

**TO:** CHAIR AND MEMBERS  
FINANCIAL MANAGEMENT COMMITTEE

**DATE:** 2018 November 19

**FROM:** DIRECTOR FINANCE

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

**SUBJECT:** 2019 WATERWORKS UTILITY RATES

**PURPOSE:** To request Council approval for a 2% increase to the 2019 Waterworks Utility Rates and 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 2019 Water Rates contained in Schedule C of this report, and amend the bylaw as outlined in Section 4 of this report, effective 2019 January 01.

**REPORT**

**1.0 BACKGROUND**

The Waterworks Utility 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 adoption by Council.

The due date for payment of annual waterworks utility fees is March 15<sup>th</sup> each year. To promote payment by the due date, Burnaby offers discounted rates for payments received on or before the March 15<sup>th</sup> due date. Metered Water customers are offered the same incentive for payments made within 30 days of the billing date. The intent of the bylaw is not to grant a discounted rate for partial payments.

Table 1 provides rate increase information over the past five years and the proposed rate for 2019.

**Table 1 – Rate Increases**

2014	2015	2016	2017	2018	Proposed 2019
5.5%	3.0%	2.0%	1.0%	0.0%	2.0%

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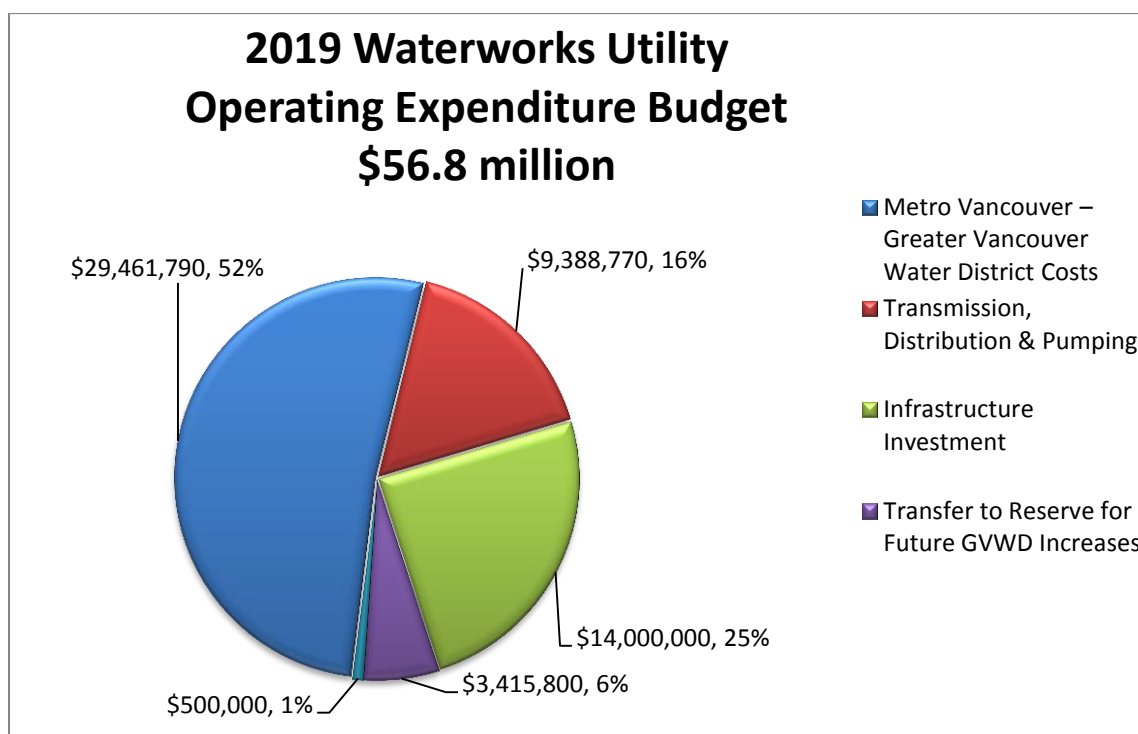
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## 2.0 WATERWORKS UTILITY EXPENDITURES

The 2019 Waterworks Utility Operating Expenditure Budget totals \$56.8 million, an increase of \$1.6 million compared to 2018. The 2019 Waterworks Utility Operating Expenditure Budget is summarized in Chart 1 below. Schedule A (attached), provides further details of the City's Waterworks Utility Five Year Operating Plan.

