



ADMINISTRATIVE REPORT

Report Date: November 6, 2019
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Meeting Date: December 3, 2019

TO: Vancouver City Council
FROM: General Manager of Engineering Services
SUBJECT: 2020 Annual Review of Water Rates and Water Works By-law Amendments

RECOMMENDATION

- A. THAT Council approve the 2020 rates and fees under the Water Works By-law, with the following recommended increases: 9.7% increase in the per unit flat fee for Single Dwelling (from \$716 per unit in 2019 to \$785 per unit in 2020); 9.7% increase in per unit Metered Rate in off season (from \$3.125 in 2019 to \$3.427 in 2020) and peak season (from \$3.917 in 2019 to \$4.296 in 2020); 3.0% increase for Water Flat Rate Connection Fees for Single and Two Family dwellings; 3.0% for all other Water Flat Rate Connection Fees (as listed in Appendix A, Schedule A); and varied increases for all other Water Utility User Rates (as listed in Appendix A, Schedules B, C, E, F, G and H).
- B. THAT Council approve the peak season and off peak season rate for metered Rate to be aligned with the restriction periods as per the City's Drinking Water Conservation Bylaw
- C. THAT Council instruct the Director of Legal Services to bring forward for enactment the necessary amendments to the Water Works By-law, generally as set out in Appendix B.

REPORT SUMMARY

Each year, staff review all costs related to the Water Utility and recommend rates for the year to come. This is also an opportunity for staff to provide an update to Council and the public on the objectives of the Utility and what progress has been made towards those objectives.

In this report are updates on 2019 overall performance and some specific initiatives already underway such as seismic improvements, conservation efforts, and the pay-as-you-go strategy for capital funding. Also, included in this report is a look ahead to work planned in 2020.

This report seeks Council approval of the recommended 2020 rates and fees for water service, which incorporates a 9.7% increase for single family flat rates and consumption driven metered

rates; 3.0% increase for Water Flat Rate Connection Fees; 3.0% increase for meter service charges; and 3.0% increase for other user rates. These increases achieve full cost recovery for water services as well as investing in a program that will reduce future financing costs. Finally, also proposed is a change to the dates that set the peak season and off peak season water rates, to match the water restriction periods set out in the Drinking Water Conservation By-law.

COUNCIL AUTHORITY/PREVIOUS DECISIONS

Water rates for both metered and non-metered customers are specified in the Schedules of Rates and Charges included in the Water Works By-law. These schedules are updated annually by Council.

In 2001, Council endorsed the Greater Vancouver Regional District Board (Metro Vancouver) decision to construct the Capilano Seymour filtration plant.

On December 13, 2011, Council adopted the 2011-2014 Greenest City Clean Water Work Plan including By-law revisions requiring residential water metering for all new single family and duplex properties.

On December 13, 2011, Council approved transition from a uniform volumetric rate for commercial and residential metered customers to a seasonal rate consisting of two different rates for low and high seasons.

On November 27, 2012, Council approved the establishment of a peak and off-peak seasonal rate structure for all remaining metered properties.

On November 27, 2012, Council approved By-law revisions that changed billing frequency to 3 reads and 3 bills per year to better align with seasonal rates.

On November 4, 2015, Council adopted the 2016-2020 Greenest City Clean Water Work Plan to expand water conservation programs.

On November 1, 2017, Council adopted the recommendation to broaden the water conservation program to include non-potable water resources (rain water, ground water, and waste water) to address long term water demands.

CITY MANAGER'S/GENERAL MANAGER'S COMMENTS

The General Manager of Engineering Services recommends approval of recommendations A, B, C and D above.

REPORT

Background/Context

The City's water system is comprised of approximately 1,474 km of water mains that distribute water to more than 101,000 service connections and 6,600 fire hydrants. All water supplied to the City is purchased from Metro Vancouver, which is responsible for supply reservoirs, treatment, and delivery of water to the City system.

The capital cost for timely replacement of these assets and expansion to accommodate growth, the operating costs of maintaining the system and the cost to purchase water from Metro Vancouver make up the total costs of the water system. The City's water rates and fees are set based on a principle of full cost recovery which requires that no costs related to the delivery of water are included in the general tax levy. In the City of Vancouver, all sectors are fully metered except for single and dual family homes.

In 2012, Council implemented the policy to achieve a fully metered water system over time by requiring meters for all new single-family and duplex properties undergoing redevelopment or major renovations. As of 2019, 9.0% or 7,400 of single-family and duplex properties are metered.

Strategic Analysis

The Water Utility has a mandate to provide the best drinking water of any major city in the world, to use potable water efficiently to extend the life of our current water supplies, to ensure continued availability for consumption and fire suppression, and to ensure we are prepared for emergencies.

