

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

**DATE:** 2019 November 14

**FROM:** DIRECTOR FINANCE

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

**SUBJECT:** 2020 WATERWORKS UTILITY RATES

**PURPOSE:** To request Council approval for a 1% increase to the 2020 Waterworks Utility Rates and bylaw revisions contained herein.

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**RECOMMENDATION:**

1. **THAT** the Financial Management Committee recommend Council authorize the City Solicitor to amend the Burnaby Waterworks Regulation Bylaw 1953 to reflect the 2020 rates contained in Schedule C of this report, and the bylaw amendments outlined in Section 6 of this report, effective 2020 January 01.

**REPORT**

**1.0 INTRODUCTION**

The Waterworks Utility is financially self-sustaining and debt free. Rate changes do not impact what is collected through general property taxes. Rates are reviewed annually and adjustments are made to provide funding for required operating and capital works through the adoption of amendments to the Burnaby Waterworks Regulation Bylaw 1953.

Waterworks charges are payable on or before March 15<sup>th</sup> (or next business day if the due date falls on a weekend). To promote payment by the due date, Burnaby offers discounted rates for payments received on or before the due date. Metered Water customers are offered the same incentive for payments made within 30 days of the billing date, both quarterly and monthly.

**2.0 POLICY SECTION**

**Goal:**

- A Dynamic Community:
  - Economic opportunity - Foster an environment that attracts new and supports existing jobs, businesses and industries

- City facilities and infrastructure –  
Build and maintain infrastructure that meets the needs of our growing community
- A Thriving Organization
  - Financial viability –  
Maintain a financially sustainable City for the provision, renewal and enhancement of City services, facilities and assets

### **3.0 BACKGROUND**

The annual budget process for the Waterworks Utility takes into account projected revenues and expenditures, plus sustainability of the operating and capital reserves over a 5 year period. As per prior years, the single biggest driver for budget and rate increases are the costs imposed on the City by Metro Vancouver for delivery of water to Burnaby in the form of the Greater Vancouver Water District (GVWD). Other key components include the city's planned capital program and annual operating requirements.

All rates within the bylaw are increased each year by the approved percentage amount. Rate increases are communicated to customers in the form of the Annual Utility Brochure, and Metered Water and Sewer Customer Information Bulletins, which are sent out in the new-year with Utility Notices. Table 1 provides rate increase information over the past 5 years and the proposed rate for 2020:

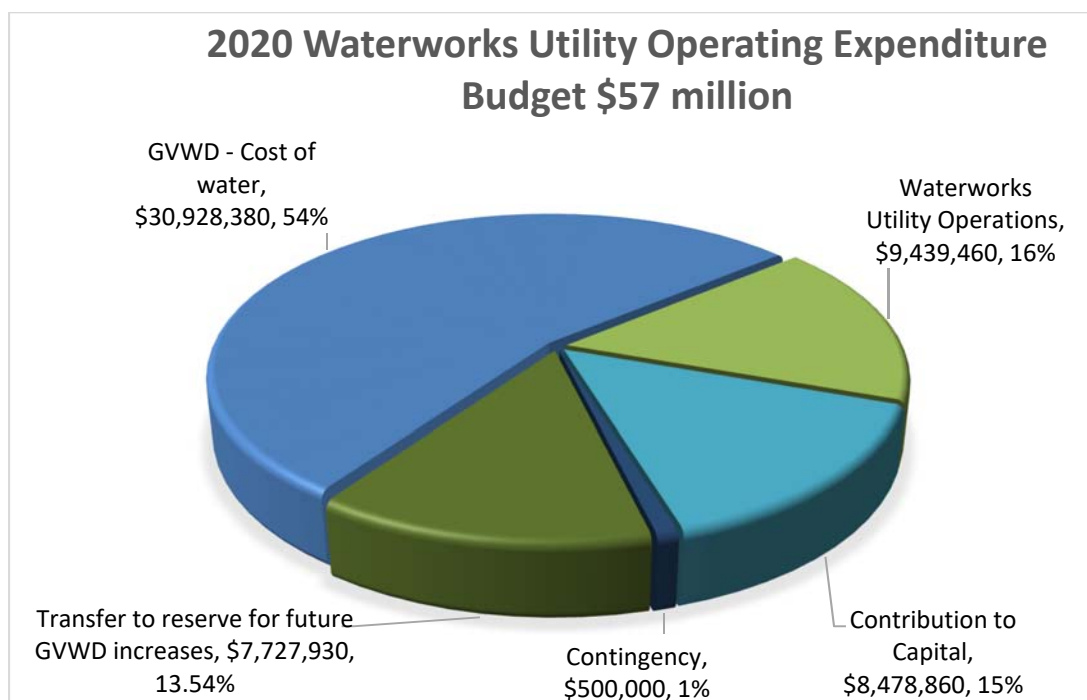
**Table 1 - Rate Increases**

2015	2016	2017	2018	2019	Proposed 2020
3.0%	2.0%	1.0%	1.0%	2.0%	1.0%

#### 4.0 WATERWORKS UTILITY EXPENDITURES

Waterworks Utility expenditures for 2020 are projected at \$57m, an overall change of \$308k over 2019. The increase in overall expenditure is mainly the result of an increase in GVWD costs. Schedule A (attached) outlines the City's Waterworks Utility 5 year Operating Plan. Chart 1 below summarises the 2020 Waterworks Utility operating expenditure budget:

**Chart 1 – 2020 Waterworks Utility Operating Expenditure Budget**



#### 4.1 Metro Vancouver Greater Vancouver Water District (GVWD) Costs

For 2020, the City has budgeted water consumption of 39.4m cubic metres, amounting to costs of \$30.9m. This is based on prior year consumption and 2019 actuals as of November 12. City estimates are in line with GVWD consumption projections for 2020.

The GVWD cost of water continues to form the largest percentage of overall expenditure for 2020, at 54% 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. Consumption estimates for 2021-2024 are based on GVWD projected volume fluctuations.

Schedule B (attached) summarizes the projected 2020 – 2024 GVWD increases in the cost of water services provided to Burnaby, with historical data going back to 2015. The City of Burnaby's budget includes projected rate increases for the cost of water from 2025 to 2029 based on average rate increase from 2020 – 2024. The blended 2020 rate increase for the GVWD is 5.95%. The 2020 GVWD rates are as follows:

- Peak (June to September) - \$0.8899 per cubic metre @ 16.2m cubic metres.
- Off Peak– \$0.7119 per cubic metre @ 23.2m cubic metres.

The following are examples of current and planned major GVWD initiatives supported by 2020 rate increases:

#### **2020 Major Capital Projects**

- 2nd Narrows Marine Crossing
- Annacis Marine Crossing
- Kennedy Newton Main
- Coquitlam Main No. 4 (Central)
- Coquitlam Intake No. 2
- Coquitlam Main No. 4 (South)
- Capilano Main No. 5

### **4.2 Waterworks Utility Operations**

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 kilometres of water mains and connections throughout the City. Planned 2020 operations expenditure is similar to the prior year at \$9.4m.

### **4.3 Contribution to Capital**

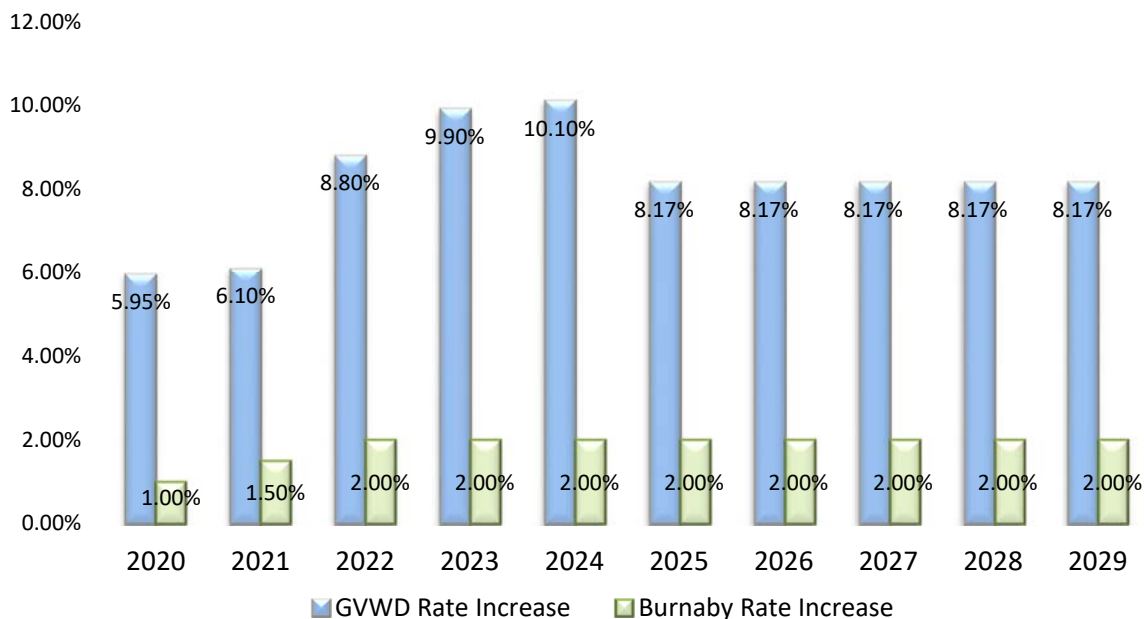
The City's policy of funding ongoing replacement and the development of new capital infrastructure annually has provided assurance that funding is available to sustain the capital program without the need for external debt financing. Funding is reviewed annually to determine changes to requirements. As it currently stands, the capital reserve has sufficient funding to meet the city's target level of five years capital works costs. Staff are recommending that the contribution to capital for 2020 to 2024 is aligned with the proposed average annual capital spend for that period, at \$8.5m.

