



TO: CHAIR AND MEMBERS

DATE:

2016 November 01

FINANCIAL MANAGEMENT COMMITTEE

FROM: DIRECTOR FINANCE

FILE: 39500-07
Reference: Water Rates

SUBJECT: 2017 WATERWORKS UTILITY RATES

PURPOSE: To request Council approve a 2% increase to the 2017 Waterworks Utility Rates.

RECOMMENDATION:

1. THAT Financial Management Committee recommend Council approve amendment by the City Solicitor of the Burnaby Waterworks Regulation Bylaw 1953 to provide for the 2017 Water Rates contained in Schedule C of this Report, and the bylaw amendments outlined in Section 5 of this report, effective 2017 January 01.

REPORT

1.0 BACKGROUND

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. Water rates are changed through the adoption by Council of an amendment to the Burnaby Waterworks Regulation Bylaw 1953.

Waterworks Utility fees are due by March 15th each year. To promote payment by the due date, Burnaby offers a 5% discount for payments received on or before March 15th 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.

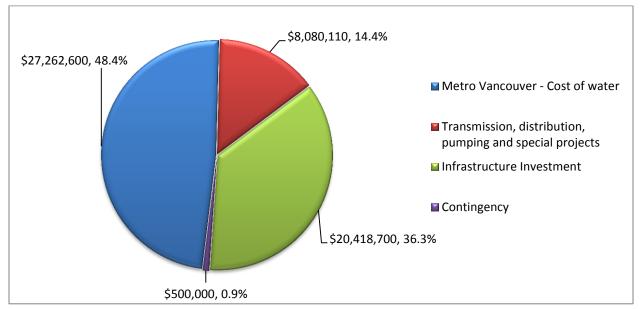
2.0 WATERWORKS UTILITY FUND EXPENDITURES

The 2017 Waterworks Utility expenditures total \$56.3m, an increase of \$4.7m over 2016. The 2017 Operating Expenditure Budget is summarized in Chart 1. Schedule A (attached) provides the City's Waterworks Five Year Operating Plan.

From: Director Finance

Re: 2017 WATERWORKS UTILITY RATES

Chart 1 – 2017 Waterworks Utility Operating Expenditure Budget – \$56.3m



2.1 Metro Vancouver Costs

The Greater Vancouver Water District (GVWD) provides safe, reliable, high-quality drinking water to Burnaby. The GVWD is responsible for acquiring and maintaining the water supply, treating it to ensure its quality and delivering it to the City. The GVWD also provides ongoing capital work for the treatment of water, including the upgrading of facilities to meet safety and environmental standards.

Schedule B (attached) summarizes the projected 2017 – 2021 GVWD increase in the cost of water services provided to Burnaby based on GVWD rates and estimated consumption for the five year period.

The GVWD Board has increased 2017 Water Rates by 3.2%. The 2017 GVWD member rates are:

- \$0.7641 per cubic metre for June to September
- \$0.6113 per cubic metre for January to May and October to December.

Forecast water consumption for 2017 in Burnaby remains relatively constant based on current-year usage information. The estimated cost of the 2017 GVWD water delivery service for Burnaby is \$27.3m.

GVWD water service costs make up approximately 48.4% of the City's total 2017 Water Utility Operating Budget. At the time of this report, projected rate increases for 2018 – 2021 have not been provided by the GVWD, therefore future rate projection increases are based on the 2017 rate increase of 3.2%. The estimated rates have been used in conjunction with GVWD projected Burnaby consumption levels to develop the City's 2018 – 2012 GVWD estimated water delivery service costs.

