

**FINANCE AND CIVIC DEVELOPMENT COMMITTEE**

*HIS WORSHIP, THE MAYOR  
AND COUNCILLORS*

**SUBJECT: 2015 WATERWORKS UTILITY RATES**

**RECOMMENDATION:**

1. THAT Council amend the Burnaby Waterworks Regulation Bylaw to provide for the water rates contained in Schedule C, effective 2015 January 01, as outlined in this report.

**REPORT**

The Finance and Civic Development Committee, at its meeting held on 2014 November 18, received and adopted the *attached* report seeking Council's approval for a 3% increase to the 2015 Waterworks Utility rates.

Respectfully submitted,

Councillor D. Johnston  
Chair

Councillor C. Jordan  
Vice Chair

Councillor P. McDonell  
Member

Copied to:	City Manager Director Finance Director Engineering City Solicitor
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**TO:** CHAIR AND MEMBERS  
FINANCE AND CIVIC DEVELOPMENT  
COMMITTEE

**DATE:** 2014 November 18

**FROM:** DIRECTOR FINANCE

**FILE:** 39500-07  
*Reference: Water Rates*

**SUBJECT: 2015 WATERWORKS UTILITY RATES**

**PURPOSE:** To request Council approval for a 3.00% increase to the 2015 Waterworks Utility rates.

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**RECOMMENDATION:**

1. **THAT** Finance and Civic Development Committee recommend Council amend the Burnaby Waterworks Regulation Bylaw to provide for the water rates contained in Schedule C, effective 2015 January 01 as outlined in this report.

**REPORT**

**1.0 BACKGROUND**

The Waterworks Utility report provides information and recommendations for funding of the Waterworks Utility.

The Waterworks Utility Fund is financially self-sustaining and therefore rate changes do not impact property taxes. Water rates are reviewed annually and revised to account for changes in costs associated with the delivery of water to Burnaby. Rates are changed through the adoption of an amendment to the Burnaby Waterworks Regulation Bylaw.

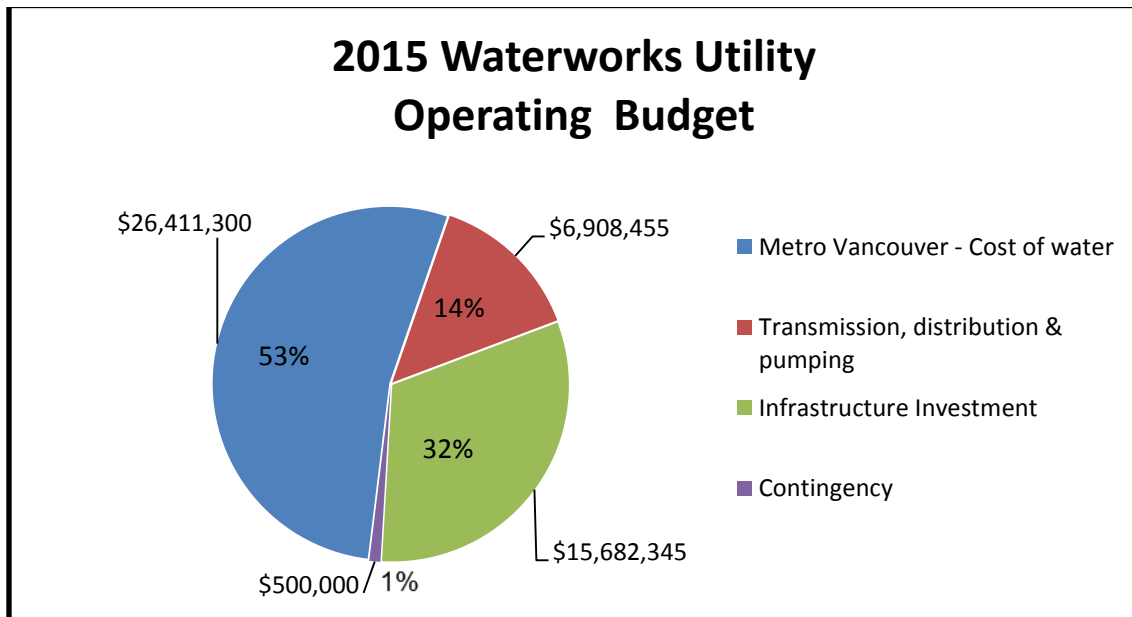
Waterworks Utility fees are due by March 15<sup>th</sup> each year. To promote payment by the due date, Burnaby offers a 5% discount for payments received on or before March 15<sup>th</sup> of a given year. Metered water users are offered the same 5% discount for payments made within 30 days of the billing date on the metered water bill.