**Chart 1 – 2019 Waterworks Utility Operating Expenditure Budget**



### 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 2019, at just under 52% 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.

2019 volumes are based on the City of Burnaby's average volume for the prior three years. Rates are as per GVWD. 2020 – 2023 rates are based on GVWD projected rate increases. Volumes for this period are also based on GVWD projected increases. For 2019, the City has budgeted for consumption of 39.7m cubic metres, which is in line with GVWD estimates. The estimated cost of

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the 2019 GVWD water delivery service for Burnaby is \$29.4 million, an increase of \$1.5 million over the 2018 budget.

Schedule B (attached) summarizes the projected 2019 – 2023 GVWD increases in the cost of water services provided to Burnaby, with historical data going back to 2014. The City of Burnaby's longer range forecast rate increases for the GVWD cost of water services from 2024 to 2028 are based on average rate increase from 2017 – 2020. The blended 2019 rate increase for the GVWD is 5.8%. The 2019 GVWD rates for peak and off peak rates are as follows:

- Peak (June to September) - \$0.8399 per cubic metre @ 16,233 cubic metres.
- Off Peak (January to May / October to December) –  
 \$0.6719 per cubic metre @ 23,556 cubic metres.

The following are examples of current and planned major GVWD initiatives supported by 2019 rate increases:

#### 2019 Major Capital Projects

- Coquitlam Intake No. 2 project definition
- Coquitlam Main No. 4 design
- Capilano Raw Water Pump Station Back-up Power
- Capilano Main No. 5 (Stanley Park Section) design
- Annacis Marine Crossing design
- Second Narrows Marine Crossing construction
- Port Mann Main No. 2 (South) construction
- Jericho Reservoir construction
- Fleetwood Reservoir construction

The City's approach to maintaining a stable level of operating reserves allows for rate increases that are well below the GVWD increases. Proposed rate increases for future years are set out in Table 2 below:

**Table 2 – Planned GVWD and City Increases**

GVWD 2019 – 2023 Plan <sup>1</sup>	2019	2020	2021	2022	2023
<b>GVWD Blended Rate Increase</b>	5.8%	10.9%	11.0%	11.7%	11.6%
<b>Total GVWD Operating Budget</b>	\$289.1m	\$323.2m	\$359.5m	\$403.7m	\$453.0m
<b>Total GVWD Capital Budget</b>	\$231.4m	\$395.7m	\$440.9m	\$486.0m	\$477.2m
<b>Household Impact</b>	\$172	\$189	\$207	\$229	\$253
<b>% Change on Household</b>	4.5%	10.0%	9.5%	10.5%	10.5%
<b>Planned City of Burnaby % change</b>	<b>2.0%</b>	<b>3.0%</b>	<b>3.0%</b>	<b>3.0%</b>	<b>3.0%</b>

<sup>1</sup> Metro Vancouver Corporate Planning Committee Budget Workshop – October 17, 2018

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## ***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. This division manages the installation and maintenance of over 700 kilometers of watermain and connections throughout the City. Planned 2019 transmission, distribution, and pumping expenditure is proposed to increase by \$1.3 million to \$9.4 million.

Key changes include:

- \$600,000 related to water service connections activity. A provision for connections with performance issues in the past was included in the capital plan; however, after further review it was deemed that majority of this type of ongoing work is more of an operating activity. Since this is no longer classified as a capital activity the capital plan will have an offsetting reduction.
- \$300,000 is required due to the increase in costs associated with transporting construction materials for disposal at off site locations. These costs are incurred by the City and allocated evenly between both the Waterworks Utility and Sanitary Sewer Fund.
- \$210,000 in various operating expenditures related to Water Conservation and Enforcement initiatives and other operating initiatives.
- \$190,000 due to additional compensation costs such as collective agreement increases and staff pay-step increments.

