

TO: CHAIR AND MEMBERS
FINANCIAL MANAGEMENT COMMITTEE

DATE: 2017 November 15

FROM: DIRECTOR FINANCE

FILE: 39500-07
Reference: Water Rates

SUBJECT: 2018 WATERWORKS UTILITY RATES

PURPOSE: To request Council approve a 0% increase to the 2018 Waterworks Utility Rates and the bylaw revisions contained herein.

RECOMMENDATION:

1. **THAT** the Financial Management Committee recommend Council authorize the City Solicitor to amend the Burnaby Waterworks Regulation Bylaw 1953 for the 2018 Water Rates contained in Schedule C of this Report, and the bylaw amendments outlined in Section 4 of this report, effective 2018 January 01.

REPORT**1.0 BACKGROUND**

The Waterworks Utility Fund is financially self-sustaining; funding for operations comes from utility rates and/or reserves. There is no impact on property taxes from any increased demand for water services. 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 by way of an amendment to the Burnaby Waterworks Regulation Bylaw 1953 and adopted by Council.

The due date for payment of annual waterworks utility fees is March 15th each year. Customers are incentivised to make payments on a timely basis through means of a 5% discount for payments received on or before March 15th of a given year. Metered water customers are offered the same 5% discount for payments made within 30 days of the billing date on the metered water bill.

Table 1 provides rate increase information over the past 5 years and the proposed 2018 rate change.

Table 1 – Rate Increases

2013	2014	2015	2016	2017	Proposed 2018
6.0%	5.5%	3.0%	2.0%	1.0%	0.0%

To: Financial Management Committee

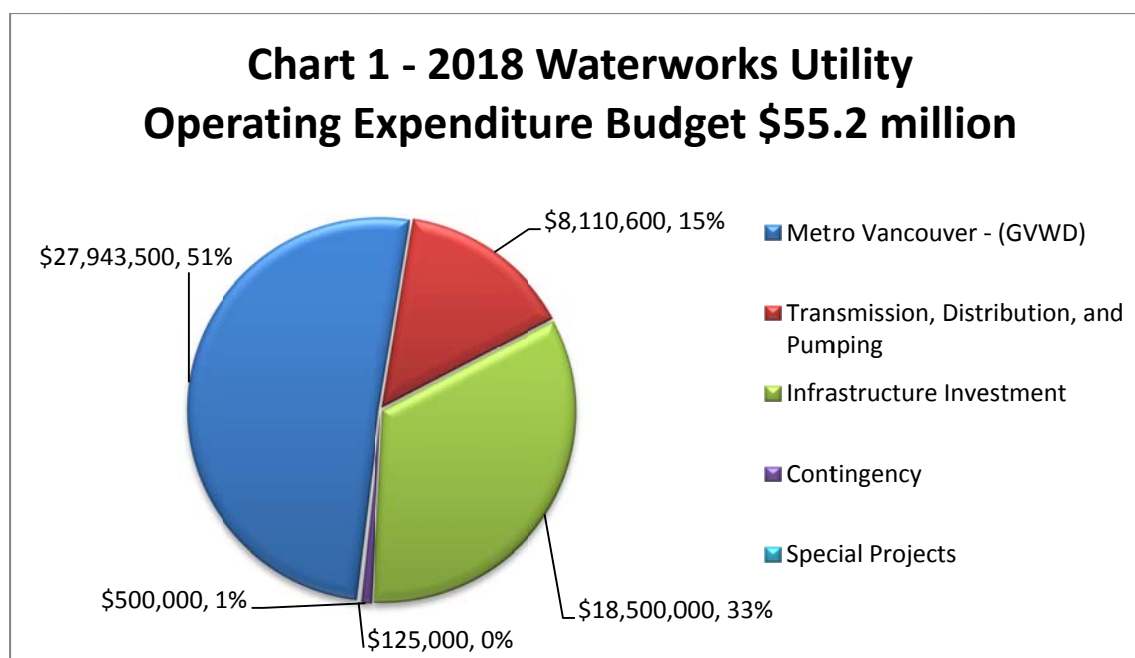
From: Director Finance

Re: 2018 Waterworks Utility Rates

2017 November 22..... Page 2

2.0 WATERWORKS UTILITY FUND EXPENDITURES

The 2018 Waterworks Utility Operating Expenditure Budget totals \$55.2 million, a decrease of \$163,000 compared to 2017. There are three main reasons for this decrease: low water consumption estimates for 2018, minimal Transmission, Distribution, and Pumping operating cost increases and a reduction in contribution to capital. The 2018 Waterworks Utility Operating Expenditure Budget is summarized in Chart 1 below. Schedule A, (attached) provides further details for the City's Waterworks Five Year Operating Plan.