## 2.0 WATERWORKS UTILITY FUND EXPENDITURES

The 2015 Waterworks Utility expenditures total \$49.5 million, an increase of \$865 thousand over 2014. Increased expenditures include Metro Vancouver costs of \$417,700, and an increased contribution to capital of \$682 thousand. Operating contingency has been identified in the budget to provision for any fluctuation in water demand.

The 2015 expenditure budget is summarized in Chart 1. Schedule A (attached) provides the City's Waterworks 5 – Year Operating Budget.

**Chart 1**



### ***Metro Vancouver Costs***

The Greater Vancouver Water District (GVWD) provides safe, reliable, high-quality drinking water to Burnaby and is responsible for acquiring and maintaining the water supply, treating it to ensure its quality and delivering it to the City. Burnaby pays the GVWD for the delivery of water on the basis of cubic metre volume. The 2015 estimated cost of the GVWD water delivery service for Burnaby is \$26.4 million.

The GVWD supplies water to Burnaby at peak rates (effective June to September) and non-peak rates. For 2015, the blended rate is 63.01 cents per cubic meter, an increase from 62.01 cents per cubic metre in 2014.

The GVWD cost of water accounts for approximately 53% of the City’s 2015 Water Utility operating budget. The Water Utility budget provides for ongoing work by the GVWD for water treatment and other improvements, including upgrading of facilities to meet safety and environmental standards. Schedule B summarizes the projected increase in the cost of water to Burnaby for 2015 based on GVWD rates and estimated consumption.

***Transmission, Distribution & Pumping***

The City’s Engineering Department manages Burnaby’s water transmission system to ensure that drinking water quality delivered to customers meets all relevant health and quality guidelines. Through the City’s long-standing Water Quality Monitoring Program comprehensive water quality monitoring, routine uni-directional flushing of water mains and reservoir exercising are carried out to help protect the quality of the City’s water. The City’s Cross Connection Program also helps to safeguard against the possibility of contaminants entering the community's drinking water systems. Cross-connection control devices are installed, maintained and tested annually.

Operating costs include Engineering staffing, materials, utilities (Hydro and Gas), and equipment expenditure, which contribute towards continued operation of Burnaby’s Waterworks Utility programs in 2015.