As part of a strategic asset management approach, the City evaluates asset condition based on system performance and industry benchmarks. To ensure reliable performance of the system and minimize failures, the City should be renewing the system at a rate of approximately 1.0% per year. The current asset condition assessment indicates that 27.0% of the system is in poor condition and the past rate of renewal of 0.5% is not sufficient to improve the overall system condition which would continue to deteriorate. The approved 2019-2022 Capital Plan considers an increase to the rate of renewal, targeting 0.7% per year through the plan, and future plans will consider further increases to ensure assets are maintained in a state of good repair.

The water distribution network, valued at \$2.5 billion, is made of 1,474 km of buried pipelines, including over 6,600 fire hydrants, 30,000 valves, and 19,000 water meters. The system is carefully managed using an asset management process.

The Water Utility also operates a dedicated fire protection system for the Downtown, Kitsilano and Fairview areas valued at \$80 million consisting of 12 km of dedicated high pressure pipes and 2 pumping stations. In an emergency, salt water can be used to provide fire protection, if the potable water supply is interrupted.

Key services delivered

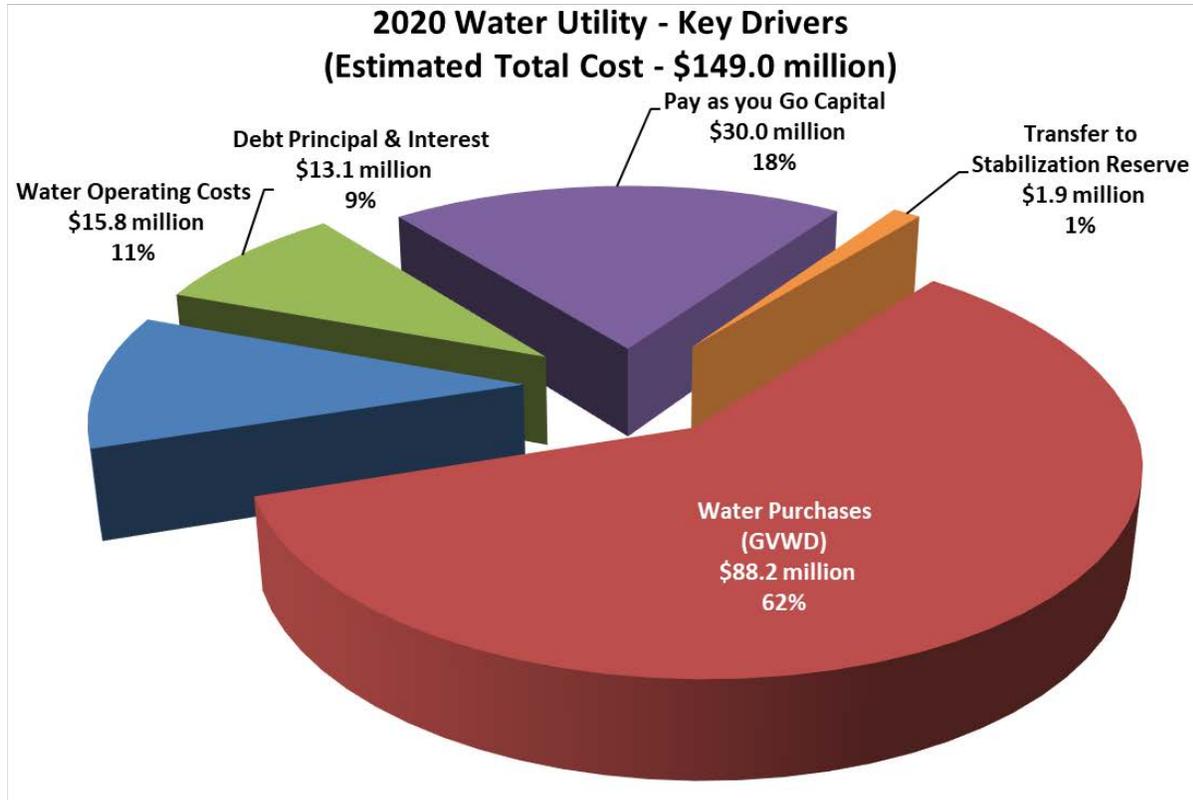
- **Water distribution service** - Providing clean water to businesses, residents and communities and serving growth. Ensuring that water system assets are in good condition and well managed by replacing aging and deteriorating infrastructure.
- **Emergency preparedness** – Supporting emergency preparedness through response planning and increasing resiliency by strategically strengthening infrastructure.
- **Water conservation and resource management** – Enabling the efficient use of water corporately and in the community.

