

Report to Committee

To:

Finance Committee

Date:

September 17, 2018

From:

Andrew Nazareth

File:

03-0970-01/2018-Vol

01

General Manager, Finance & Corporate Services
Robert Gonzalez, P.Eng.

Deputy CAO and General Manager,

Engineering & Public Works

Re:

2019 Utility Budgets and Rates

Staff Recommendation

That the 2019 Utility Budgets, as outlined under Option 1 for Water, Option 1 for Sewer, Option 2 for Drainage and Diking, and Option 3 for Solid Waste and Recycling, as contained in the staff report dated September 17, 2018 from the General Manager of Finance & Corporate Services and the Deputy CAO and General Manager of Engineering & Public Works, be approved as the basis for establishing the 2019 Utility Rates and preparing the Consolidated 5 Year Financial Plan (2019-2023) Bylaw.

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Andrew Nazareth General Manager, Finance & Corporate Services (604-276-4095) Robert Gonzalez, P.Eng. Deputy CAO and General Manager, Engineering and Public Works (604-276-4150)

REPORT CONCURRENCE

CONCURRENCE OF GENERAL MANAGER

REVIEWED BY SENIOR MANAGEMENT
TEAM

APPROVED BY CAO

Staff Report

Origin

This report presents the recommended 2019 utility budgets and rates for Water, Sewer, Drainage and Diking, and Solid Waste and Recycling. The utility rates need to be established by December 31, 2018, in order for the rates to take effect on January 1, 2019.

Analysis

Metro Vancouver rate increases are the primary drivers for the City's 2019 utility budget increase. The City's 2019 water and sanitary sewer utility rates are based on Metro Vancouver's five-year projections approved in their 2018-2022 Financial Plan. Solid waste and recycling rates are based on the most current information from Metro Vancouver. The Metro Vancouver Board will review Metro Vancouver rates in late October and Staff anticipate that Metro Vancouver rates will be approved at that time. Staff will report back to Council for further consideration if the approved rates differ substantially from Metro Vancouver's projected rates. Estimated Metro Vancouver increases are as follows:

- Greater Vancouver Water District's (GVWD) water purchase cost represents 60% of the City's water utility user fee budget. The estimated GVWD unit rate increase is 5.8%, which translates to 80% of the City's 2019 non-discretionary water budget increases.
- Greater Vancouver Sewerage and Drainage District's (GVS&DD) sewer levy represents 67% of the City's sewer utility user fee budget. The estimated GVS&DD sewer levy increase for Richmond is 6.4%, which translates to 80% of the City's 2019 non-discretionary sewer budget increases.
- Metro Vancouver's solid waste tipping fees have recently been projected to increase by \$5 to \$108 per tonne for 2019, plus a transaction fee of \$5 per load. A tiered structure based on load size/weight will continue to be used for small vehicles and commercial customers.

The City's portion of the water and sewer operating cost impacts are below the Consumer Price Index (CPI).

Another component of the City's utility budget relates to replacement of ageing municipal infrastructure. The City has achieved the target funding range for long-term ageing infrastructure replacement in both the water and drainage utilities and has achieved 72% of the long-term funding target for the sanitary sewer utility. The ageing infrastructure component is discussed in the water, sewer and drainage sections of this report.

The recommended 2019 solid waste and recycling services include various programs designed to achieve the City's established waste diversion target of 80% by 2020. The City is a leader in providing robust recycling programs, currently diverting 78% of single-family residential waste. Budget amounts presented with this report include new rates obtained under a new service contract, effective January 1, 2019. Various options are also presented with this report to help further expand recycling services, with the objective of reaching the 80% diversion target.