2.1 Metro Vancouver – Greater Vancouver Water District Costs

The cost of water from the Greater Vancouver Water District (GVWD) continues to form the largest percentage of overall expenditure for 2018, at just under 51% of total expenditure. 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.

Actual annual consumption data is used by the City in forecasting future year consumption. For 2018 the City has budgeted for consumption of 39.9 million cubic metres, compared to a GVWD estimate of 41.1 million cubic meters. The City's estimate is consistent with prior year figures and expenditure to date, which for 2018 is currently tracking at 741,000 cubic metres below forecast for 2017. Staff are therefore comfortable with forecasting 2018 consumption levels at lower than GVWD estimates. The estimated cost of the 2018 GVWD water delivery service for Burnaby is \$27.9 million, an increase of \$681,000 over the 2017 budget. Forecasts for 2019-

2022 are based on GVWD consumption estimates, which trend consistently higher than City of Burnaby average values.

Schedule B summarizes the projected 2018 – 2022 GVWD increases in the cost of water services provided to Burnaby, with historical data going back to 2013. City of Burnaby longer range forecast rate increases for the GVWD are estimated at 3% annually from 2023-2027. Blended rates as provided by the GVWD are set to increase by 3.9% in 2018, however based on a projection of City of Burnaby average annual consumption data, which has been steadily decreasing, the overall increase in the supply cost of water for 2018 will be around 2.5%. The GVWD Board meeting of 2017 October 27 approved the 2018 GVWD budget, which is comprised of the following rate increases:

- Peak (June to September) - \$0.7938 per cubic metre, up 3.9% from \$0.7641
- Off Peak (October to December) - \$0.6350 per cubic metre, up 3.9% from \$0.6113

The following are examples of current and planned major GVWD initiatives supported by these rate increases:

2018

- Construction of the Second Narrows Water Supply Tunnel

2019

- Annacis Supply Tunnel Design and Construction
- Construction of Coquitlam Main No. 4

The City's approach to maintaining a stable operating reserve balance, coupled with lower than forecast current and prior year consumption, allows the city to set rate rises that are well below those quoted by the GVWD. 2018 – 2022 GVWD rate increases are set out in table 2 below:

Table 2 – Planned GVWD Increases

GVWD 2018-2022 Plan ¹	2018	2019	2020	2021	2022
GVWD blended rate increase	3.9%	5.9%	7.7%	7.7%	7.9%
Total GVWD budget	\$271	\$288	\$314	\$339	\$368
Household impact	\$165	\$172	\$184	\$196	\$209
% Change on household	1.5%	4.7%	6.8%	6.3%	6.7%
Planned City of Burnaby % change	0.0%	1.0%	1.0%	1.0%	1.0%

1 Metro Vancouver 2018-2022 Financial Plan, Regional Finance Advisory Committee – October 5 2017

To: Financial Management Committee

From: Director Finance

Re: 2018 Waterworks Utility Rates

2017 November 22..... Page 4

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 the water supply for fire suppression. The Division manages the installation and maintenance of over 700 kilometers of water mains and connections throughout the City. Planned 2018 Transmission, distribution, and pumping expenditure are set to increase by just 0.38%, or \$30,000.

Changes for the most part reflect non-discretionary salary increases offset by charges to non-utility areas or Sanitary Sewer. Separate from the Transmission, Distribution & Pumping budget is a one-time funding request from utility surplus and a contingency request as set out in section 2.3 below.

2.3 Utility Surplus Request

The Water Conservation Enforcement and Education program successfully promotes Metro Vancouver's Water Shortage Response Plan (WSRP). The WSRP runs annually from May to October and encourages the public to conserve our precious resource during the dry summer months. In the event of escalating drought stages, there is a greater demand to limit water use. The Water Conservation Officers are a dedicated team that enforce the Burnaby Watercourse bylaw by actively patrol Burnaby neighbourhoods, follow up on complaints and liaise with the public. The request of \$125,000 will provide for one Lead Water Conservation Officer and three Water Conservation Officers, all on part time auxiliary basis.

2.4 Contingency Request

A contingency amount of \$500,000 has been built into the budget to accommodate for any unforeseen costs that may arise during the year.