From: Director Finance

Re: 2017 WATERWORKS UTILITY RATES

2.2 Transmission, Distribution & Pumping

The City's Engineering Department, Water Services Division, provides high quality drinking water to homes and businesses, as well as water supply for fire suppression. The Division manages the installation and maintenance of over 700 kilometers of watermains and connections throughout the City. Operating expenditures for 2017 including special projects increased by 1.5% over 2016. The budget includes the addition of one clerical support position for the Water division and the savings in water maintenance costs due to the sharing of resources between operating assignments and capital infrastructure work. Included in operations are three special projects totalling \$257k for the following:

- \$75k is needed to provide additional building inspections as part of the Secondary Suite program being implemented in early 2017
- \$50k for work in the Pumps and Control Division. This work will include the development of a comprehensive preventive maintenance plan and standard operating procedures for improving efficiencies utilizing the new Electrical Services team in the Engineering Department
- \$132k has been identified for the Water Conservation Enforcement and Education Program. This includes four auxiliary officers from 2017 May to October, vehicle and material expenses.

2.3 Infrastructure Investment

The 2016 condition assessment information has established that the majority of in-service water service assets are rated between Fair to Very Good. The City's policy of funding ongoing replacement and development of required infrastructure continues to ensure a stable and sustainable capital program. Funding is reviewed annually to determine the funding requirements. An infrastructure increase of approximately \$4.9m is provided in 2017 for water utility capital investment.

Infrastructure investment contributes both in the short and longer term to the quality and safety of the City's water supply. The five year capital replacement plan and infrastructure investment is \$77m.

3.0 SOURCES OF FUNDS

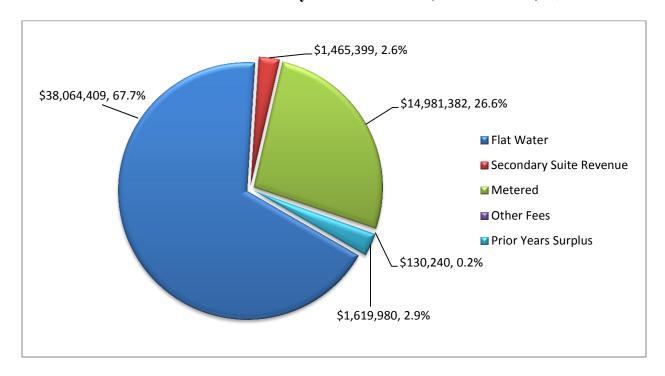
The Waterworks Utility is self-funding. Rates are based on a user pay principle and structured to fund the cost of Burnaby's water services. The rate structure includes the funding of the City's capital infrastructure renewal programs and new water services, the supply cost of water provided by the GVWD, and the funding of operations including maintenance programs. The rate structure is divided into three categories: Flat Water, Metered Water and Other fees. Prior year surplus is used to stabilize rates and fund important one time projects.

From: Director Finance

Re: 2017 WATERWORKS UTILITY RATES

Chart 2 provides a breakdown of funding sources net of discounts.

Chart 2 – 2016 Waterworks Utility Sources of funds (After Discount) - \$56.3m



3.1 Flat Water

Flat water charges make up 67.7% of all revenues, at \$38m (net of discounts). The projected revenue increase for 2017 is \$1.5m. This is based on 2016 projected actual revenues, an estimated 1% annual growth factor and the rate increase for water.

3.2 Secondary Suites

In 2014, City Council adopted a comprehensive program to permit secondary suites in single-family homes. All property owners with a secondary suite are subject to a supplementary utility charge based on 50% of the regular Single Family Dwelling rate for water and sanitary sewer services.

In addition to charging for newly constructed properties, in 2016 July the City provided advance notice of additional usage fees for 2017, using the City's inventory of properties listed as potentially having a suite. With this notice instructions were provided on how property owners could update the City's records should the property not include a secondary suite. It is expected that the number of properties with a secondary suite will fluctuate through the transition process into early 2017 as inspections continue. Budget estimates are based on an approximate figure of 5,000 units. This equates to additional Flat Water Revenue of \$1.53m (\$1.46m after discounts), and is shown as a separate line item in the budget.

From: Director Finance

Re: 2017 WATERWORKS UTILITY RATES

3.3 Metered Water

Approximately 2,000 customers are metered, which accounts for 26.6% of total revenues (net of discounts). Projections are based on past actual consumption levels, which are on an annual decline (down to 9.7m³ in 2015 from 12m³ in 2006). Revenues are anticipated to be \$14.98m in 2017 after applicable discounts.