## ***2.3 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 2019 infrastructure investment is budgeted at \$14 million. This figure ensures that capital funds held in reserves are sufficient to fund capital expenditures for the future.

## ***2.4 Transfer to Reserve for Future GVWD Increases***

The City is setting aside funding to the Waterworks Utility Operating Reserve from 2019 to 2021, which will help to reduce the upward pressure of GVWD rate increases in future years, keeping future rate increases to citizens stable.

## ***2.5 Contingency***

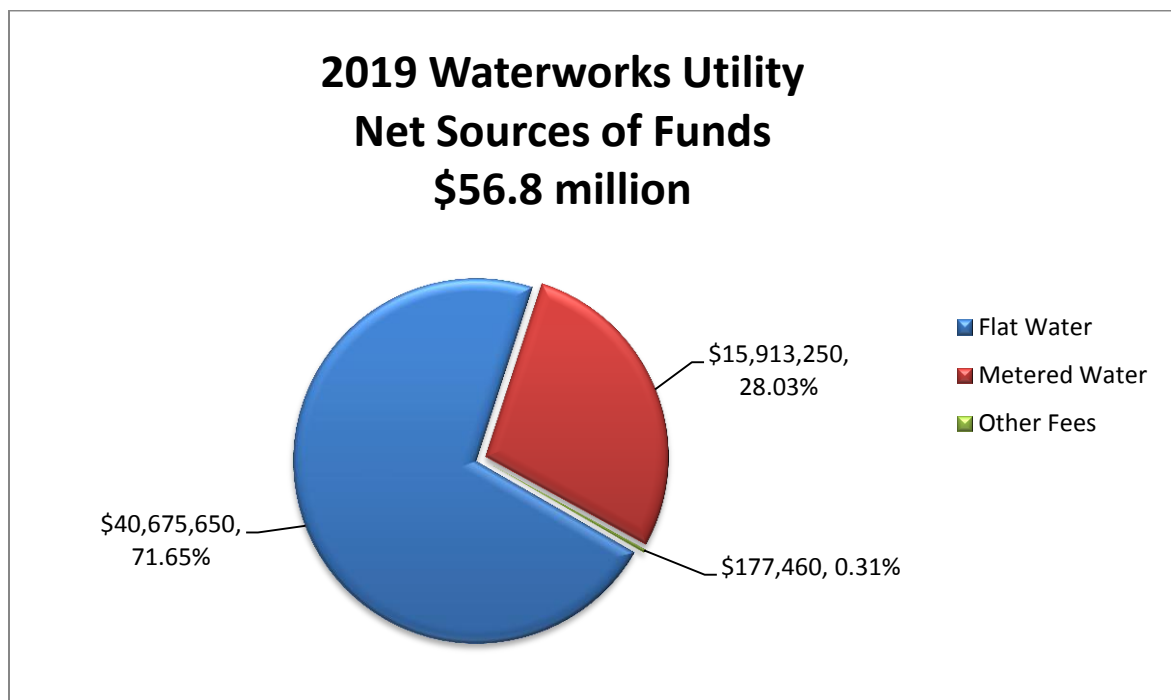
A contingency amount, consistent with prior years, of \$500,000 has been built into the budget to accommodate for any unforeseen costs that may arise during the year.

### 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 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. A transfer from reserve is used to stabilize rates.

Chart 2 below provides a breakdown of 2019 funding sources net of early payment discounts.

**Chart 2 – 2019 Waterworks Utility Net Sources of Funds**



#### 3.1 Flat Water

Flat water charges make up 71.7% of all revenues, at \$40.6 million (net of discounts). The projected revenue increase for 2019 is \$1.3 million. This is based on an estimated 1% annual growth factor for 2019 and the general rate increase.