Recognizing the challenges of cost increases outside of the City's control and those associated with maintaining City infrastructure, Staff have presented various budget and rate options for 2019. Budgets and rates presented include three different options for each of the City's utilities. Option 1 presents the minimum non-discretionary increases necessary to meet demands placed on the City by factors outside of the City's direct control (e.g. regional or other agency increases, contractual obligations, plant growth, fuel, insurance, etc.) based on the currently approved level of service. Options 2 and 3 present various actions the City can take to either reduce or increase the budget and rates depending on the varying circumstances and needs within each budget area. The various options are presented for each of the City utilities in the following sections, and a summary of proposed rates for 2019 is shown in Tables 13 and 14.

Water Utility

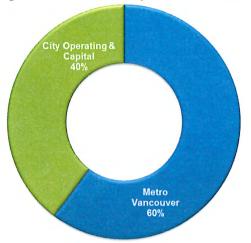
7	Γable 1. Water U	Jtility Budget		
Key Budget Areas	2018 Base Level Budget (Restated for Comparison)	Option 1 (Recommended) Non- Discretionary Increases	Option 2 Non- Discretionary Increases with \$100,000 increase to Capital	Option 3 Non- Discretionary Increases with \$500,000 drawdown from Rate Stabilization
<u>Expenditures</u>				<u> </u>
Salary	\$5,630,400	\$208,000	\$208,000	\$208,000
PW Materials/Equipment/Power Costs	\$2,236,400	\$90,400	\$90,400	\$90,400
Operating Expenditures ¹	\$1,433,200	\$68,400	\$68,400	\$68,400
Water Meter Reading and Maintenance Contract	\$235,900	\$0	\$0	\$0
Toilet Rebate Program	\$100,000	\$0	\$0	\$0
GVWD Water Purchases (Metro Vancouver)	\$24,433,200	\$1,561,600	\$1,561,600	\$1,561,600
Capital Infrastructure Replacement Program	\$7,500,000	\$0	\$100,000	\$0
Firm Price/Receivable	\$2,578,100	\$63,100	\$63,100	\$63,100
Residential Water Metering Program	\$1,320,000	-\$34,100	-\$34,100	-\$34,100
Overhead Allocation	\$981,100	\$25,000	\$25,000	\$25,000
Total Base Level Expenditure Budget	\$46,448,300	\$48,430,700	\$48,530,700	\$48,430,700
Revenues				
Provision (Rate Stabilization)	\$0	\$0	\$0	-\$500,000
Investment Income	-\$392,000	\$0	\$0	\$0
Firm Price/Receivable	-\$2,578,100	-\$63,100	-\$63,100	-\$63,100
Meter Rental	-\$1,877,000	-\$31,600	-\$31,600	-\$31,600
YVR Maintenance	-\$30,000	\$0	\$0	\$0
Provision (Toilet Rebate/Flushing)	-\$251,100	\$0	\$0	\$0
Provision (OBI Adjustment) ²	-\$66,000	\$66,000	\$66,000	\$66,000
Meter Re-Reads and Other Services	-\$80,800	\$0	\$0	\$0
Total Base Level Revenue Budget	-\$5,275,000	-\$5,303,700	-\$5,303,700	-\$5,803,700
Net Budget	\$41,173,300	\$43,127,000	\$43,227,000	\$42,627,000
Net Difference Over 2018 Base Level Budget		\$1,953,700	\$2,053,700	\$1,453,700

¹ Operating Expenditures includes internal shared costs, vehicle charges, and asset management system costs ² See "Provision (OBI Adjustment)" on page 6

The following is an explanation of the budget reductions and increases outlined in Table 1.

GVWD Water Purchases - Metro Vancouver

Figure 1. 2019 Water Utility User Fee Breakdown



Metro Vancouver estimates their water rate will increase by 5.8%. The corresponding increase in bulk water purchase cost from Metro Vancouver is \$1.56 million, making up 80% of the City's 2019 water budget increase for Option 1.