***Infrastructure Investment***

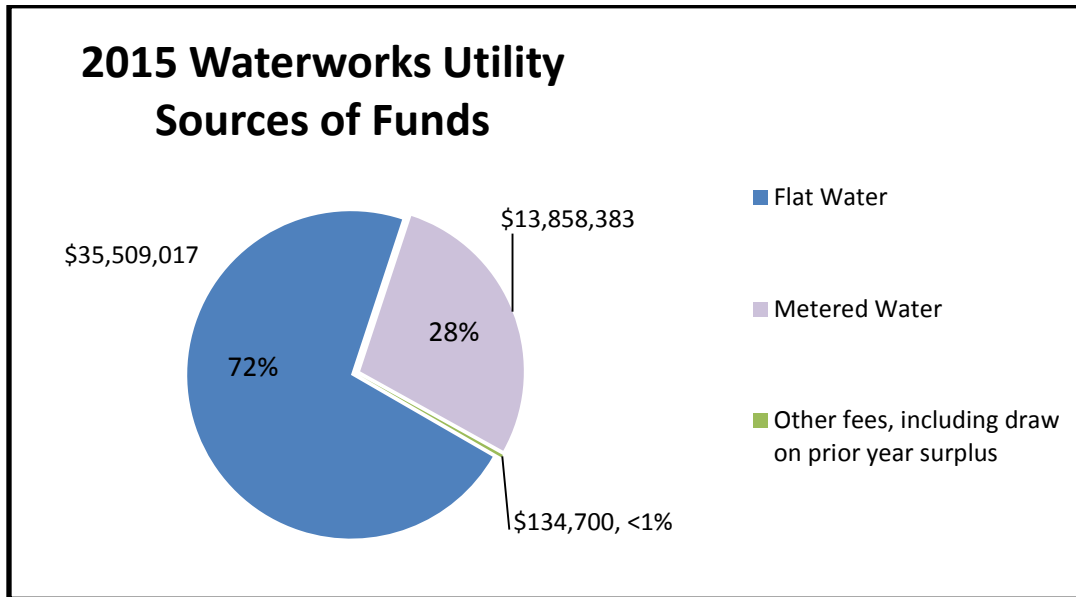
Burnaby relies on over 700 km of watermains to deliver approximately 115 million litres of water every day to Burnaby residents and businesses. The City has a water main replacement program to replace aging water mains at a rate of about 2% a year helping to ensure City water infrastructure assets are well managed and resilient. The City has made significant progress in replacing aging asbestos cement watermains which have reached the end of their useful life. The 2015 program focuses on mains with the highest break frequency and the largest potential for neighbourhood disruption. In addition, pressure reducing valves are added to the systems to improve performance.

The City continues to make provision for the replacement of aging pumping stations to meet current and future growth related demands. Infrastructure investment contributes both in the short and longer term to the quality and safety of the City’s water supply. The capital replacement plan for the next 5 years averages just under \$13 million annually.

**3.0 2015 RATE SETTING**

Rates are based on a user pay principle and structured to fund the entire cost of the delivery and management of Burnaby’s water services. The rate structure includes the funding of the City’s capital infrastructure renewal programs and new water services, the supply cost of water provided by the GVWD, and the funding of operations including maintenance programs. The rate structure is divided into three categories: Flat Water, Metered Water and Other fees, which includes funding from prior year’s surplus.

**Chart 2**



***Flat Water Rates***

All properties pay a flat charge for water consumption unless they are metered. Flat Water Rates fund 72% or \$35.5 million of the Water Utility budget in 2015 (after applicable discounts). They are based on property classification. A 1% growth rate is factored into account for the growth in demand from new development.

The flat rate increase for a single family home will increase the utility bill by \$16.35 to \$561.22 if payment is made on or before the due date of 2015 March 15. The charge for a single family home after the due date of 2015 March 15 will increase by 5% to \$590.76. Schedule C provides the Waterworks Rates for 2015.

***Secondary Suite Rates***

All Single Family Dwellings with a Secondary Suite or grandfathered in-law Suite must pay an additional charge to contribute towards the extra consumption incurred by the unit. The additional charge is based on 50% of the Flat Water Rate for a detached Single Family Dwelling. Two Family Dwelling Units with a Grandfathered In-Law suite will pay an extra fee equal to 50% of the flat rate for that property type.

***Metered Water Rates***

An analysis of metered customer consumption has identified that annual consumption levels have dropped by an average of 2.23% since 1993. Total consumption was down by 9.22% in 2013. The estimated consumption revenue for Metered Water is therefore adjusted for this decrease. Metered Water provides \$13.8 million or 28% of funding for the Waterworks Utility.

**Other Fees and Charges:**

**Construction Water Charges**

The rate structure for 2015 has been revised. The new structure applies a flat rate based on average construction time and charges. New rates are set out in Schedule C.

**Rain Barrels**

New fees as set out in Schedule C for rain barrels have been included in 2015.

**Fire Hydrant Daily Use Fee**

Fire Hydrant Use Permits are granted to contractors working on city property and to filming companies, in order that they can access the City's water system. Rates for Fire Hydrant use are increased in line with the general increase in Waterworks Rates.

All other rate increases are based on the rate increase for the Waterworks Utility. The following Table 1 shows the rate increase over the past five years.