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

The provision of \$7.7m for future rate increases (up from \$3.4m in 2019) helps to mitigate fluctuations in rates. Through the use of reserves held by the City, Burnaby has the ability to offset the immediate impact of rate increases by the GVWD. Hence, planned future

City of Burnaby increases will be lower than those imposed upon the City by GVWD, as illustrated in Chart 2.

**Chart 2 – Planned GVWD Increases vs Burnaby Increases**



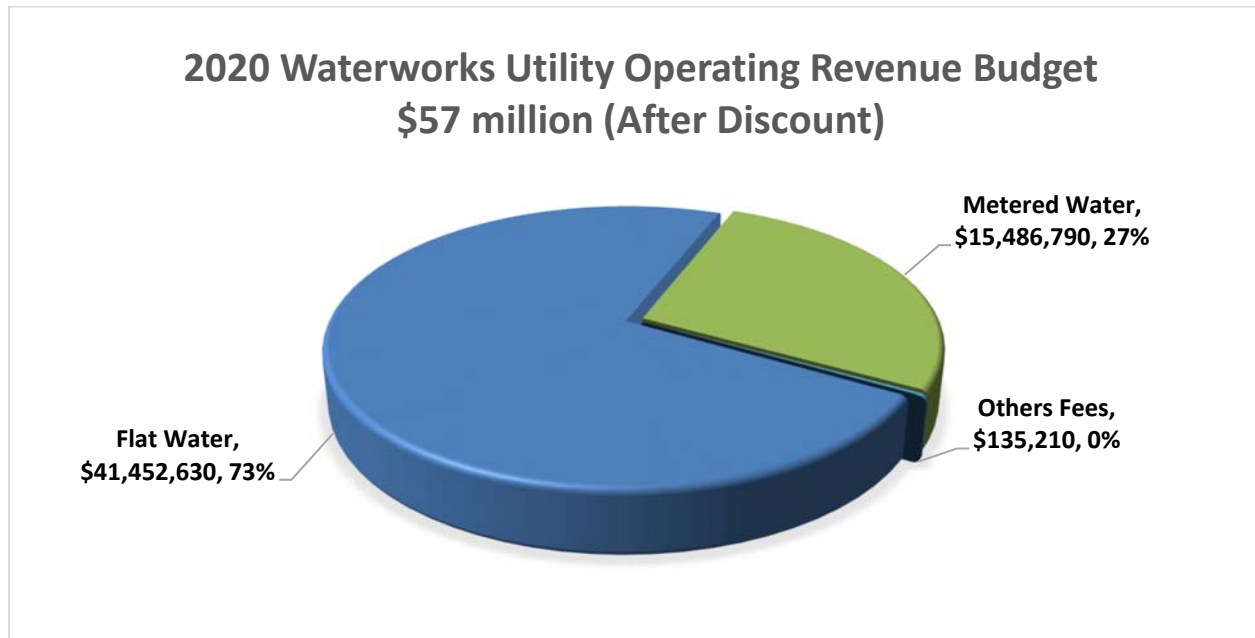
#### 4.5 Contingency

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.