3.4 Construction Water

In 2016 the City introduced mandatory metering during construction of Multi Dwelling Buildings. Given challenges in the establishment of this program it is recommended that flat rates be provisioned for any sites in which a meter cannot be installed. Rates for 2017 are therefore proposed in Schedule C. An amendment is also recommended for Section 23 of the Bylaw, as set out in Section 5 in this report.

3.5 Other Fees

Other revenues in 2017 include estimated construction water meter and flat charges of \$80k, permits and inspections services of \$50k.

3.6 Prior Years Surplus

To reduce the impact of cost increases on rates funding of \$1.6m is provided from the Water Utility Operating Fund.

4.0 RATES

4.1 Recommended Increase

The Waterworks Utility is self-funding and debt free. Rates are based on a user pay principle and structured to fund the cost of Burnaby's water services. The rate structure includes the funding of the City's capital infrastructure renewal program and new water services, the supply cost of water provided by the GVWD, and the funding of operations including maintenance programs. For 2017 a rate increase of 2% is recommended. While all non-discounted flat and metered water fees are to increase in line with the general rate increase of 2%, miscellaneous fees (such as water turn on/off charges) have been rounded up for improved administrative purposes. This is reflected in Schedule C (attached). Rate increases for 2017 and the previous five years are set out below.

Table 1 – Rate Increases

2012	2013	2014	2015	2016	2017
6.0%	6.0%	5.5%	3.0%	2.0%	2.0%

From: Director Finance

Re: 2017 WATERWORKS UTILITY RATES

4.2 Impact on Households

Rates are subject to a 5% discount if paid before the due date. Table 2 provides a breakdown of the impact a 2% increase has upon residential properties.

Table 2 – Household Impact

	2016 (\$)	2017 (\$)	Change (\$)	% Change
Single Family Dwelling increase				
Paid by Due Date	572.45	583.90	11.45	2.00%
Paid after Due Date	602.58	614.63	12.05	2.00%
Multiple Family Dwelling*				
Paid by Due Date	328.70	335.27	6.57	2.00%
Paid after Due Date	346.00	352.92	6.92	2.00%

^{*} excluding duplexes

5.0 BYLAW AMENDMENTS

It is the recommendation of staff that the following revisions be made to the Waterworks Regulation Bylaw 1953:

Section 3 – Application for the laying of water service.

To improve the language within this Section and provide for clarification of existing procedures the following is wording is proposed:

"Application for the laying of water service pipe or pipes to any land shall be made in writing to the Engineer on such form as may from time to time be prescribed by Council, and shall be signed by the owner of such land. Service shall be of size and type as prescribed by the Engineer. The land owner shall, (except where the water service pipe or pipes have been installed and paid for by a subdivider pursuant to BYLAW No. 5953, being Burnaby Subdivision Control BYLAW 1971), with each application pay the connection fee prescribed in Schedule 'A' of this bylaw.

If a flat rate water service is applied for (via a Building Permit), the land owner shall also pay in advance the annual flat rate water service fee prescribed in the said Schedule 'A' less a proportionate rebate for that portion of the calendar year expired at the date of such application. The Collector will apply the flat rate water service fee or part thereof paid to be entered in the current year's tax roll. The land owner shall be responsible for the payment of all rates until the land owner provides written notice to the Collector ordering the discontinuance of such service.

From: Director Finance

Re: 2017 WATERWORKS UTILITY RATES

Section 23 - Construction of a Multi Dwelling Building

It is recommended that the wording for this Section of the bylaw be revised, in order to stipulate the requirement that developers are to connect to a water meter during construction for all property types, with the exception of those listed under Section 15 (1) a, b and c to the bylaw. Proposed revision:

"The following apply during new construction, excluding those properties as listed under Section 15 (1), (a), (b) and (c) to this bylaw.