**Table 1**

2010	2011	2012	2013	2014	2015
14.0%	11.0%	6.0%	6.0%	5.5%	3.0%

**4.0 RECOMMENDATION**

The budget as set out in Schedule A reflects a Waterworks Utility rate increase of 3.0% with total revenue of \$49.5 million for 2015 after the estimated 5% discount for flat and metered rates.

It is recommended that Council amend the Burnaby Waterworks Regulation Bylaw to provide for the water rates contained in Schedule C, effective 2015 January 01 as outlined in this report. The rate adjustments will ensure that the Water Utility continues to be financially self- sustaining and will support needed infrastructure investment. Once approved by Council, a general notice informing users of the rate increase will be placed in a local newspaper and *InfoBurnaby*. Metered users will be notified by letter.

The Director Engineering concurs with the recommendations contained in this report.



Denise Jorgenson  
DIRECTOR FINANCE

DJ:RR/ml

Attachments: Schedule A – 5 Year Operating Budget  
Schedule B – Cost of Water Supplied to Burnaby by Metro Vancouver (GVWD)  
Schedule C – Water Rates

Copied to: City Manager  
Director Engineering  
City Solicitor  
City Clerk

**2015 WATERWORKS UTILITY - 5 YEAR OPERATING BUDGET**

**SCHEDULE A**

	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Annual	2015 Annual	2016 Projected	2017 Projected	2018 Projected	2019 Projected
		\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>EXPENDITURE</b>										
Metro Vancouver - Cost of water	20,224,731	21,512,387	24,087,812	25,820,790	25,993,600	26,411,300	28,839,400	31,479,000	33,270,100	35,186,400
Transmission, distribution & pumping Infrastructure Investment	5,140,417	5,273,687	5,581,493	5,671,086	7,142,976	6,908,455	7,115,700	7,329,200	7,549,100	7,775,600
Contingency	-	-	-	-	500,000	500,000	500,000	500,000	500,000	500,000
Surplus	-	124,038	-	-	-	-	-	-	-	-
<b>TOTAL</b>	<b>38,543,148</b>	<b>40,780,112</b>	<b>42,984,955</b>	<b>45,991,876</b>	<b>48,636,576</b>	<b>49,502,100</b>	<b>51,056,000</b>	<b>53,220,900</b>	<b>54,490,500</b>	<b>56,262,000</b>
<b>REVENUES/ TRANSFERS</b>										
Flat rates	26,219,050	29,340,124	31,367,601	33,728,080	35,774,800	37,205,800	38,694,000	40,241,800	41,851,500	43,525,600
Metered Rates	12,415,079	13,250,697	13,430,333	13,985,119	14,409,600	14,520,600	14,632,400	14,745,100	14,858,600	14,973,000
Discount (flat and metered)	-1,741,841	-1,926,198	-2,025,973	-2,212,158	-2,267,300	-2,359,000	-2,409,200	-2,484,200	-2,562,100	-2,642,900
Construction - Metered Charges	32,188	31,629	42,890	33,630	37,500	38,600	39,800	41,000	42,200	43,500
Construction - Flat Rate Charges	49,300	40,885	45,390	54,093	47,700	49,100	50,600	52,100	53,700	55,300
Fire Hydrant Daily Use	-	-	-	-	-	13,000	13,400	13,800	14,200	14,600
Other Miscellaneous	22,914	42,975	29,415	23,007	33,500	34,000	35,000	611,300	232,400	40,100
Prior Year's Surplus Brought Forward	1,546,458	-	95,299	380,105	600,776	-	-	-	-	252,800
<b>TOTAL</b>	<b>38,543,148</b>	<b>40,780,112</b>	<b>42,984,955</b>	<b>45,991,876</b>	<b>48,636,576</b>	<b>49,502,100</b>	<b>51,056,000</b>	<b>53,220,900</b>	<b>54,490,500</b>	<b>56,262,000</b>
<b>Rate Increase</b>	<b>14.00%</b>	<b>11.00%</b>	<b>6.00%</b>	<b>6.00%</b>	<b>5.50%</b>	<b>3.00%</b>	<b>3.00%</b>	<b>3.00%</b>	<b>3.00%</b>	<b>3.00%</b>