Financial Implications

Key Cost Drivers

The Water Utility expenditures consist of four (4) key cost drivers: water purchased from Metro Vancouver which makes up 62.0% of the budget, City of Vancouver's operating costs which make up about 12.0% of the total budget, and costs associated with capital expenditures which make up about 28.0% of the budget as shown graphically in Figure 1 below. A description of each component and its related activities follows.

Figure 1 – Water Utility Costs



Water Purchases

As discussed, the City of Vancouver and other Lower Mainland municipalities purchase water from Metro Vancouver based on consumption. The cost to purchase water is the largest cost driver in the Water Utility. The cost of water to the City of Vancouver is driven by the price per cubic metre that Metro charges all member municipalities, as well as the consumption within the City itself.

Significant increases to the regional cost of water since 2004 are a result of regional capital water quality initiatives - primarily the Seymour-Capilano Filtration Plant and the associated twin tunnel project between Capilano and Seymour Lakes. These initiatives have resulted in greatly improved water quality in the region. We are now seeing stabilized rate increases from Metro as all of the costs for the treatment plant have now been built into their wholesale rates.

The success of water conservation programs in the city has led to a trend of declining water consumption over time. Since most of the costs associated with the delivery of water are fixed costs, over time there will be an upward trend in the price per unit of water as consumption

continues to decline, but this will be offset to some extent by the avoided cost of deferrals in capacity expansion in the Metro system.

Capital Program

For the 2019-2022 Capital Plan, the water capital program will be fully funded on a pay-as-you-go basis. The current debt charges represent past borrowing, so the reduction of debt charges from moving to pay-as-you-go will be realized gradually.

Operating and Maintenance

These are the costs associated with cleaning, repairing, inspecting and managing the infrastructure, as well as, emergency response for main breaks and other trouble calls. This also includes customer billing and general administration.

2019 Budget Performance

Table 2 summarizes the operating budget and current forecast for the Water Utility in 2019.

Table 2 – 2019 Budget Performance

Water Utility (\$ millions)	2019 Forecast	2019 Budget	\$ Variance	% Variance
Water Consumption Volume	111,863,852	113,000,000		
Revenues				
Metered Rate Revenues	\$ 73.1	\$ 71.0	\$ 2.1	3.0%
Flat Rate Revenues	55.5	55.4	0.0	0.0%
Meter Service Charges	4.7	4.5	0.2	4.3%
Flat Rate Fire Line Charges	3.3	3.3	0.0	0.2%
Other Revenues	0.9	0.7	0.2	33.3%
Total Revenues	\$ 137.5	\$ 135.0	\$ 2.5	1.9%
Expenses & Transfers				
Water Purchases (GVWD)	\$ 82.8	\$ 83.2	\$ 0.5	0.6%
Waterworks Operations	14.9	15.2	0.4	2.4%
Debt Service Charges	15.0	14.9	(0.0)	-0.2%
Pay As you Go Capital	24.5	24.5	0.0	0.0%
Transfer to/(from) Stabilization Reserve	0.4	(3.0)	(3.4)	112.3%
Total Expenses & Transfers	\$ 137.5	\$ 135.0	\$ 2.5	1.9%
Surplus/(Deficit)	\$ -	\$ -	\$ -	0.0%

**Tables may not sum due to rounding. The purpose of this table is to explain budget performance. Additional revenue is reported as positive and additional expenditures as negative.*

2019 Revenues

The current forecast for metered revenues is about \$2.0 Million higher than budgeted. Metered rate revenues are estimated as a percentage of total water consumption, which is higher than budgeted this year. Flat rate revenues are consistent with the budget.

The 2019 budget was based on a forecast that total per capita use would decrease from the previous year by about 1.5%; water consumption in 2019 has been slightly lower than budgeted. However, the lower consumption are mostly attributable to lower usage by flat rate customer, attributed in part to the effectiveness of water conservation efforts supporting increased efficiency and mitigating water wastage, specifically new outdoor watering regulations passed by Council earlier this year and the continued adoption of eliminating non-recirculating systems that use drinking water, such as in once through cooling systems. Programs that support shifts in water use behaviours and decision making have also contributed, including the Water Ambassador Program which provided home owners with free irrigation assessments to ensure their automatic irrigation systems were programmed according to the regulations and operating efficiency and effectively.

Meter service charges and fire line charges, which apply only to multi-family and commercial accounts, are slightly higher than anticipated due to an increase in the number of these accounts in recent years.

Other revenues include administrative fees for cross connection control, permit fees for high water use air conditioning units and various other cost recovery fees as set out in the Water Works By-law. These were higher than budgeted in 2019.