- (a) Prior to construction, the City will review the proposed construction to determine the feasibility of installing a water meter. If installation is deemed feasible, upon direction of the Engineer, the City will provide and install a construction water meter on the property and the property shall be subject to Metered Service during construction, commencing from the time of connection of the water meter to the City's Service. Should metered service not be feasible during construction, applicable flat rates as per Schedule A of the bylaw will apply.
- (b) The owner shall, at the owner's expense, prepare the water meter installation site, including the installation of double-check valve assembly.
- (c) Upon invoice by the City, the owner shall pay to the City the construction water meter connection fee as set out in Schedule "A", in addition to the metered rate for water consumption.
- (d) The City will read the construction water meter monthly and issue an invoice to the owner on a monthly basis or quarterly basis, at the City's choosing, based on the level of consumption.
- (e) At the completion of construction the City will remove the construction water meter and if such meter is missing or damaged, the owner shall pay to the City cost of replacing such meter.

6.0 EXECUTIVE SUMMARY

Schedule A (attached) reflects a Waterworks Utility rate increase of 2% with total planned revenue of \$56.3m for 2017 after the estimated 5% discount for flat and metered rates. The supply cost increases imposed by the GVWD of 3.2% and increase in infrastructure investment are offset by new revenues of \$1.53m (\$1.46m after discounts) from the secondary suite program, and relatively low increases in transmission distribution and pumping costs (including special projects). Additional infrastructure funding is provided to maintain the City's investment in capital assets. By drawing down on prior year surplus from the Waterworks Utility Operating Fund, the City is able to reduce the impact of rate increases while meeting the long term goal of rate stability and a sustainable capital investment funding strategy.

From: Director Finance

Re: 2017 WATERWORKS UTILITY RATES

7.0 RECOMMENDATION

It is recommended that Financial Management Committee recommend Council approve amendment by the City Solicitor of the Burnaby Waterworks Regulation Bylaw 1953 to provide for the 2017 Water Rates contained in Schedule C and the bylaw amendments as outlined in Section 5 of this report effective 2017 January 01. The Director Engineering concurs with the recommendations contained in this report.

Once approved by Council, a general notice informing users of the 2017 rates will be placed in a local newspaper and *InfoBurnaby*. Metered users will be notified by letter.

Denise Jorgenson

DIRECTOR FINANCE

DJ:RR/ew

Attachments: Schedule A – City's Waterworks 5 Year Operating Plan

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

2017 WATERWORKS UTILITY - 5 YEAR OPERATING PLAN

	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Annual	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
EXPENDITURE										
Metro Vancouver - Cost of water	24,087,812	25,820,790	25,199,090	26,159,327	27,081,800	27,262,600	28,606,900	29,755,500	31,025,000	32,163,100
Transmission, distribution & pumping	5,581,493	5,671,086	6,083,121	6,385,702	7,957,300	8,080,110	8,308,000	8,682,200	9,067,700	9,464,700
Infrastructure Investment	13,315,650	14,500,000	15,001,520	15,682,345	16,000,000	20,418,700	19,500,000	19,500,000	19,500,000	19,500,000
Contingency	-	-	-	-	500,000	500,000	500,000	500,000	500,000	500,000
Surplus	-	-	2,347,641	2,156,657	-	-	-	-	-	-
TOTAL	42,984,955	45,991,876	48,631,372	50,384,032	51,539,100	56,261,410	56,914,900	58,437,700	60,092,700	61,627,800
REVENUES/ TRANSFERS										
Flat rates	31,367,601	33,728,080	35,837,549	37,555,074	38,267,800	39,913,890	41,111,300	42,447,400	43,826,900	45,251,300
Secondary Suite Revenue (starting 2017)	-	-	-	-	-	1,536,600	1,582,700	1,634,100	1,687,200	1,742,000
Metered Rates	13,430,333	13,985,119	14,993,427	15,161,706	15,293,300	15,709,300	16,023,500	16,384,000	16,752,600	17,129,500
Discount -flat and metered (include suites) Other Fees and Services:	(2,025,973)	(2,212,158)	(2,346,159)	(2,450,886)	(2,459,200)	(2,648,600)	(2,720,800)	(2,801,800)	(2,885,300)	(2,971,300)
Construction - Metered Charges	42,890	33,630	41,143	23,460	39,400	40,000	40,800	41,700	42,600	43,600
Construction - Flat Rate Charges	45,390	54,093	58,892	39,520	50,100	40,000	40,800	41,700	42,600	43,600
Permits and Fees	-	-	13,351	12,017	13,300	14,160	14,400	14,700	15,000	15,300
Other Sales of Services	29,415	23,007	33,168	43,141	35,900	36,080	36,800	37,600	38,400	39,300
Previous year's surplus brought forward	95,299	380,105	-	-	298,500	1,619,980	785,400	638,300	572,700	334,500
TOTAL	42,984,955	45,991,876	48,631,372	50,384,032	51,539,100	56,261,410	56,914,900	58,437,700	60,092,700	61,627,800
IVIAL	72,307,333	70,001,010	-10,001,07Z	00,007,002	01,000,100	55,251,710	00,017,000	00,401,100	00,002,700	01,021,000
Rate Increase	6.00%	6.00%	5.50%	3.00%	2.00%	2.00%	2.00%	2.25%	2.25%	2.25%