2.5 Infrastructure Investment

The City's policy of funding ongoing replacement and development of required infrastructure continues to ensure a stable and sustainable capital program. The 2018 Infrastructure Investment is budgeted at \$18.5 million.

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.

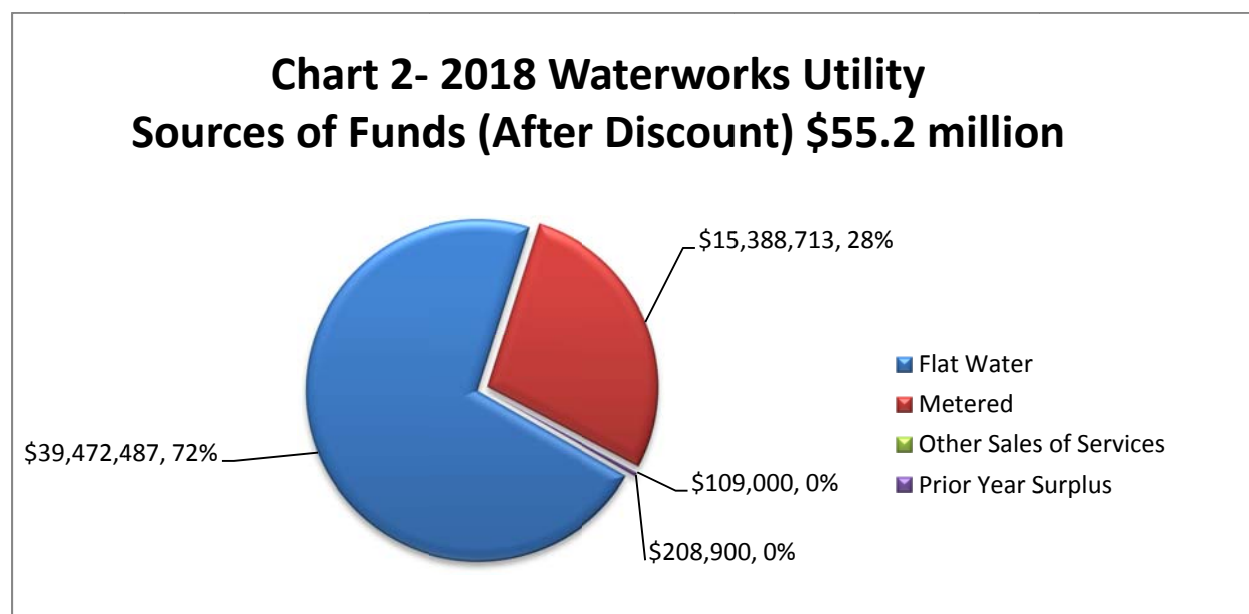
To: Financial Management Committee

From: Director Finance

Re: 2018 Waterworks Utility Rates

2017 November 22..... Page 5

Chart 2 below provides a breakdown of 2018 funding sources net of discounts.



3.1 Flat Water

Flat water charges make up 72% of all revenues, at \$39.5 million (net of discounts). The projected revenue increase for 2018 is \$327,000. This is based on an estimated 1% annual growth factor for 2018. Incorporated into 2018 and future annual figures is revenue from the Secondary Suite program, which commenced in 2017.

Single Family Dwellings will continue to be billed additional user fees in 2018 for secondary suites, and as such this revenue stream now forms part of the 2018 flat water base. Without additional secondary suite fee revenue (at approximately \$1.5 million per annum before discount for 2018), the water rate would have to increase by around 6% in order to fund the Waterworks Utility, assuming no change in projected expenditures.

3.2 Metered Water

Approximately 2,000 customers are metered, which accounts for 28% of total revenues (net of discounts). Despite an overall average decline in consumption of 1.87% over the past ten years, 2016 full year actuals were higher than forecast. (Period 09 data for 2017 is indicating the possibility of a minor positive variance for the year). The 2018 budget is based on past actual consumption levels, with 2018 revenues estimated at \$15.4 million after applicable discounts.

To: Financial Management Committee

From: Director Finance

Re: 2018 Waterworks Utility Rates

2017 November 22..... Page 6

3.3 Other Sales of Services, Permits and Construction Charges

Other revenues in 2017 include *Construction Water (Flat and Metered)*, Permits, Special Meter Readings and Testing. Rates for construction water charges increase in line with all other water rates. Revenue for Other Sales of Services, Permits and Construction Charges is estimated at around \$109,000 for 2018.