Bulk water is purchased from Metro Vancouver on a unit volume basis and accounts for 60% of Richmond's water rate (Figure 1). The City's 2019 water rates are based on Metro Vancouver's five-year projections approved in their 2018-2022 Financial Plan (Table 2). The Metro Vancouver Board will review Metro Vancouver water rates in late October and Staff anticipates that Metro Vancouver water rates will be approved at that time. Staff will report back to Council for further consideration if final approved rates are substantially different.

Table 2. Metro Vancouver 5-Year Water Rate Projection – 2018-2022 Financial Plan					
2019 2020 2021 2022					
Blended Rate (\$/m³)	\$0.7399	\$0.7966	\$0.8583	\$0.9259	
% Change	5.8%	7.7%	7.8%	7.9%	

Residential Water Metering (Avoided Water Purchase Costs)

Residential water metering plays a significant role in the City's water demand management program, which improves equity to ratepayers by allowing volume-based user fees and reduces bulk water purchase costs by promoting water conservation. Since the inception of the program in 2003, the City's total water use has decreased by 11% despite an increase in population of 22%. In 2017, this reduction in per capita water usage resulted in an annual saving of \$9.4 million in avoided water purchase cost based on 2017 Metro Vancouver rates.

The City has made significant advances in water metering since the program was first introduced. Approximately 82% of the City's water use is currently metered. All single-family, industrial, commercial and institutional properties are metered for water and 46% of multi-family units are metered. Programs are in place to continue advancing water metering within the City through switching out touchpad meters in preparation for fixed base water metering and continuation of the volunteer multi-family water metering program.

With the completion of the Universal Single-Family Water Metering Program in 2017, efforts are changing from capital installation towards maintenance of water metering infrastructure. As

such, the proposed 2019 budget includes a transfer of \$34,100 from the Residential Water Metering Capital Program to the Public Works water meter maintenance program to better reflect program needs. This transfer has a zero net budget impact.

City Operating Expenditures

The City's total operating expenditure increase is below CPI. A number of operating expenditures have increased due to many factors beyond the City's control, including:

- Salary increases as per committed union agreements;
- New Employer Health Tax;
- Electricity and natural gas increases;
- Material and equipment cost increases; and
- Vehicle cost increases, including fuel and insurance increases.

A new Employer Health Tax has been introduced by the Province of BC starting January 2019. 50% of 2019's Option 1 salary budget increase is attributed to this new tax. The City's operating expenditures are carefully managed and considerable measures have been taken to minimize cost increases where possible.

Provision (OBI Adjustment)

One-time transfers from the Water Rate Stabilization Provision are utilized each year to fund operating budget impacts (OBIs) for the current year's capital program. This amount is incorporated into the base water utility base budget in the following year. In 2018, \$66,000 was transferred from the Water Rate Stabilization Provision to fund OBI's associated with the 2018 Capital Program and has been incorporated into the 2019 base water utility budget.

Construction Period Revenues

The City receives construction period revenues from development customers for water use during construction. This revenue is not budgeted due to the long term variability in these revenues. Any actual revenue will be transferred to the Water Levy Stabilization Provision for future rate stabilization funding.

Capital Infrastructure Replacement Program Contribution (Water Rate Options)

The Capital Infrastructure Replacement Program facilitates proactive management of the City's water assets, allowing the City to maintain a high level of service by minimizing watermain breaks and service disruptions. Through proactive replacement of ageing infrastructure and implementation of the City's water pressure management program, the City has also successfully reduced water losses due to pipe leakage in the water distribution system, resulting in additional cost savings from avoided Metro Vancouver water purchase costs.

The annual capital contribution for water-related infrastructure replacement is currently \$7.5 million. The "Ageing Utility and Road Infrastructure Planning – 2017 Update" report identified long-term annual water infrastructure funding requirements of \$7.6 million. As at July 31, 2018, the watermain replacement reserve balance is \$42.8 million. Options 1 and 3 maintain current

funding levels for water capital project contributions; Option 2 includes an increase of \$100,000 to meet the increase in ageing infrastructure target funding levels.