**COST OF WATER SUPPLIED TO BURNABY BY METRO VANCOUVER (GVWD)**

**SCHEDULE B**

Year	Rate Per Cubic Meter						Total volume (2)			Annual Cost to Burnaby	Increase in total cost of water to Burnaby	
	Cost/M <sup>3</sup>		Increase from previous year				purchased 000 M <sup>3</sup>				000 \$	000 \$
	Off-Peak	Peak	\$		%		Peak	Off-Peak	Total			
			Off-Peak	Peak	Off-Peak	Peak						
2007	0.3271	0.3794	0.0453	0.0750	16.1	24.6	16,097	23,112	39,209	13,667	1,540	12.7
2008	0.3477	0.4347	0.0206	0.0553	6.3	14.6	15,369	24,491	39,860	15,196	1,529	11.2
2009	0.4026	0.5032	0.0549	0.0685	15.8	15.8	16,811	24,275	41,086	18,232	3,036	20.0
2010	0.4505	0.5631	0.0479	0.0599	11.9	11.9	16,768	23,936	40,703	20,225	1,992	10.9
2011	0.5135	0.6419	0.0630	0.0788	14.0	14.0	15,135	22,975	38,109	21,512	1,288	6.4
2012	0.5437	0.6796	0.0302	0.0377	5.9	5.9	16,454	23,737	40,191	24,088	2,575	12.0
2013	0.5504	0.6880	0.0067	0.0084	1.2	1.2	17,690	24,800	42,490	25,821	1,733	7.2
2014	0.5724	0.7155	0.0220	0.0275	4.0	4.0	17,376	23,147	40,523	25,682	-139	-0.5
2015	0.5816	0.7270	0.0092	0.0115	1.6	1.6	17,118	24,014	41,132	26,411	729	2.8
2016	0.6275	0.7844	0.0459	0.0574	7.9	7.9	17,323	24,302	41,625	28,839	2,428	9.2
2017	0.6815	0.8519	0.0540	0.0675	8.6	8.6	17,411	24,426	41,837	31,479	2,640	9.2
2018	0.7149	0.8936	0.0334	0.0417	4.9	4.9	17,542	24,610	42,152	33,270	1,791	5.7
2019	0.7507	0.9383	0.0357	0.0447	5.0	5.0	17,669	24,788	42,457	35,186	1,916	5.8
2020	0.7882	0.9852	0.0375	0.0469	5.0	5.0	17,840	25,028	42,868	37,303	4,033	11.5
2021	0.8276	1.0345	0.0394	0.0493	5.0	5.0	17,909	25,125	43,034	39,320	4,134	11.1
2022	0.8690	1.0862	0.0414	0.0517	5.0	5.0	18,007	25,263	43,270	41,513	4,210	10.7
2023	0.9125	1.1405	0.0435	0.0543	5.0	5.0	18,089	25,379	43,468	43,789	4,469	10.8
2024	0.9581	1.1975	0.0456	0.0570	5.0	5.0	18,207	25,544	43,751	46,277	4,764	10.9
Increase 2007 - 2015			0.2998	0.4226	78	92					14,284	93.25
Projected increase 2016 - 2024			0.3765	0.4705	53	53					30,384	60

NOTES: 2010-2013 volumes are based on actuals up to December 31 2013.

2014 volumes are based on invoices posted for January 1 to September 2. An estimate is used for the remainder of the year.

2015 volumes are based on the City of Burnaby average volume for the prior 3 years plus a 1.5% uplift in consumption.

2016 - 2024 volumes are based on an estimate as provided by GVWD.

2016 - 2018 costs are based on GVWD's projected increase in the blended rates. 2016 7.9%, 2017 8.6%, 2018 4.9%

2019 - 2024 costs are based on a flat 5% increase per year.