## 5.0 WATERWORKS UTILITY REVENUES

The primary revenue item for 2020 is Flat Water, at \$41.4m, with Metered Water contributing over \$15.4m. A small percentage of revenue comes in the form of other permits and fees. Chart 3 provides a breakdown of revenues net of discounts. Aligning revenues with expenditures, there is a \$308k overall increase in funds being raised.

**Chart 3 – 2020 Waterworks Utility Operating Revenue Budget**



### 5.1 Flat Water

The \$41.4m budget for Flat Water in 2020, which makes up approximately 73% of all revenues, is based on an estimated 1% growth factor and the general rate increase for the utility.

### 5.2 Metered Water

Approximately 2,800 customers are metered, which accounts for 27% of total revenues (net of discounts). The 2020 budget is based on past actual consumption levels, which continue to decrease. It should be noted that given the small metering footprint in the city, consumption for metered customers does not correlate with consumption estimates for the city as a whole.

### 5.3 Other Fees

Other revenues in 2020 include construction charges, permits, special meter readings and testing fees.

## 6.0 BYLAW AMENDMENTS

### 6.1 Section 26 - Provision for rebate on disconnection less 7 days.

Currently Section 26 of the Waterworks Bylaw is interpreted such that if a building permit is not taken out within seven days of service disconnection, that charges are stop dated and a refund is given to the customer for annual charges already paid, less the unused portion of the year, less seven days. In reality, building permits usually come within 14-21 days after the tax office is informed of the initial demolition permit/disconnection. As such, considerable administration is incurred in turning off services to only turn them back on a week or so later, with the customer only benefitting by a few dollars.

It is proposed Section 26 be repealed, and that a new provision be added to afford a longer period before system service charges are stop dated. The proposed provision could allow 28 days after receipt of a disconnection request/demolition permit before charges are stopped. The proposed Section 26 is to include wording the same or similar to the following:

*'Utility service charges will not be adjusted for a period of 28 days following receipt of a request for the disconnection of water services, or on notification that a Demolition Permit has been taken out for a property in Burnaby. If a building permit is taken out during this time, then no adjustments are necessary. If a building permit is taken out after the 28 day period, account adjustments will be back dated to the original disconnection / demolition permit date. Account adjustments will be required during the 28 day period if there is a change in dwelling type or service provision. A credit will be allocated to the customer's utility account for any time period during which service charges are stopped in the system or following a change in service charge that results in an overcharge having occurred'.*

### 6.2 New Rates – Schedule A of the bylaw

The following rates are levied upon various properties, including municipal sites, but are not currently included in Schedule A of the bylaw. These rates apply a per unit allocation of water to certain institutional and commercial buildings that are not metered and fall outside of the standard Single Family, Twin, Multi Family, and Small Business rates. It is proposed that the schedule is updated to include these rates:

- Miscellaneous Structure - Unit Charge      \$59.55      (\$62.53 non discounted)
- City Facility – Unit Charge      \$59.55      (\$62.53 non discounted)

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From: Director Finance  
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## 7.0 RECOMMENDATION

It is recommended that Financial Management Committee recommend Council authorize the City Solicitor to amend the Burnaby Waterworks Regulation Bylaw 1953 to reflect the 2020 rates contained in Schedule C of this report, and the bylaw amendments outlined in Section 6 of this report, effective 2020 January 01.



Noreen Kassam, CPA CGA  
DIRECTOR FINANCE

NK/RR:md

Attachments: Schedule A – 2020 Waterworks - 5 Year Operating Budget  
Schedule B – Cost of Water Supplied to Burnaby by GVWD  
Schedule C – 2020 Waterworks Rates