#### 3.2 Metered Water

Approximately 2,800 customers are metered, which accounts for 28% of total revenues (net of discounts). Despite an overall average decline in consumption of 0.96% over the past ten years, 2017 full year actuals were higher than forecast. The 2019 budget is based on past actual consumption levels, with 2019 revenues estimated at \$15.9 million after applicable discounts.

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### ***3.3 Other Fees (Sales of Services, Permits and Construction Charges)***

Other revenues in 2019 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 from these sources is estimated at \$177,460 for 2019.

### ***3.4 Transfer from Reserve***

For 2019, there is no transfer from reserve. In future years the water operating reserve fund will be used to offset GVWD rate increases, meaning that the City can set rate increases that are significantly lower than those of the GVWD.

## **4.0 BYLAW AMENDMENTS**

The following revisions to Schedule C of this report (Schedule A of the Waterworks Regulation Bylaw 1953) are proposed:

### ***4.1 Metered Rates***

In line with Metered Sewer Rates, a single tier rate per cubic metre of water consumption is applied to all monthly and quarterly accounts. As such, multiple tiers are no-longer shown on Schedule C to this report, and will be updated within Schedule A of the bylaw.

### ***4.2 Cost of connection – Tie In***

This fee is being added to the Waterworks Regulation Bylaw 1953.

### ***4.3 Water Transfers***

This fee is being added to the Waterworks Regulation Bylaw 1953.

### ***4.4 Water Meter Purchase and Installation***

These rates have been added to Schedule C of this report and will be added to the bylaw to capture meter purchase and installation charges.

### ***4.5 Other Installation / Device Fees***

The fees for the Nelson box purchase and installation, and Fireline Meter purchase and installation have been included in Schedule C of this report and will be added to the bylaw.

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#### **4.6 Watering Permit**

This fee is being added to the Waterworks Regulation Bylaw 1953.

With inclusion of the fees listed above in Schedule C attached, going forward rate increases for these fees will adhere to the general annual rate increase for the Waterworks Utility.

#### **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 2019, it is recommended that rates increase by 2%, to help offset future rate increases by GVWD.

A number of fee additions have been made to Schedule C to this report (Schedule A of the Burnaby Waterworks Regulation Bylaw 1953).

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 2019 Water Rates contained in Schedule C and the bylaw amendments as outlined in Section 4 of this report effective 2019 January 01.



Noreen Kassam, CPA, CGA  
DIRECTOR FINANCE

NK:RR:WK /ml

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

2019 WATERWORKS - FIVE YEAR OPERATING BUDGET

SCHEDULE A

	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Annual	2019 Budget	2020 Projected	2021 Projected	2022 Projected	2023 Projected
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
EXPENDITURE										
Metro Vancouver – Greater Vancouver Water District Costs	25,199,090	26,159,327	25,865,340	26,983,019	27,943,500	29,461,790	32,832,700	36,597,400	41,167,700	46,341,600
Transmission, Distribution & Pumping	6,083,121	6,385,702	6,203,023	6,822,740	8,110,600	9,388,770	9,670,430	9,960,540	10,259,360	10,567,140
Infrastructure Investment	15,001,520	15,682,345	16,002,500	21,131,130	18,500,000	14,000,000	11,500,000	11,500,000	11,500,000	11,500,000
Transfer to Reserve for Future GVWD Increases	-	-	-	-	-	3,415,800	4,185,550	2,108,080	-	-
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	4,122,981	-	-	-	-	-	-	-
TOTAL	48,631,372	50,384,032	52,193,844	54,936,900	55,179,100	56,766,360	58,688,680	60,666,020	63,427,060	68,908,740
GROSS REVENUES/TRANSFERS										
Flat Rates (Net of Discounts, including Secondary Suites)	34,175,090	35,808,730	36,965,274	39,153,697	39,472,490	40,675,650	41,991,610	43,340,900	44,730,950	46,162,860
Metered Rates (Net of Discounts)	14,309,728	14,457,163	15,172,485	15,552,029	15,388,710	15,913,250	16,519,620	17,147,670	17,800,850	18,480,150
Construction - Metered Charges	41,143	23,460	15,280	3,412	23,600	23,800	23,800	23,800	23,800	23,800
Construction - Flat Rate Charges	58,892	39,520	200	32,800	32,900	47,430	47,430	47,430	47,430	47,430
Permits and Fees	13,351	12,017	11,131	22,714	17,200	16,970	16,970	16,970	16,970	16,970
Other Sales of Services	33,168	43,141	29,473	22,732	35,300	89,260	89,250	89,250	89,250	89,250
Transfer from Reserve	-	-	-	149,500	208,900	-	-	-	717,810	4,088,280
TOTAL	48,631,372	50,384,032	52,193,844	54,936,900	55,179,100	56,766,360	58,688,680	60,666,020	63,427,060	68,908,740
Rate Increase	5.50%	3.00%	2.00%	1.00%	0.00%	2.00%	3.00%	3.00%	3.00%	3.00%