3.4 Prior Year Surplus

For 2018, Prior Year Surplus of \$209,000 is being used to fund continuing operations, including \$125,000 for special projects.

4.0 BYLAW AMENDMENTS

It is the recommendation of staff that the following revisions be made to the Waterworks Regulation Bylaw 1953 through the inclusion of two new fee types in Schedule A, and provision of revised billing processes for new construction of Single Family Dwellings with a Secondary Suites:

4.1 Construction Meter Deposit

Historically, the City only charged flat rates for water used during construction. However, in 2016, the City enabled metered construction water, which ensures full cost recovery for larger developments spanning multiple years. Initially, staff estimated a simple \$200 connection fee, which assumed that the developer would configure the connection site appropriately and City staff would quickly install a meter which would be read and billed monthly. However, experience has shown that developer site preparation quality varies considerably, and that some developers damage the meter and assembly site during the construction process, requiring City staff to perform additional site visits and supply additional equipment.

To ensure that the City's costs are fully covered, a \$5,000 initial deposit is considered to be more appropriate for metered construction water. This money will be used to pay for the cost of installation and to cover any costs associated with damage to the meter. Any unused funds will be returned to the developer upon completion of the construction water period following approval by the Director Engineering.

This new deposit will replace the \$202 fee currently charged. Flat construction water rates will continue to be used for smaller, shorter term development sites.

Amendments to Section 23, parts (c) and (e) of the Waterworks Regulation Bylaw 1953 are therefore required to accommodate the new deposit requirement and residual deposit return upon project completion.

To: Financial Management Committee

From: Director Finance

Re: 2018 Waterworks Utility Rates

2017 November 22..... Page 7

4.2 Service Disconnection

The City currently invoices for various services performed against private properties; including temporary water shut off and the cost of new connections; however, the City does not have a set fee for permanent service disconnection, either at the main or property line. Two new fees are recommended for inclusion in the Waterworks Regulation Bylaw 1953 as a new Section 3C, as follows:

Service Disconnection - at property line:	\$350
Service Disconnection - at main:	\$3,500

These new fees will provide transparency for customers and allow for improved and timelier billing. There is no discount for early payment.

4.3 Secondary Suites – Charges during Construction

At present additional user fees for Secondary Suites are charged annually and are based on 50% of the standard annual charge. (Fees include both additional water and sewer charges). Under section 26 of the bylaw, utility fees are pro-rated and rebated if there is a delay of greater than seven days between the date of the demolition permit and application for a building permit. Utility charges including the additional secondary suite fees are levied once the building permit is taken out.

In 2017 February 27, the City received a delegation from a property owner who raised attention to the issue of being charged the additional secondary suite user fees during construction. The property owner asked that the City explore alternative options for the charging of the additional fees. Staff have considered a number of different options:

- Levying the fees from issuance of an occupancy permit
- Levying the fees from issuance of a final inspection report
- Delaying the fees for a set period of time.

Staff have identified that the most cost effective and efficient process of billing for the additional user fees during construction of a single family dwelling with a suite would be to implement the delayed billing approach. This would provide consistency in billing and remove any lag time caused as a result of failings on the part of a property owner or their representative in seeking necessary permits, or completion of any necessary works. Data from the Planning and Building Department has established that the period of construction can vary between projects, from less than six months to over two years.

Staff are recommending a 12 month delay period during which time the additional fee will not be charged and only the basic utility (water and sewer) charges will be levied on properties undergoing construction. After this 12 month period, the additional fees for a secondary suite will apply.

To: Financial Management Committee
From: Director Finance
Re: 2018 Waterworks Utility Rates
2017 November 22.....

Page 8

This approach will provide general relief to the property owner during construction, and capture those properties that fail to complete Final Inspection and/or Issuance of an Occupancy Permit. It is recommended that this change is applied prospectively.

5.0 SUMMARY

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. For 2018 it is recommended that rates remain at 2017 levels.

Two new fees are being added to Schedule A of the bylaw for Service Cuts, and bylaw edits are being made to accommodate a 12 month additional fee billing grace period for construction of Single Family Dwellings with a Secondary Suite.

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

6.0 RECOMMENDATION

It is recommended that the Financial Management Committee recommend Council authorize the City Solicitor to amend the Burnaby Waterworks Regulation Bylaw 1953 for the 2017 Water Rates contained in Schedule C and the bylaw amendments as outlined in Section 4 of this report, effective 2018 January 01.

Once approved by Council, a general notice informing users of the 2017 rates will be placed in a local newspaper and made available on the City's website. Metered users will be notified by letter.