COST OF WATER SUPPLIED TO BURNABY BY THE G.V.W.D.

Year	Cost	Cost/m³		Increase over the previous year				Volumes m ³		Change n volume	Annual cost to Burnaby	Increase in the total cost of water to Burnaby	
	-		\$	\$	%	%			_				,
	Off-Peak	Peak	Off-Peak	Peak	Off-Peak	Peak	Off-Peak	Peak	Total m ³	%	000 \$	000 \$	%
2012	0.5437	0.6796	0.0302	0.0377	5.88	5.87	23,737	16,454	40,191	5.46	24,088	2,575	11.97
2013	0.5504	0.6880	0.0067	0.0084	1.23	1.24	24,800	17,690	42,490	5.72	25,821	1,733	7.19
2014	0.5724	0.7155	0.0220	0.0275	4.00	4.00	22,338	17,348	39,687	-6.60	25,199	-622	-2.41
2015	0.5816	0.7270	0.0092	0.0115	1.61	1.61	24,014	17,118	41,132	3.64	26,411	1,212	4.81
2016	0.5926	0.7407	0.0110	0.0137	1.89	1.88	24,460	15,807	40,267	-2.10	26,203	-208	-0.79
2017	0.6113	0.7641	0.0187	0.0234	3.16	3.16	24,165	16,347	40,512	0.61	27,263	1,059	4.04
2018	0.6309	0.7886	0.0196	0.0245	3.20	3.20	24,564	16,626	41,190	1.67	28,607	1,344	4.93
2019	0.6510	0.8138	0.0202	0.0252	3.20	3.20	24,758	16,757	41,515	0.79	29,755	1,149	4.01
2020	0.6719	0.8398	0.0208	0.0260	3.20	3.20	25,014	16,930	41,944	1.03	31,025	1,270	4.27
2021	0.6934	0.8667	0.0215	0.0269	3.20	3.20	25,128	17,007	42,135	0.45	32,163	1,138	3.67
Increase 2012	2 - 2016		0.0791	0.0988	8.99	8.99						5,978	8.78
Projected incr	rease 2017 - 20	21	0.1008	0.1260	13.43	13.43						5,960	17.98

NOTES:

2012-2015 volumes are based on actuals up to December 31 2014.

2016 volumes and costs are based on expenditure as of period 10 2016. An estimate is used for the remainder of the year based on prior year average 2017 volumes are based on the City of Burnaby average volume for the prior two years. Rates are as per GVWD.

2018 - 2021 rates are based on an estimated 3.2% increase per year. Volumes for this period are based on GVWD projected increases over the City's 2017 projected volume, and GVWD estimated annual volume changes thereafter.