Water Rate Stabilization Provision Contribution (Water Rate Options)

The Water Levy Stabilization Provision was established by Council as a funding source for water rate stabilization. This Provision has a balance of \$9.8 million as of July 31, 2018, and is intended to offset significant increases in regional water purchase costs. Options 1 and 2 maintain a \$0 impact on the Water Levy Stabilization Provision; and Option 3 includes a \$500,000 drawdown from the Provision to subsidize the water rate.

Impact on 2019 Water Rates

The impact of the three budget options on water rates is shown in Tables 3 and 4. Table 3 shows the various options for metered rate customers; Table 4 shows the options for flat rate customers. The rates presented include fixed costs for metering such as meter reading, billing and maintenance. Numbers in italics represent the difference between 2018 rates and 2019 optional rates.

Option 3 results in the lowest rates as it includes drawdown from the Water Rate Stabilization Provision to minimize rate impacts; Option 2 results in the highest rates as it includes additional contribution to the Capital Infrastructure Replacement Program.

Table 3. 2019 Metered Rate Water Options (net of discount)					
Customer Class	2018 Rates	Option 1 (Recommended)	Option 2	Option 3	
Single-Family Dwelling	¢412.55	\$433.23	\$434.18	\$428.45	
(based on 315 m ³ average)	\$413.55	\$19.68	\$20.63	\$14.90	
Townhouse	£292.00	\$296.02	\$296.65	\$292.83	
(based on 210 m ³ average)	\$282.90	\$13.12	\$13.75	\$9.93	
Apartment	0107.11	\$207.11	\$207.59	\$204.68	
(based on 160 m ³ average)	\$197.11	\$10.00	\$10.48	\$7.57	
M-4 1 D-4 (6/43)	¢1 1757	\$1.2382	\$1.2412	\$1.2230	
Metered Rate (\$/m³)	\$1.1757	\$0.0625	\$0.0655	\$0.0473	

Table 4. 2019 Flat Rate Water Options (net of discount)					
Customer Class 2018 Rates Option 1 (Recommended) Option 2 Option 3					
0!1- F! - D !	¢(24.20	\$657.51	\$659.13	\$649.45	
Single-Family Dwelling	\$624.30	\$33.21	\$34.83	\$25.15	
Tarrellance	¢511.04	\$538.22	\$539.54	\$531.62	
Townhouse	\$511.04	\$27.18	\$28.50	\$20.58	
A	\$329.31	\$346.83	\$347.68	\$342.57	
Apartment	\$329.31	\$17.52	\$18.37	\$13.26	

The rates outlined in Tables 3 and 4 are net rates. The Water Bylaw provides a 10% discount for utility bills paid prior to a deadline. The rates shown will be increased by 10% in the supporting bylaws to provide for the discount incentive while ensuring appropriate cost recovery.

Advantages/Disadvantages of Various Options

Option 1 (Recommended)

- Represents the minimum increase necessary to maintain the current level of service.
- Maintains a \$7.5 million contribution to the Capital Infrastructure Replacement Program, this is within the target range identified in the "Ageing Utility and Road Infrastructure Planning 2017 Update" report.
- Maintains a \$0 impact on the Water Levy Stabilization Provision.

Option 2

- Represents the minimum increase necessary to maintain the current level of service.
- Includes a \$100,000 increase to the Capital Infrastructure Replacement Program in order to meet the target funding level identified in the "Ageing Utility and Road Infrastructure Planning 2017 Update" report.
- Maintains a \$0 impact on the Water Levy Stabilization Provision.

Option 3

- Represents the minimum increase necessary to maintain the current level of service.
- Maintains a \$7.5 million contribution to the Capital Infrastructure Replacement Program, this is within the target range identified in the "Ageing Utility and Road Infrastructure Planning 2017 Update" report.
- Includes a contribution of \$500,000 from the Water Levy Stabilization Provision.