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

# **SCHEDULE B**

Year	Cost/m <sup>3</sup>		Increase over the previous year				Volumes m <sup>3</sup>			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 <sup>3</sup>	%	000 \$	000 \$	%
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 Actual	0.6113	0.7641	0.0187	0.0234	3.16	3.16	23,270	16,700	39,970	1.98	26,983	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	0.6719	0.8399	0.0369	0.0461	5.81	5.81	23,556	16,233	39,790	-0.42	29,462	1,519	5.44
2020 Budget	0.7451	0.9314	0.0732	0.0915	10.90	10.90	23,789	16,219	40,007	0.55	32,833	3,371	11.44
2021 Budget	0.8271	1.0339	0.0820	0.1025	11.00	11.00	23,888	16,287	40,175	0.42	36,597	3,765	11.47
2022 Budget	0.9239	1.1549	0.0968	0.1210	11.70	11.70	24,057	16,402	40,459	0.71	41,168	4,570	12.49
2023 Budget	1.0310	1.2888	0.1072	0.1340	11.60	11.60	24,266	16,544	40,810	0.87	46,342	5,174	12.57
Increase 2014 - 2018			0.0846	0.1058	10.94	10.94						2,122	10.89
Projected increase 2019 - 2023			0.3960	0.4950	53.45	53.45						18,399	57.29

## NOTES:

2014-2017 volumes are based on actuals up to December 31 2017.

2018 volumes and costs are based on expenditure as of October 2018. An estimate is used for the remainder of the year based on prior year averages.

2019 volumes are based on the City of Burnaby average volume for the prior three years. Rates are as per GVWD.

2020-2023 rates are based on GVWD projected rate increases. Volumes for this period are based on GVWD projected increases.

2019 WATERWORKS RATES

SCHEDULE C

Note - full payment of the amount specified is required by the due date in order to receive the lower rate, where applicable.

FLAT RATES

Detached Single Family Dwelling
Two Family Dwelling, including strata, forming part of a duplex- Per Unit
Multiple Family Dwelling, including strata, not part of a duplex - Per Unit:
Secondary suite, or in-law suite in a Single Family Dwelling
In-Law Suite in a Two Family Dwelling
Commercial - not more than 3 stores / offices:
Commercial and living quarters, 1 family
Commercial and no living quarters

CROSS CONNECTION CONTROLS

Per Device
Minimum Per Unit

METERED RATES

Monthly
Per cubic metres
Minimum monthly
Quarterly
Per cubic metres
Minimum quarterly

WATER CONNECTION  
WATER TIE IN  
WATER TRANSFERS

Meter Purchase and Installation

Water Meter 5/8" to 10"
Water Meter 5/8" installation
Water Meter 3/4" installation
Water Meter 1" installation
Water Meter 1.5" installation
Water Meter 2" installation
Water Meter 3" installation
Water Meter 4" installation
Water Meter 6" installation
Water Meter 8" installation
Water Meter 10" installation

OTHER INSTALLATION / DEVICE FEES

Nelson box purchase and installation for driveway MR6
Fireline meter purchase - 6" to 10"
6" Fireline Installation
8" Fireline Installation
10" Fireline Installation