## WATERWORKS RATES

## SCHEDULE C

	Effective Jan 1 <b>2014</b> Paid by Mar. 15 \$	Effective Jan 1 <b>2014</b> Paid after Mar. 15 \$	Effective Jan 1 <b>2015</b> Paid by Mar. 15 \$	Effective Jan 1 <b>2015</b> Paid after Mar. 15 \$
<b><u>FLAT RATES</u></b>				
Detached Single Family Dwelling	544.87	573.55	561.22	590.76
Two Family Dwelling - Per Unit	408.59	430.10	420.85	443.00
Multiple Family Dwelling, Per Unit:	312.87	329.34	322.26	339.22
Single Family Dwelling with a Secondary Suite or Grandfathered In-law Suite	817.31	860.33	841.83	886.14
Two Family Dwelling Unit with a Grandfathered In-Law Suite	612.89	645.15	631.27	664.50
<b>Commercial Not More Than 3 Stores/Offices</b>				
Commercial and living quarters, 1 family	1089.74	1,147.10	1122.44	1,181.52
Commercial and no living quarters	544.87	573.55	561.22	590.76
<b><u>CROSS CONNECTION CONTROLS</u></b>				
Per Device	48.95	51.53	50.43	53.08
Minimum Per Unit	6.13	6.45	6.31	6.64
<b><u>METERED RATES</u></b>				
<b>Monthly</b>				
First 300 cubic metres	1.446	1.522	1.490	1.568
Next 550 cubic metres	1.446	1.522	1.490	1.568
Next 1,400 cubic metres	1.446	1.522	1.490	1.568
Over 12,000 cubic metres	1.446	1.522	1.490	1.568
Minimum monthly	45.40	47.79	46.77	49.23
<b>Quarterly</b>				
First 900 cubic metres	1.446	1.522	1.490	1.568
Next 1,650 cubic metres	1.446	1.522	1.490	1.568
Next 4,200 cubic metres	1.446	1.522	1.490	1.568
Over 36,000 cubic metres	1.446	1.522	1.490	1.568
Minimum quarterly	136.21	143.38	140.30	147.68
<b><u>SPECIAL METER READING</u></b>				
	No discount	75.00	No discount	77.25
<b><u>Connection Fee</u></b>				
	Per agreed cost of connection		Per agreed cost of connection	
<b><u>CONSTRUCTION FLAT WATER</u></b>				
3/4" connection (per six months)	No discount	1,316.24	N/A	N/A
1" connection (per six months)	No discount	2,169.50	N/A	N/A
2" connection (per six months)	No discount	3,290.04	N/A	N/A
19 mm Connection	N/A	N/A	No discount	1,320.00
25 mm Connection	N/A	N/A	No discount	3,440.00
50 mm Connection	N/A	N/A	No discount	10,500.00
<b><u>MISCELLANEOUS CHARGES</u></b>				
<b>I. Water Turn-on / Turn-off request (per occurrence)</b>				
<b>Regular hours:</b> 7am to 11 pm Monday to Friday except statutory holidays	No discount	50.00	No discount	51.50
<b>After hours:</b> 11pm to 7am Mon - to Fri, weekends and statutory holidays	No discount	150.00	No discount	154.50
<b>II. Fire Hydrant</b>				
Permit (Inspection fee)	No discount	150.00	No discount	154.50
Water use per day	No discount	25.00	No discount	25.75
Damage deposit (refundable)	No discount	500.00	No discount	515.00
<b>III. Meter Test or retest</b>				
16 mm, 19 mm, 25 mm, 32 mm, 38 mm or 50 mm meters	No discount	115.00	No discount	118.45
76 mm, 102 mm, 152 mm or meters over 152 mm	No discount	225.00	No discount	231.75
<b>IV. Rain Barrels (Inclusive of GST/PST)</b>				
Small	N/A	N/A	No discount	30
Large	N/A	N/A	No discount	70
Delivery fee	N/A	N/A	No discount	5
<b>Rate Increase</b>	<b>5.50%</b>	<b>5.50%</b>	<b>3.00%</b>	<b>3.00%</b>