2019 Expenditures & Transfers

As previously stated, the largest driver of expenses in the Water Utility is the purchase of bulk water from Metro Vancouver. This expense is also based on water consumption, which is forecasted to be 1.0% lower than estimated in the 2019 budget.

The Water Utility uses the Water Rates Stabilization Reserve to mitigate year-over-year increases in water rates and balance year-end differences between budgeted and actual revenues.

In 2019, there was a budgeted transfer of \$3.0 million from the Reserve to fund water conservation efforts; however, for this year \$0.4 million is expected to be contributed to the reserve. This variance is due to higher than budgeted revenue, lower than budgeted water purchases and lower operating costs.

2020 Proposed Budget and Rates

Water utility rates will increase by 9.7% or \$69 per year for a single-family residence. This increase is necessary due to:

- An increase of 6.0% in Metro Vancouver water rates that fund infrastructure improvements throughout the region, including improvements to reservoirs and filtration to provide a high-quality water supply as Vancouver grows.
- An increase in funding for water capital projects relating to the approved 2019-2022 Capital Plan.
- Cost increases to deal with maintenance of the aging infrastructure.

Actual water consumption is lower than budgeted in 2019 and the longer term trend demonstrates an overall reduction in per capita use. However, it is expected that water consumption volume for 2020 would be similar to that planned for in 2019. The water consumption volume budget for 2020 has been set at 113,000,000m³ and actual usage will be influenced by many factors including changes in weather and the impacts of future population

growth. The enhanced strategic water conservation activities and additional investment in water conservation programs, planned over the next few years, are expected to further contribute to the downward per capita consumption trend in future years.

The 2020 proposed budget is summarized in Table 3 with the 2019 budget and comparison.

Table 3 – Proposed 2020 Budget

Water Utility (\$ millions)	2019 Budget	2020 Proposed	\$ Change from 2018 Budget	% Change
Water Consumption Volume	113,000,000	113,000,000		
Revenues				
Metered Rate Revenues	\$ 71.0	\$ 80.2	\$ 9.2	13.0%
Flat Rate Revenues	55.4	60.0	4.6	8.3%
Meter Service Charges	4.5	4.6	0.1	2.0%
Flat Rate Fire Line Charges	3.3	3.4	0.1	2.0%
Other Revenues	0.7	0.7	0.0	2.0%
Total Revenues	\$ 135.0	\$ 148.9	\$ 14.0	10.4%
Expenses & Transfers				
Water Purchases (GVWD)	\$ 83.2	\$ 88.2	\$ 5.0	5.9%
Waterworks Operations	15.2	15.8	0.6	3.7%
Debt Service Charges	14.9	13.1	(1.3)	-8.5%
Pay As you Go Capital	24.5	30.0	5.4	22.1%
Transfer to/(from) Stabilization Reserve	(3.0)	1.9	4.9	-161.8%
Total Expenses & Transfers	\$ 135.0	\$ 148.9	\$ 14.5	10.8%
Surplus/(Deficit)	\$ -	\$ -	\$ (0.5)	0.0%

* Tables may not sum due to rounding. The purpose of this table is to present year-over-year changes in the budget as presented in the 2020 Budget Book where both additional revenue and expenses are presented as positive changes

2020 Revenues & Proposed Rates

For both metered customers and flat-fee single-family dwellings, a 9.7% rate increase is recommended for 2020. Since 2012, all new single-family dwellings must be metered and no longer pay the flat fee. The 2020 budget for flat-rate revenues reflects the 9.7% rate increase and a change to better reflect the types of housing subject to flat fees, such a higher number of single-family dwellings with lane way or suites. As a result of these changes, water rates for single-family dwellings are projected to be \$785 versus \$716 in 2019.

Also, recommended are inflationary increases of 3.0% for fire line charges and meter service charges. Both the revenue and expense changes for meter service charges and fire line charges reflect an increase in the number of accounts over the last several years.

2020 Expenditures & Transfers

The increase for the 2020 water purchase budget is \$5.0 million due to a Metro Vancouver price increase of 6.0%. Water utility operational costs have increased by \$0.3 million for new investments remained largely flat due to new investments and inflationary increases being off-set by the 2018 One Water Strategy program being moved to Capital (now Integrated Water Resource Planning).

In 2012, the Water utility began funding a portion of its annual capital program on a pay-as-you-go basis; as a result, debt service charges are decreasing. The plan is to increase the pay-as-you-go contribution until all new capital expenditures for the renewal of assets are covered through current revenues; ultimately, this will eliminate the debt interest expense. In 2020, City staff recommends a \$5.5 million increase in the pay-as-you-go contribution from \$24.5 million to \$30.0 million to expand the capital work and address the increasing level of service breaks and costs of aging infrastructure, per the approved 2019-2023 Capital Plan. The current debt charges represent past borrowing and will continue to decrease over time as outstanding borrowing is gradually retired.