	Effective Jan 01 2016 Paid by	Effective Jan 01 2016 Paid after	Effective Jan 01 2017 Paid by	Paid after
FLAT RATES	Mar. 15 \$	Mar. 15 \$	Mar. 15 \$	Mar. 15 \$
Detached Single Family Dwelling	σ 572.45	602.58	583.90	φ 614.63
Two Family Dwelling, including strata, forming part of a duplex- Per Unit	429.34	451.94	437.92	460.97
Multiple Family Dwelling, including strata, not part of a duplex - Per Unit:	328.70	346.00	335.27	352.92
Secondary suite, or in-law suite in a Single Family Dwelling.	286.23	301.29	291.95	307.32
In-Law Suite in a Two Family Dwelling.	214.67	225.97	218.97	230.49
Previous rate - Two Family Dwelling with one Grandfathered In-Law Suite. Per Unit.	N/A	N/A	N/A	N/A
Commercial Not More Than 3 Stores/Offices	4444.00	4 005 45	4407.70	4 000 05
Commercial and living quarters, 1 family	1144.89	1,205.15	1167.79	1,229.25
Commercial and no living quarters	572.45	602.58	583.90	614.63
CROSS CONNECTION CONTROLS Per Device	51.44	54.15	52.48	55.24
Minimum Per Unit	6.46	6.80	6.59	6.94
William Co. Other	0.40	0.00	0.55	0.54
METERED RATES Monthly	Paid within 30 days of billing date	Paid 31 or more days after billing date	Paid within 30 days of billing date	Paid 31 or more days after billing date
First 300 cubic metres	1.520	1.600	1.552	1.632
Next 550 cubic metres	1.520	1.600	1.552	1.632
Next 1,400 cubic metres	1.520	1.600	1.552	1.632
Excess	1.520	1.600	1.552	1.632
Minimum monthly	47.70	50.21	48.654	51.21
Quarterly				
First 900 cubic metres	1.520	1.600	1.552	1.632
Next 1,650 cubic metres	1.520	1.600	1.552	1.632
Next 4,200 cubic metres	1.520	1.600	1.552	1.632
Excess	1.520	1.600	1.552	1.632
Minimum quarterly	143.10	150.63	145.97	153.65
SPECIAL METER READING	No discount	78.80	No discount	80.37
CONNECTION FEE	Per agreed co	st of connection	Per agreed o	ost of connection
CONSTRUCTION EL AT WATER ANNUAL CHARGE				
CONSTRUCTION FLAT WATER ANNUAL CHARGE 3/4" connection (per six months)	N/A	N/A	N/A	N/A
1" connection (per six months)	N/A	N/A	N/A	N/A
2" connection (per six months)	N/A	N/A	N/A	N/A
19 mm Connection		ntinued	No discount	
25 mm Connection		ntinued	No discount	·
50 mm Connection		ntinued	No discount	·
Construction meter connection charge	No discount	200.00	No discount	,
Construction meter Usage charge		tered rates		Netered rates
MICCELL ANECUIO CUADOFO				
MISCELLANEOUS CHARGES I. Water Turn-on / Turn-off request (per occurrence)				
Regular hours: 7am to 11 pm Monday to Friday, except statutory holidays	No discount	52.53	No discount	54.00
After hours: 11pm to 7am Mon - to Fri, weekends and statutory holidays	No discount	157.59	No discount	
II. Fire Hydrant	No diagram	157.50	No diagram	164.00
Permit (Inspection fee)	No discount	157.59	No discount	
Water use per day	No discount	26.27	No discount	
Damage deposit (refundable)	No discount	525.30	No discount	536.00
III. Meter Test or retest		4.5.5.5		
16 mm, 19 mm, 25 mm, 32 mm, 38 mm or 50 mm meters	No discount	120.82	No discount	
76 mm, 102 mm, 152 mm or meters over 152 mm	No discount	236.39	No discount	t 242.00
IV. Rain Barrels (Inclusive of GST/PST)				
(Section removed, as now included in Section F of the Solid Waste and Recycling Bylaw 2010, (update No. 13620)				
General Rate Increase	2.00%	2.00%	2.00%	2.00%
Votonworks Litility Dates - EMC 2016 Nov 24			-	