CONSTRUCTION FLAT WATER ANNUAL CHARGE

19 mm Connection
25 mm Connection
50 mm Connection

CONSTRUCTION OTHER

Construction Meter Deposit 2019 (Previously connection charge)
Construction meter Usage Charge

Effective 2018 Jan 01 Paid by Mar. 15	Effective 2018 Jan 01 Paid after Mar. 15	Effective 2019 Jan 01 Paid by Mar. 15	Effective 2019 Jan 01 Paid after Mar. 15
\$	\$	\$	\$
578.17	608.60	589.73	620.77
433.63	456.45	442.30	465.58
331.99	349.46	338.63	356.45
289.09	304.30	294.88	310.39
216.82	228.23	221.16	232.79
1156.34	1,217.20	1179.47	1,241.54
578.17	608.60	589.74	620.77
51.96	54.69	53.01	55.79
6.53	6.87	6.67	7.01
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
1.536	1.616	1.570	1.6500
48.18	50.72	49.15	51.74
1.536	1.616	1.570	1.6500
144.54	152.16	147.44	155.20
As per agreed cost of connection		As per agreed cost of connection	
Added to bylaw for 2019		As per agreed cost of connection	
Added to bylaw for 2019		As per agreed cost of connection	
Added to bylaw for 2019		Actual cost	
Added to bylaw for 2019		No discount	350.00
Added to bylaw for 2019		No discount	450.00
Added to bylaw for 2019		No discount	650.00
Added to bylaw for 2019		No discount	1,100.00
Added to bylaw for 2019		No discount	1,250.00
Added to bylaw for 2019		No discount	2,100.00
Added to bylaw for 2019		No discount	2,600.00
Added to bylaw for 2019		No discount	5,000.00
Added to bylaw for 2019		No discount	6,500.00
Added to bylaw for 2019		No discount	7,500.00
Added to bylaw for 2019		No discount	175.00
Added to bylaw for 2019		Actual cost	
Added to bylaw for 2019		No discount	7,500.00
Added to bylaw for 2019		No discount	5,000.00
Added to bylaw for 2019		No discount	6,500.00
No discount	1,400.00	No discount	1,428.00
No discount	3,600.00	No discount	3,672.00
No discount	10,900.00	No discount	11,118.00
No discount	5,000.00	No discount	5,100.00
As per Metered rates		As per Metered rates	

2019 WATERWORKS RATES

Note - full payment of the amount specified is required by the due date in order to receive the lower rate, where applicable.

MISCELLANEOUS CHARGES

I. Water Turn-on / Turn-off request (per occurrence)

Regular hours: 7am to 11 pm Monday to Friday except statutory holidays

After hours: 11pm to 7am Mon - to Fri, weekends and statutory holidays

II. Fire Hydrant

Permit (Inspection fee)

Water use per day

Damage deposit (refundable)

III. Meter Test or retest

16 mm, 19 mm, 25 mm, 32 mm, 38 mm or 50 mm meters

76 mm, 102 mm, 152 mm or meters over 152 mm

IV. Service Disconnection

At Property Line

At Main

V. Special Meter Reading

VI. Watering Permit

RATE INCREASE

Effective 2018 Jan 01 Paid by Mar. 15	Effective 2018 Jan 01 Paid after Mar. 15
\$	\$
No discount	54.00
No discount	160.00
No discount	160.00
No discount	27.00
No discount	531.00
No discount	123.00
No discount	239.00
No discount	350.00
No discount	3,500.00
No discount	80.00
Added to bylaw for 2019	
0.00%	0.00%

SCHEDULE C

Effective 2019 Jan 01 Paid by Mar. 15	Effective 2019 Jan 01 Paid after Mar. 15
\$	\$
No discount	55.08
No discount	163.20
No discount	163.20
No discount	27.54
No discount	541.62
No discount	125.46
No discount	243.78
No discount	357.00
No discount	3,570.00
No discount	81.60
No discount	50.00
2.00%	2.00%

Finance Department

November 2018