Copied to: City Manager  
Director Engineering  
City Solicitor  
City Clerk

**2020 WATERWORKS - FIVE YEAR OPERATING BUDGET****SCHEDULE A**

Finance Department  
November 2019

	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Annual	2020 Budget	2021 Projected	2022 Projected	2023 Projected	2024 Projected
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>EXPENDITURE</b>										
<b>GVWD - Cost of water</b>	<b>26,159,327</b>	<b>25,865,340</b>	<b>26,983,020</b>	<b>27,842,870</b>	<b>29,461,790</b>	<b>30,928,380</b>	<b>32,990,000</b>	<b>36,130,000</b>	<b>39,940,000</b>	<b>44,333,700</b>
Waterworks Utility Operations	6,385,702	6,203,020	6,822,740	6,933,230	9,388,770	9,439,460	9,722,640	10,014,320	10,314,750	10,624,190
Contribution to Capital	15,682,345	16,002,500	21,131,130	18,809,700	14,000,000	8,478,860	8,478,860	8,478,860	8,478,860	8,478,860
Transfer to reserve for future GVWD increases					3,415,800	7,727,930	6,670,500	4,887,650	2,485,730	0
Special project - one time request	0	0	0	0	0	0	0	0	0	0
Contingency	0	0	0	0	500,000	500,000	500,000	500,000	500,000	500,000
Surplus	2,156,657	4,122,980	0	1,834,040	0	0	0	0	0	0
<b>TOTAL</b>	<b>50,384,032</b>	<b>52,193,840</b>	<b>54,936,890</b>	<b>55,419,840</b>	<b>56,766,360</b>	<b>57,074,630</b>	<b>58,362,000</b>	<b>60,010,830</b>	<b>61,719,340</b>	<b>63,936,750</b>
<b>GROSS REVENUES/TRANSFERS</b>										
Flat rates (Net of Discounts)	37,555,074	36,965,274	39,153,707	39,729,876	40,675,650	41,452,630	42,507,690	43,830,650	45,202,950	46,616,420
Metered Rates (Net of Discounts)	15,161,706	15,172,485	15,552,029	15,257,777	15,913,250	15,486,790	15,719,100	16,044,970	16,381,180	16,724,120
Construction - Metered Charges	23,460	15,280	3,412	0	23,800	31,440	31,440	31,440	31,440	31,440
Construction - Flat Rate Charges	39,520	200	32,800	109,300	47,430	43,230	43,230	43,230	43,230	43,230
Permits and Fees	12,017	11,131	22,714	22,140	16,970	30,540	30,540	30,540	30,540	30,540
Other Sales of Services	43,141	29473.39	22,732	300,748	89,260	30,000	30,000	30,000	30,000	30,000
<b>Previous year's surplus brought forward</b>	<b>0</b>	<b>0</b>	<b>149,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>461,000</b>
<b>TOTAL</b>	<b>47,933,146</b>	<b>52,193,840</b>	<b>54,936,890</b>	<b>55,419,840</b>	<b>56,766,360</b>	<b>57,074,630</b>	<b>58,362,000</b>	<b>60,010,830</b>	<b>61,719,340</b>	<b>63,936,750</b>
<b>Rate increase</b>	<b>3.00%</b>	<b>2.00%</b>	<b>1.00%</b>	<b>1.00%</b>	<b>2.00%</b>	<b>1.00%</b>	<b>1.50%</b>	<b>2.00%</b>	<b>2.00%</b>	<b>2.00%</b>

**COST OF WATER SUPPLIED TO BURNABY BY THE G.V.W.D.****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	Total m <sup>3</sup>	%	000 \$	000 \$	%
			Off-Peak	Peak	Off-Peak	Peak							
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 Actual	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	23,509	15,950	39,459	-1.25	29,192	1,249	4.47
2020 Budget	0.7119	0.8899	0.0400	0.0500	5.95	5.95	23,186	16,207	39,393	-0.17	30,930	1,738	5.95
2021 Budget	0.7553	0.9442	0.0434	0.0543	6.10	6.10	23,430	16,201	39,631	0.60	32,990	2,060	6.66
2022 Budget	0.8218	1.0273	0.0665	0.0831	8.80	8.80	23,583	16,307	39,891	0.66	36,130	3,140	9.52
2023 Budget	0.9032	1.1290	0.0814	0.1017	9.90	9.90	23,723	16,404	40,127	0.59	39,940	3,810	10.55
2024 Budget	0.9944	1.2430	0.0912	0.1140	10.10	10.10	23,914	16,536	40,450	0.81	44,334	4,394	11.00
Increase 2015 - 2019			0.0995	0.1244	15.53	15.53						3,994	11.60
Projected increase 2020 - 2024			0.3225	0.4031	39.68	39.68						15,141	43.34

**NOTES:**

2015-2018 volumes are based on actuals up to December 31 2018.

2019 volumes and costs are based on expenditure as of 2019 November 12. An estimate is used for the remainder of the year based on prior year averages.