Recommended Option

Staff recommends the budgets and rates identified in Option 1 for Water Services. This option represents the minimum increase necessary to maintain the current level of service without subsidizing the water rate using the Water Levy Stabilization Provision. Staff recommends maintaining the current contribution to the Capital Infrastructure Replacement Program at this time since the current funding levels are within the target funding range. Staff will continue to undertake further assessments to determine infrastructure replacement requirements going forward and identify any recommended changes to the annual contribution.

Significant Metro Vancouver water rate increases are projected for 2020 and beyond. As such, Staff recommend maintaining a \$0 impact on the Water Rate Stabilization Provision at this time. This preserves the Water Rate Stabilization Provision for utilization in the near future when larger Metro Vancouver water rate increases are anticipated.

Sewer Utility

Table 5. Sewer Utility Budget					
Key Budget Areas	2018 Base Level Budget (Restated for Comparison)	Option 1 (Recommended) Non-Discretionary Increases	Option 2 Non-Discretionary Increases with \$500,000 Additional Capital Infrastructure Replacement	Option 3 Non- Discretionary Increases with Additional \$500,000 from Provisions for Rate Stabilization	
Expenditures					
Salary	\$2,968,400	\$126,400	\$126,400	\$126,400	
PW Materials/Equipment/Power Costs	\$1,746,000	\$42,400	\$42,400	\$42,400	
Operating Expenditures ¹	\$806,300	\$115,700	\$115,700	\$115,700	
GVSⅅ O&M (Metro Vancouver) ²	\$20,818,000	\$1,332,400	\$1,332,400	\$1,332,400	
GVSⅅ Debt (Metro Vancouver)	\$372,700	\$23,800	\$23,800	\$23,800	
Capital Infrastructure Replacement Program	\$5,256,400	\$0	\$500,000	\$0	
Firm Price/Receivable	\$621,400	\$13,200	\$13,200	\$13,200	
Overhead Allocation	\$565,400	\$10,000	\$10,000	\$10,000	
Total Base Level Expenditure Budget	\$33,154,600	\$34,818,500	\$35,318,500	\$34,818,500	
Revenues					
Provision (Rate Stabilization)	-\$500,000	\$0	\$0	-\$500,000	
Investment Income	-\$152,000	\$0	\$0	\$0	
Firm Price/Receivable	-\$621,400	-\$13,200	-\$13,200	-\$13,200	
Provision (OBI Adjustment) ³	-\$36,100	36,100	36,100	36,100	
Property Tax for GVSⅅ Debt	-\$372,700	-\$23,800	-\$23,800	-\$23,800	
Total Base Level Revenue Budget	-\$1,682,200	-\$1,683,100	-\$1,683,100	-\$2,183,100	
Net Budget	\$31,472,400	\$33,135,400	\$33,635,400	\$32,635,400	
Net Difference Over 2018 Base Level Budget		\$1,663,000	\$2,163,000	\$1,163,000	

Operating Expenditures includes internal shared costs, vehicle charges, and asset management system costs

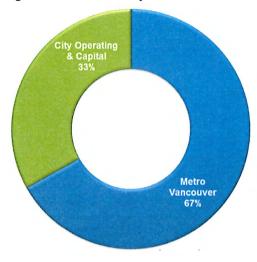
See "Metro Vancouver GVS&DD Operating and Maintenance (O&M) Costs" on page 10

See "Provision (OBI Adjustment)" on page 11

The following is an explanation of the budget reductions and increases outlined in Table 5.

Metro Vancouver GVS&DD Operating and Maintenance (O&M) Costs

Figure 2, 2019 Sewer Utility User Fee Breakdown



Metro Vancouver's GVS&DD O&M cost is projected to increase by \$1,332,400 (6.4%) for Richmond in 2019. This increase accounts for 80% of the increase in the City's 2019 sewer utility budget for Option 1.