Noreen Kassam, CPA, CGA
DIRECTOR FINANCE

NK:RR /mlm

*Attachments: Schedule A – 2018 Waterworks – Five Year Operating Budget
Schedule B – Cost of Water Supplied to Burnaby by Metro Vancouver (GVWD)
Schedule C – 2018 Waterworks Rates*

Copied to: City Manager
Director Engineering
City Solicitor
City Clerk

2018 WATERWORKS - FIVE YEAR OPERATING BUDGET

SCHEDULE A

	2013 Actual \$	2014 Actual \$	2015 Actual \$	2016 Actual \$	2017 Annual \$	2018 Annual \$	2019 Projected \$	2020 Projected \$	2021 Projected \$	2022 Projected \$
EXPENDITURE										
Metro Vancouver - Cost of water	25,820,790	25,199,090	26,159,327	25,865,340	27,262,600	27,943,500	30,639,400	33,288,700	35,960,500	39,166,500
Transmission, distribution and pumping	5,671,086	6,083,121	6,385,702	6,203,023	8,080,110	8,110,600	8,364,200	8,625,700	8,895,400	9,173,500
Infrastructure Investment	14,500,000	15,001,520	15,682,345	16,002,500	19,500,000	18,500,000	16,500,000	14,500,000	12,500,000	12,500,000
Special project - one time request	-	-	-	-	-	125,000	-	-	-	-
Contingency	-	-	-	-	500,000	500,000	500,000	500,000	500,000	500,000
Surplus	-	2,347,641	2,156,657	4,122,980	-	-	-	-	-	-
TOTAL	45,991,876	48,631,372	50,384,032	52,193,844	55,342,710	55,179,100	56,003,600	56,914,400	57,855,900	61,340,000
GROSS REVENUES/TRANSFERS										
Flat rates (includes secondary suites)	33,728,080	35,837,549	37,555,074	38,766,805	41,047,880	41,389,300	42,217,100	43,061,400	43,898,100	45,215,000
Metered Rates	13,985,119	14,993,427	15,161,706	15,901,548	15,554,650	16,136,000	16,305,400	16,476,600	16,649,600	16,982,600
Discount - flat and metered (Including suites)	(2,212,158)	(2,346,159)	(2,450,886)	(2,530,593)	(2,622,800)	(2,664,100)	(2,710,300)	(2,757,400)	(2,804,100)	(2,880,500)
Construction - Metered Charges	33,630	41,143	23,460	15,280	40,000	23,600	23,800	24,000	24,200	24,400
Construction - Flat Rate Charges	54,093	58,892	39,520	200	40,000	32,900	33,200	33,500	33,800	34,100
Permits and Fees	-	13,351	12,017	11,131	14,160	17,200	17,400	17,600	17,800	18,000
Other Sales of Services	23,007	33,168	43,141	29,473	36,080	35,300	35,700	36,100	36,500	36,900
Previous year's surplus brought forward	380,105	-	-	-	1,232,740	208,900	81,300	22,600	-	1,909,500
TOTAL	45,991,876	48,631,372	50,384,032	52,193,844	55,342,710	55,179,100	56,003,600	56,914,400	57,855,900	61,340,000
Rate increase	6.00%	5.50%	3.00%	2.00%	1.00%	0.00%	1.00%	1.00%	1.00%	1.00%

Finance Department
November 2017

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

SCHEDULE B

Year	Cost/m ³		Increase over the previous year				Volumes m ³			Change In 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 \$	%
2013 Actual	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 Actual	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 Actual	0.5816	0.7270	0.0092	0.0115	1.61	1.61	23,871	16,886	40,757	2.70	26,159	960	3.81
2016 Actual	0.5926	0.7407	0.0110	0.0137	1.89	1.88	24,028	15,696	39,724	-2.53	25,865	-294	-1.12
2017 Budget	0.6113	0.7641	0.0187	0.0234	3.16	3.16	24,165	16,347	40,512	1.98	27,263	1,397	5.40
2018 Budget	0.6350	0.7938	0.0237	0.0297	3.88	3.89	23,778	16,181	39,959	-1.36	27,943	681	2.50
2019 Budget	0.6725	0.8406	0.0375	0.0468	5.90	5.90	24,703	16,687	41,390	3.58	30,639	2,696	9.65
2020 Budget	0.7242	0.9054	0.0518	0.0647	7.70	7.70	24,920	16,833	41,754	0.88	33,289	2,649	8.65
2021 Budget	0.7800	0.9751	0.0558	0.0697	7.70	7.70	24,996	16,884	41,880	0.30	35,960	2,672	8.03
2022 Budget	0.8416	1.0521	0.0616	0.0770	7.90	7.90	25,231	17,043	42,274	0.94	39,167	3,206	8.92
Increase 2013 - 2017			0.0676	0.0845	11.06	11.06						3,175	5.58
Projected increase 2018 - 2022			0.2303	0.2880	32.54	32.54						11,904	40.16

NOTES:

2013-2016 volumes are based on actuals up to December 31 2016.