2020 volumes are based on the City of Burnaby average volume for the prior three years. Rates are as per GVWD.

2021 - 2024 rates are based on GVWD projected rate increases, and volumes are based on GVWD projected increases.

**Finance Department  
November 2019**

**SCHEDULE C**

**2020 WATERWORKS RATES**

**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

***Twin Family Dwelling (non stratified - entire property)***

Two Family Dwelling, including strata, forming part of a duplex-  
Per Unit

Multiple Family Dwelling, including strata, not part of a duplex -  
Per Unit: (includes Tri-Plex and Four-Plex)

Rented Suite in a Single Family Dwelling - Supplementary Utility  
Fee.

Rented Suite in a Two Family Dwelling - Supplementary Utility  
Fee.

Commercial - not more than 3 stores / offices:

Commercial and living quarters, 1 family

Commercial and no living quarters

**Miscellaneous Structure - Rate per unit**

**City Facility – Unit Charge**

**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

Effective Jan 1 2019 Paid by Mar. 15	Effective Jan 1 2019 Paid after Mar. 15	Effective Jan 1 2020 Paid by Mar. 16	Effective Jan 1 2020 Paid after Mar. 16
\$	\$	\$	\$
589.73	620.77	595.63	626.98
<b>884.60</b>	<b>931.16</b>	<b>893.45</b>	<b>940.47</b>
442.30	465.58	446.73	470.24
338.63	356.45	342.01	360.01
294.88	310.39	297.83	313.49
221.16	232.79	223.37	235.12
1179.47	1,241.54	1191.27	1,253.96
589.74	620.77	595.63	626.98
	New for 2020	59.55	62.53
	New for 2020	59.55	62.53
53.01	55.79	53.54	56.35
6.67	7.01	6.74	7.08
<b>Paid within 30 days of billing date</b>	<b>Paid 31 or more days after billing date</b>	<b>Paid within 30 days of billing date</b>	<b>Paid 31 or more days after billing date</b>
1.570	1.6500	1.590	1.6700
49.15	51.74	49.65	52.26
1.570	1.6500	1.590	1.6700
147.44	155.20	148.94	156.75
As per agreed cost of connection		As per agreed cost of connection	
As per agreed cost of connection		As per agreed cost of connection	
As per agreed cost of connection		As per agreed cost of connection	
	Actual cost		Actual cost
No discount	350.00	No discount	353.50
No discount	450.00	No discount	454.50
No discount	650.00	No discount	656.50
No discount	1,100.00	No discount	1,111.00
No discount	1,250.00	No discount	1,262.50
No discount	2,100.00	No discount	2,121.00
No discount	2,600.00	No discount	2,626.00
No discount	5,000.00	No discount	5,050.00
No discount	6,500.00	No discount	6,565.00
No discount	7,500.00	No discount	7,575.00

**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

No discount 175.00  
 Actual cost  
 No discount 7,500.00  
 No discount 5,000.00  
 No discount 6,500.00

No discount 176.75  
 Actual cost  
 No discount 7,575.00  
 No discount 5,050.00  
 No discount 6,565.00

**CONSTRUCTION FLAT WATER ANNUAL CHARGE**

19 mm Connection  
 25 mm Connection  
 50 mm Connection

No discount 1,428.00  
 No discount 3,672.00  
 No discount 11,118.00

No discount 1,442.28  
 No discount 3,708.72  
 No discount 11,229.18

**CONSTRUCTION OTHER**

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

No discount 5,100.00  
 As per Metered rates

No discount 5,151.00  
 As per Metered rates

**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

No discount 55.08  
 No discount 163.20

No discount 55.63  
 No discount 164.83

**II. Fire Hydrant**

Permit (Inspection fee)  
 Water use per day  
 Damage deposit (refundable)

No discount 163.20  
 No discount 27.54  
 No discount 541.62

No discount 164.83  
 No discount 27.82  
 No discount 547.04

**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

No discount 125.46  
 No discount 243.78

No discount 126.71  
 No discount 246.22

**IV. Service Disconnection**

At Property Line  
 At Main

No discount 357.00  
 No discount 3,570.00

No discount 360.57  
 No discount 3,605.70

**V. Special Meter Reading**

No discount 81.60

No discount 82.42

**VI. Watering Permit**

No discount 50.00

No discount 50.50

**General Rate increase**

**2.00% 2.00%**

**1.00% 1.00%**