Staff proposes to transfer \$1.8 million to the Water Rates Stabilization Reserve in 2020 to mitigate against increases in Metro Vancouver water purchase price in future years.

Five Year Outlook

Table 4 summarizes the five (5) year outlook for the Water Utility and the following paragraphs discuss the assumptions used.

Water Utility (\$ millions)	2020	2021	2022	2023	2024
Assumptions:					
Water Consumption Volume	113,000,000	113,000,000	113,000,000	113,000,000	113,000,000
Metro Price Increase	6.0%	6.1%	8.8%	9.9%	10.1%
City Rate Increase	9.7%	7.0%	7.0%	7.0%	7.0%
Revenues					
Metered Rate Revenues	\$ 80.2	\$ 85.8	\$ 91.9	\$ 98.3	\$ 105.2
Flat Rate Revenues	60.0	63.4	66.9	70.6	74.5
Meter Service Charges	4.6	4.7	4.8	4.9	5.0
Flat Rate Fire Line Charges	3.4	3.5	3.5	3.6	3.7
Other Revenues	0.7	0.7	0.7	0.7	0.7
Total Revenues	148.9	158.1	167.8	178.1	189.1
Expenses					
Water Purchases (GVWD)	88.2	93.6	101.8	111.9	123.2
Waterworks Operations	15.8	16.1	16.4	16.8	17.1
Debt Service Charges	13.1	9.9	6.9	4.7	3.0
Pay As you Go Capital	30.0	28.7	31.4	40.8	43.3
Transfer to/(from) Stabilization Reserve	1.9	9.8	11.2	4.0	2.5
Total Expenses & Transfers	148.9	158.1	167.8	178.1	189.1
Surplus/(Deficit)	\$ -				

**Tables may not sum due to rounding – some of the revenues are grouped in Cost recoveries, grants & donations and Other revenue in the budget book*

Table 4 assumes a flat rate of consumption, with the assumption that conservation measures off-set population increase. This is a conservative approach for financial planning purposes, which will be reviewed annually as water consumption results are realized.

The price of water purchases from the GVWD (Metro Vancouver) is increasing 6.0% in 2019. The following four (4) years are forecasted to increase between 6.1% and 10.1%. These increases are based on projected operating and capital costs for supply reservoirs, treatment, and delivery of high quality water to the City. However, the actual Metro Vancouver rate increases in recent years have been below the forecasted rate increases. In addition, continued water conservation efforts, including educational and demand management programs, contribute to the decreased use of regional drinking water, resulting in savings to residents who ultimately pay a smaller portion of regional infrastructure related costs.

Debt charges will continue to decrease due to the pay-as-you-go strategy, because we have reduced our debenture borrowing since the program started in 2012. By increasing the pay-as-you-go contribution per year in the 2019-2022 Capital Plan, all new routine capital spending for the transmission and distribution main work is expected to be funded on a pay-as-you-go basis, eliminating the need to borrow for ongoing capital programs.

While City operating costs are showing inflationary increases for the purpose of this forecast, staff will continue to look for ways to provide the same service at a lower cost.

An increase to the budget to repair main breaks and impacted roadways has been incorporated into the outlook. Since 2012, the number of main breaks has increased by over 30.0%, reflecting an aging water system. This budget increase does not include unanticipated needs that may emerge as a result of a spike in leaks or breaks beyond the anticipated trend. Pipe breaks tend to fluctuate year to year and is dependent on weather conditions, system pressures and pipe age. Single year anomalies will require an offset from reserve funding, whereas an increased trend beyond what is currently anticipated would require additional program funding as an appropriate response.

Connection Fees

All new development and major renovation projects in the City are required to install water and combined water and sewer connections on private property and pay connection fees for the corresponding connections on City property. These fees are updated regularly to ensure cost recovery.

Connection fees are collected prior to the timing of the actual work and are based on an average price model and the underlying complexities can vary by job and by job type. Fee increases are required to cover annual inflationary increases for construction costs, as well as to account for the timing of work being performed.

As of September 2019, the increase in the 12-month average Consumer Price Index (CPI) for Metro Vancouver was 2.5%. Certain non-wage items such as electricity and gasoline have increased in the range of 0.3% to 2.3% over the past year. The Conference Board of Canada forecasted that the CPI for Metro Vancouver would increase 2% for 2020 through 2023.

To maintain full cost recovery, it is recommended that a 3.0% increase be approved for all Water Flat Rate Connection and Removal fees.