2017 volumes and costs are based on expenditure as of period 10 2017. An estimate is used for the remainder of the year based on prior year averages.

2018 volumes are based on the City of Burnaby average volume for the prior three years. Rates are as per GVWD.

2019 - 2022 rates are based on an GVWD projected rate increases. Volumes for this period are based on GVWD projected increases.

2018 WATERWORKS RATES**FLAT RATES**

Detached Single Family Dwelling	578.17	608.60
Two Family Dwelling, including strata, forming part of a duplex- Per Unit	433.63	456.45
Multiple Family Dwelling, including strata, not part of a duplex - Per Unit:	331.99	349.46
Secondary suite, or in-law suite in a Single Family Dwelling.	289.09	304.30
In-Law Suite in a Two Family Dwelling.	216.82	228.23

Commercial Not More Than 3 Stores /Offices

Commercial and living quarters, 1 family	1156.34	1,217.20
Commercial and no living quarters	578.17	608.60

CROSS CONNECTION CONTROLS

Per Device	51.96	54.69
Minimum Per Unit	6.53	6.87

METERED RATES**Monthly**

First 300 cubic metres	1.536	1.616
Next 550 cubic metres	1.536	1.616
Next 1,400 cubic metres	1.536	1.616
Excess	1.536	1.616
Minimum monthly	48.18	50.72

Quarterly

First 900 cubic metres	1.536	1.616
Next 1,650 cubic metres	1.536	1.616
Next 4,200 cubic metres	1.536	1.616
Excess	1.536	1.616
Minimum quarterly	144.54	152.16

SPECIAL METER READING

	Effective 2017 Jan 01 Paid by Mar. 15	Effective 2017 Jan 01 Paid after Mar. 15
	\$	\$
	578.17	608.60
	433.63	456.45
	331.99	349.46
	289.09	304.30
	216.82	228.23
	1156.34	1,217.20
	578.17	608.60
	51.96	54.69
	6.53	6.87
	Paid within 30 days of billing date	Paid 31 or more days after billing date
	1.536	1.616
	1.536	1.616
	1.536	1.616
	1.536	1.616
	48.18	50.72
	1.536	1.616
	1.536	1.616
	1.536	1.616
	1.536	1.616
	144.54	152.16
	No discount	80.00
	Per agreed cost of connection	
	No discount	1,400.00
	No discount	3,600.00
	No discount	10,900.00
	No discount	202.00
		N/A
	As per Metered rates	
	No discount	54.00
	No discount	160.00
	No discount	160.00
	No discount	160.00
	No discount	27.00
	No discount	531.00
	No discount	123.00
	No discount	239.00
	NA	NA
	NA	NA
	1.00%	1.00%

	Effective 2018 Jan 01 Paid by Mar. 15	Effective 2018 Jan 01 Paid after Mar. 15
	\$	\$
	578.17	608.60
	433.63	456.45
	331.99	349.46
	289.09	304.30
	216.82	228.23
	1156.34	1,217.20
	578.17	608.60
	51.96	54.69
	6.53	6.87
	Paid within 30 days of billing date	Paid 31 or more days after billing date
	1.536	1.616
	1.536	1.616
	1.536	1.616
	1.536	1.616
	48.18	50.72
	1.536	1.616
	1.536	1.616
	1.536	1.616
	1.536	1.616
	144.54	152.16
	No discount	80.00
	Per agreed cost of connection	
	No discount	1,400.00
	No discount	3,600.00
	No discount	10,900.00
		Cancelled
	No discount	5,000.00
	As per Metered rates	
	No discount	54.00
	No discount	160.00
	No discount	160.00
	No discount	160.00
	No discount	27.00
	No discount	531.00
	No discount	123.00
	No discount	239.00
		New for 2018
	No discount	350.00
	No discount	3,500.00
	0.00%	0.00%

General Rate increase