative Water and Wastewater Rate Structures

In 2009, KPMG was engaged to undertake a review of the City's water and wastewater rate structure and presented their findings to Council on November 12, 2009. In this report KPMG set out several alternatives for water and wastewater rate setting. The major conclusions of this report were:

- The City should not consider reducing the percentage of user fees generated by the fixed charge (as noted above approximately 35% of user fees), since almost 70% of the WWW expenses are fixed in nature.

- The City should continue to use a uniform variable consumption charge for water customers as it is easily understood, simple to administer, consistent with common and best practices for Ontario municipalities and fair in that all customers pay the same rate for water consumed.
- The City should continue to levy a wastewater surcharge on the fixed and variable water rates.

During 2011, Finance staff with the assistance of BMA Management Consulting Inc. undertook an environmental scan of current practices in water and wastewater rate setting to determine if there was any new information that would suggest that the conclusions of the KPMG report should be changed. This report confirms the KPMG conclusions noted above, with the exception of one finding that emerged.

During staff's review, it was noted that the residential fixed charge and the high volume customer fixed charge could be realigned to provide for more equitable distribution of the fixed charges between residential and high volume customers. The remainder of this report discusses this finding and makes a recommendation for 2012.

### **Distribution of Fixed Charges**

The water fixed charge rates were established at the time of amalgamation, based on meter equivalency ratios. The meter equivalency ratios (set out in the Tables below) are factors that are used to establish the charge to larger customers against a base charge which is the smallest meter size available, 5/8 inch residential meter. It has been the City's practice to increase these rates annually by the volumetric water rate increase. The fixed charges for 2011 are as follows:

**TABLE 1: 2011 Fixed Charges**

<b>Meter Size Inches</b>	<b>City's Meter Equivalency Ratio</b>	<b>Monthly Fixed Water Charge \$</b>
5/8 or 3/4	1.0000	15.71
1	1.4831	23.30
1 1/2	2.0000	31.42
2	4.0286	63.29
3	8.0127	125.88
4	12.0573	189.42
6	20.1012	315.79
8	32.3285	507.88
10	55.4430	871.01



During late 2011, staff undertook a review of the City's ratios. The following table summarizes the City's ratios, American Water Wastewater Association (AWWA) recommended ratios, and the average from 20 municipalities surveyed by BMA.

**TABLE 2: COMPARISON OF METER EQUIVALENCY RATIOS**

<b>Meter Size Inches</b>	<b>City's Meter Equivalency Ratio</b>	<b>Recommended Ratios per AWWA</b>	<b>BMA Survey Average</b>
5/8	1.0000	1.0	1.0
1	1.4831	2.5	2.38
1 ½	2.0000	5.0	3.96
2	4.0286	8.0	6.38
3	8.0127	16.0	11.57
4	12.0573	25.0	19.45
6	20.1012	50.0	39.43
8	32.3285	80.0	60.77
10	55.4430	115.0	82.57

As illustrated above, the City's meter equivalency ratios are well below both the AWWA and BMA Survey Average ratios. These differences are further evident when we compare the percentage of the Fixed Charge of the Total WWW bill by meter size, in Table 3 below.

**TABLE 3: FIXED CHARGE AS A % of TOTAL WWW BILL**

<b>Metre Size Inches</b>	<b>Assumed Consumption – cubic meters</b>	<b>City - % Fixed Charge of Total Bill</b>	<b>BMA Survey Avg - % Fixed Charge of Total Bill</b>
5/8	250	41	25
1	1,000	21	27
2	10,000	7	10
3	30,000	4	7
4	100,000	2	4

With the current rate structure, a typical residential water bill in the City (assumes consumption of 250 cubic meters) has a total fixed charge component of 41% and is much higher than the average of the municipalities surveyed in the BMA Municipal Benchmarking Report at 25%. For a sample of high volume customers, the total fixed charge component of an average bill is below the survey average as illustrated above.

This analysis suggests that the City's fixed charges could be realigned between residential and high volume users.

The following options have been prepared for the Finance Committee's consideration:

**OPTION 1: Freeze the 5/8 inch meter fixed charge at the 2011 rate of \$15.71**

To begin to address this imbalance, this report recommends that the 2011 residential fixed charge of \$15.71 be frozen for 2012 and that the foregone residential fixed charge revenue of approximately

\$715,000 (base budget) be passed on to the high volume customers.

Table 4 illustrates the estimated change in the Fixed Charge as a percent of Total Bill, if Option 1 is approved by the Finance Committee:

**TABLE 4: PROPOSED FIXED CHARGE AS A % of TOTAL WWW BILL**

<b>Metre Size Inches</b>	<b>Assumed Consumption – cubic metres</b>	<b>City - % Fixed Charge of Total Bill</b>	<b>Option 1: % Fixed Charge of Total Bill</b>	<b>BMA Survey Avg - % Fixed Charge of Total Bill</b>
5/8	250	41	40	25
1	1,000	21	26	27
2	10,000	7	8.7	10
3	30,000	4	6	7
4	100,000	2	2.8	4

As illustrated in Table 4 above, if the Finance Committee approves Option1 to freeze the 5/8 inch meter rate in 2011, and pass along the increase to the high volume customers, the City's fixed charge as a percent of the total bill, is still below the BMA Survey Average.

If Option 1 is adopted, the 2012 base budget overall water and wastewater rate increase for an average residential customer (assumes consumption of 250 cubic metres) would be 2.5% compared to an overall rate increase under the existing policy of 4.2%. This represents an annual fixed charge saving of \$16. The overall water and wastewater rate increase for high volume customers (assumes average consumption as established by BMA) would range between 4.4% and 12% for high volume customers compared to a rate increase under the existing policy of 4.2%. The following table illustrates the impact to the overall water and wastewater rate increase by customers. The increased annual fixed charge cost would be \$250 for a 1 inch meter, \$340 for a 1 ½ inch meter and \$680 for a 2 inch meter.

**TABLE 5: Impact on WWW RATE**

<b>Meter Size Inch</b>	<b>No of Customers</b>	<b>Rate Increase Existing Policy %</b>	<b>Rate Increase Freeze Residential Fixed Charge %</b>
5/8 or 3/4	44,652	4.2	2.5
1	1,092	4.2	12
1.5	442	4.2	7.2
2	476	4.2	6.7
3	30	4.2	5.9
4	14	4.2	5.0
6	20	4.2	4.4

There are approximately 45,000 residential customers and 2,000 high volume customers.

## **OPTION 2: Status Quo**

The Finance Committee could increase all Fixed Meter Charges in accordance with existing practice. It has been the City's practice to increase these rates annually by the volumetric water rate increase. As illustrated in Table 5 above, the overall impact to all customers would be approximately 4.2% for the Base Budget.

The decision to adopt Option 1 could be deferred until the Regional Treasurer's Group completes the WWW rate structure review. It is expected that their report and recommendations will be available during 2012.

## **CONCLUSION**

A preliminary rate review has identified that water fixed charge rates should be realigned between residential and high volume customers. There are two options for consideration.

It is recommended that Option 1 be adopted.