Alignment of Seasonal Rates with Water Restriction Periods

Council approved in December 2011 the transition from a uniform volumetric rate for commercial and residential metered customers to a seasonal rate consisting of two different rates for low and high seasons. In November of 2012, council then approved the establishment of a peak and off-peak seasonal rate structure. At the time, the peak season was from June 1st to September 30th. Over time, the Greater Vancouver Water District extended the water restriction period from May 1st to October 15th. The City of Vancouver has adopted these extended restriction periods which are part of the Drinking Water Conservation Bylaw 12086. Staff recommends to extend the peak seasonal rates to align with the water restriction periods to maintain the intent put in place in 2012 where peak rates would follow the restriction periods to support conservation efforts, change consumption behaviours, and reflect the added costs to supply water during peak demand.

Legal Implications

The proposed amendments to the Water Works By-law are contained in Appendix B. In addition to the annual rate and fee changes, a change to the dates in Schedule D, Charges for Metered Water Service, is proposed in order to adjust the peak season and off peak season rate to match the water restriction periods set out in the Drinking Water Conservation By-law.

CONCLUSION

Rates for water services are adjusted annually to offset cost increases in the water utility, including operating and debt costs and water purchases from Metro Vancouver. Based on a review of the proposed water costs for 2019, it is recommended that flat and metered water fees be increased by 9.7%, service and connection fees be increased by 3.0% and Fire Line Charges and Meter Service Charges be increased by 3.0% as described in this report.

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Appendix A
Water Works By-Law No. 4848
2020 Rate Changes

Schedule A Flat Rate Connection Fees

	2019	Proposed 2020	% Increase
<u>Single-Family & Two-Family Dwellings</u>			
20 mm (3/4")	\$6,031	\$6,212	3.0%
25 mm (1")	\$6,244	\$6,431	3.0%
40 mm (1 1/2")	\$7,508	\$7,733	3.0%
50 mm (2")	\$8,325	\$8,575	3.0%
<u>Other Connections</u>			
20 mm (3/4")	\$10,125	\$10,429	3.0%
25 mm (1")	\$10,534	\$10,850	3.0%
40 mm (1 1/2")	\$12,156	\$12,521	3.0%
50 mm (2")	\$12,156	\$12,521	3.0%
100 mm (4")	\$17,575	\$18,102	3.0%
150 mm (6")	\$21,738	\$22,390	3.0%
200 mm (8")	\$23,738	\$24,450	3.0%
300 mm (12")	\$33,407	\$34,409	3.0%

Schedule A.1 Removal Fees

	2019	Proposed 2020	% Increase
20mm (3/4") to 50mm (2") inclusive	\$1,178	\$1,213	3.0%
100mm (4") to 300mm (12") inclusive	\$3,533	\$3,639	3.0%

Schedule B Flat Service Charges for Residential Properties

	2019	Proposed 2020	% Increase
Single dwelling unit	\$716	\$785	9.7%
Single-Family with suite or laneway house	\$971	\$1,065	9.7%
Single-Family with suite and laneway house	\$1,226	\$1,345	9.7%
For each strata title duplex	\$485	\$532	9.7%
Parking Lot/Community Garden	\$220	\$241	9.7%
Water Service - Turned Off	\$162	\$178	9.7%
Other Property	\$162	\$178	9.7%

Schedule C Flat Service Charges for Unmetered Fire Service Pipes

	2019	Proposed 2020	% Increase
50 mm (2") or smaller	\$231	\$238	3.0%
75 mm (3")	\$347	\$357	3.0%
100 mm (4")	\$479	\$493	3.0%
150 mm (6")	\$553	\$570	3.0%
200 mm (8")	\$648	\$667	3.0%
250 mm (10")	\$689	\$710	3.0%
300 mm (12")	\$738	\$760	3.0%

Schedule D Charges for Metered Water Service

		2019	Proposed 2020	% Increase
Four Month Period				
Rate for all metered uses				
October 1 - May 31	Per Unit	\$3.125	\$3.428	9.7%
June 1 - September 30	Per Unit	\$3.917	\$4.297	9.7%

Schedule E Meter Service Charge

The following schedule shows the meter charge based on the size and type of meter, payable on each service, in addition to water consumption charges.

Per Four Monthly Period	2019	Proposed 2020	% Increase
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Services with Standard Type Meters

17 mm (1/2") and 20 mm (3/4")	\$33	\$34	3.0%
25 mm (1")	\$33	\$34	3.0%
40 mm (1 1/2")	\$71	\$73	3.0%
50 mm (2")	\$98	\$101	3.0%
75 mm (3")	\$220	\$227	3.0%
100 mm (4")	\$268	\$276	3.0%
150 mm (6")	\$349	\$359	3.0%
200 mm (8")	\$540	\$556	3.0%
250 mm (10")	\$661	\$681	3.0%
300 mm (12")	\$784	\$808	3.0%

Services with Low Head Loss Meters / Detector Check Valves

100 mm (4")	\$310	\$319	3.0%
150 mm (6")	\$453	\$467	3.0%
200 mm (8")	\$607	\$625	3.0%
250 mm (10")	\$757	\$780	3.0%
300 mm (12")	\$903	\$930	3.0%

Schedule F Charges for Temporary Water Service during Construction

	2019	Proposed 2020	% Increase
	Rate in Dollars of Gross Floor Area Per Building		
Building Size in Square Meters of Gross Floor Area			
Up to an including 500 sq.m	\$316	\$347	9.7%
Over 500 but not exceeding 2,000	\$619	\$679	9.7%
Over 2,000 but not exceeding 9,000	\$930	\$1,020	9.7%
Over 9,000 but not exceeding 24,000	\$1,564	\$1,716	9.7%
Over 24,000 but not exceeding 45,000	\$2,340	\$2,567	9.7%
Over 45,000	\$3,105	\$3,406	9.7%

Schedule G Fees for Installation of Residential Water Meters

Single-Family & Two-Family Dwellings

20 mm (3/4") meter assembly and box	\$1,169	\$1,204	3.0%
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Other Connections

25 mm (1") meter assembly and box	\$1,275	\$1,313	3.0%
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Fees for Installation of Water Meters				
Size of Standard Meter	Meter on City Property	2019	Proposed 2020	% Increase
20 mm (3/4")		\$3,397	\$3,499	3.0%
25 mm (1")		\$3,551	\$3,658	3.0%
40 mm (1 1/2")		\$3,870	\$3,986	3.0%
50 mm (2")		\$4,001	\$4,121	3.0%
75 mm (3")		\$13,964	\$14,383	3.0%
100 mm (4")		\$15,270	\$15,728	3.0%
150 mm (6")		\$49,871	\$51,367	3.0%
200 mm (8")		\$51,292	\$52,831	3.0%
250 mm (10")		\$69,298	\$71,377	3.0%
300 mm (12")		\$76,622	\$78,921	3.0%
Size of Standard Meter	Meter on Private Property	2019	Proposed 2020	% Increase
20 mm (3/4")		\$537	\$553	3.0%
25 mm (1")		\$619	\$638	3.0%
40 mm (1 1/2")		\$827	\$852	3.0%
50 mm (2")		\$1,141	\$1,175	3.0%
75 mm (3")		\$2,518	\$2,594	3.0%
100 mm (4")		\$3,826	\$3,941	3.0%
150 mm (6")		\$8,114	\$8,357	3.0%
200 mm (8")		\$9,705	\$9,996	3.0%
250 mm (10")		\$19,560	\$20,147	3.0%
300 mm (12")		\$26,887	\$27,694	3.0%
Schedule H Miscellaneous Fees and Charges				
		2019	Proposed 2020	% Increase
Cross Connection Control Administration Fees				
	First Assembly	\$31	\$32	3.0%
	Additional Assembly	\$13	\$13	3.0%
Extra charge for inaccessible meter (per incident)				
		\$77	\$79	3.0%
Special meter reading (per occurrence)				
		\$102	\$105	3.0%
Customer requested meter test (deposit)				
		\$204	\$210	3.0%
Charges for Returned Cheques				
		\$36	\$37	3.0%
Residual Water Pressure Estimate Fee				
	Original calculation	\$37	\$38	3.0%
	Additional copies for same location	\$10	\$10	3.0%
Miscellaneous water information requests (per hour)				
		\$46	\$47	3.0%
City Crew call out fee (normal working hours) (per hour or portion thereof)				
		\$102	\$105	3.0%
City Crew call out fee (outside normal working hours) (per hour or portion thereof)				
		\$204	\$210	3.0%
Frozen pipe thawing				
		at cost	at cost	

**DRAFT By-law to amend Water Works By-law No. 4848
Regarding 2020 Water Rates and Fees and Housekeeping Amendments**

Note: A By-law will be prepared generally in accordance with the provisions listed below, subject to change and refinement prior to posting.

1. Council strikes out Schedules A, B, C, D, E, F, G and H and substitutes the following:

**“SCHEDULE A
Flat Rate Connection Fees
And Service Pipe Removal Fees**

Flat Rate Connection Fees

<i>Service Pipe Size</i>	<i>Single-Family and Two-Family Dwelling with or without a Laneway House</i>
20 mm (3/4")	\$ 6,212.00
25 mm (1")	6,431.00
40 mm (1 1/2")	7,733.00
50 mm (2")	8,575.00

<i>Service Pipe Size</i>	<i>Other Connections</i>
20 mm (3/4")	\$10,429.00
25 mm (1")	10,850.00
40 mm (1 1/2")	12,521.00
50 mm (2")	12,521.00
100 mm (4")	18,102.00
150 mm (6")	22,390.00
200 mm (8")	24,450.00
300 mm (12")	34,409.00

Service Pipe Removal Fees

<i>Service Pipe Size</i>	
20 mm (3/4") to 50 mm (2") inclusive	\$ 1,213.00
100 mm (4") to 300 mm (12") inclusive	3,639.00

**SCHEDULE B
Annual Flat Rate Service Charges for Residential Properties**

The following charges apply to unmetered single family dwellings and dwellings comprising not more than two separate dwelling units:

Single Dwelling Unit	\$ 785.00
Single-Family with suite or laneway house	1,065.00
Single-Family with suite and laneway house	1,345.00

For each strata title duplex	532.00
Parking Lot/Community Garden	\$ 241.00
Water Service - Turned Off	178.00
Other Property	178.00

SCHEDULE C
Annual Flat Rate Service Charges for Unmetered Fire Service Pipes

Fire Service Pipe Size

50 mm (2") or smaller	\$ 238.00
75 mm (3")	357.00
100 mm (4")	493.00
150 mm (6")	570.00
200 mm (8")	667.00
250 mm (10")	710.00
300 mm (12")	760.00

SCHEDULE D
Charges for Metered Water Service

Four Month Period

*Rate In Dollars per
Unit (2,831.6 Litres)*

Rate for all metered uses

October 16 - April 30	Per unit	\$3.428
May 1 – October 15	Per unit	\$4.297

SCHEDULE E
Meter Service Charge

The following schedule shows the meter charge based on the size and type of meter, payable on each service, in addition to water consumption charges:

Per Four Month Period

Services with Standard Type Meters

17 mm (1/2") and 20 mm (3/4")	\$ 34.00
25 mm (1")	34.00
40 mm (1 1/2")	73.00
50 mm (2")	101.00
75 mm (3")	227.00

100 mm (4")	276.00
150 mm (6")	359.00
200 mm (8")	556.00
250 mm (10")	681.00
300 mm (12")	808.00

Services with Low Head Loss Meters/Detector Check Valves

100 mm (4")	\$ 319.00
150 mm (6")	467.00
200 mm (8")	625.00
250 mm (10")	780.00
300 mm (12")	930.00

SCHEDULE F
Charges for Temporary Water Service During Construction

<i>Building Size in Square Meters of Gross Floor Area</i>	<i>Rate in Dollars of Gross Floor Area Per Building</i>
Up to and including 500	\$ 347.00
Over 500 but not exceeding 2,000	679.00
Over 2,000 but not exceeding 9,000	1,020.00
Over 9,000 but not exceeding 24,000	1,716.00
Over 24,000 but not exceeding 45,000	2,567.00
Over 45,000	3,406.00

SCHEDULE G
Fees for Installation of Water Meters

Fees for Installation of Water Meters for Single and Two Family Dwellings with or without a Laneway House

Size of Standard Meter

20 mm (3/4") meter assembly and box	\$1,204
25 mm (1") meter assembly and box	\$1,313

Fees for Installation of Water Meters on Other Connections

<i>Size of Standard Meter</i>	<i>Meter on City Property</i>	<i>Meter on Private Property</i>
20 mm (3/4")	\$ 3,499.00	\$ 553.00
25 mm (1")	3,658.00	638.00
40 mm (1 1/2")	3,986.00	852.00
50 mm (2")	4,121.00	1,175.00
75 mm (3")	14,383.00	2,594.00
100 mm (4")	15,728.00	3,941.00
150 mm (6")	51,367.00	8,357.00

200 mm (8")	52,831.00	9,996.00
250 mm (10")	71,377.00	20,147.00
300 mm (12")	78,921.00	27,694.00

**SCHEDULE H
Miscellaneous Fees and Charges**

Cross Connection Control Administration Fees		
First Assembly		\$ 32.00
Additional Assembly		13.00
Extra charge for inaccessible meter (per incident)		79.00
Special Meter Reading (per occurrence)		105.00
Customer Requested Meter Test (deposit)		210.00
Charges for Returned Cheques		37.00
Residual Water Pressure Estimate Fee		
Original calculation		38.00
Additional copies for same location		10.00
Miscellaneous water information requests (per hour)		47.00
City Crew call out fee (normal working hours) (per hour or portion thereof)		105.00
City Crew call out fee (outside normal working hours) (per hour or portion thereof)		210.00
Frozen pipe thawing		At cost (Section 5.4)".