Richmond pays Metro Vancouver for bulk transmission and treatment of liquid waste on a flat rate basis. Metro Vancouver costs account for 67% of Richmond's sewer rate and is a primary budget driver (Figure 2). The City's 2019 sanitary sewer rates are based on Metro Vancouver's five-year projections approved in their 2018-2022 Financial Plan (Table 6). The Metro Vancouver Board will review Metro Vancouver sanitary sewer rates in late October and Staff anticipate that Metro Vancouver sanitary sewer rates will be approved at that time. Staff will report back to Council for further consideration if final approved rates are substantially different.

Metro Vancouver rate increases for the Lulu Island Sewerage Area are anticipated to be significant over the next four years and beyond.

Table 6. Metro Vancouver 5-Year Overall Sewer Cost Projections – Lulu Island						
Sewerage Area						
	2019 2020 2021 2022					
Sewer Levy – LSA (\$ Millions)	\$21.2	\$22.4	\$24.7	\$26.9		
% Change	6.4%	5.7%	10.0%	8.9%		

Operating Expenditures

The City's operating budget increases are below CPI. A number of operating expenditures have increased due to many factors beyond the City's control, including:

- Salary increases as per committed union agreements;
- New Employer Health Tax;
- Electricity and natural gas increases;
- Material and equipment cost increases; and
- Vehicle cost increases, including fuel and insurance increase.

A new Employer Health Tax has been introduced by the Province of BC starting January 2019. 38% of 2019's Option 1 salary budget increase is attributed to this new tax. The City's operating

expenditures are carefully managed and considerable measures have been taken to minimize cost increases where possible.

Provision (OBI Adjustment)

One-time transfers from the Sewer Levy Stabilization Provision are utilized each year to fund operating budget impacts (OBIs) for the current year's capital program. This amount is incorporated into the sanitary sewer utility in the following year to become part of the base level budget. In 2018, \$36,100 was transferred from the Sewer Rate Stabilization Provision to fund OBIs associated with the 2018 Capital Program and have been included in the 2019 base level budget.

Construction Period Revenues

The City receives construction period revenues from development customers for sewer use during construction. This revenue is not budgeted due to the long term variability in these revenues. Any actual revenue will be transferred to the Sewer Levy Stabilization Provision for future rate stabilization funding.

Capital Infrastructure Replacement Program (Sewer Rate Options)

The "Ageing Utility and Road Infrastructure Planning – 2017 Update" report identifies a long-term sustainable funding level of \$7.3 million for sanitary sewer infrastructure. As at July 31, 2018, the sanitary sewer replacement reserve balance is \$26.5 million. Options 1 and 3 maintain the annual contribution to the capital infrastructure replacement program at its current level of \$5.25 million, while Option 2 increases the program by \$500,000 to reduce the funding gap.

Sewer Rate Stabilization Provision (Sewer Rate Options)

The Sewer Levy Stabilization Provision was established by Council as a funding source for sewer rate stabilization. The Provision, which has a balance of \$7.3 million as of July 31, 2018 has been used to offset significant increases in regional sewer treatment and capacity costs. Options 1 and 2 maintain the current \$500,000 drawdown on the Sewer Rate Stabilization Provision to partially offset Metro Vancouver GVS&DD O&M increases; Option 3 includes an additional drawdown of \$500,000 to a total of \$1,000,000 to further offset rate increases.

Staff recommend maintaining the current drawdown of \$500,000. While the current balance in the Sewer Levy Stabilization Provision is adequate to maintain the current drawdown and stabilize 2019 rate increases, more significant Metro Vancouver rate increases are anticipated in 2021 and 2022 and further drawdown is not recommended at this time.

Impact on 2019 Sewer Rates

The impact of the three budget options on the sewer rates is shown in Tables 7 and 8. Table 7 identifies the impact of each option on metered customers; Table 8 identifies the impact on flat rate customers. Numbers in italics represent the difference between 2018 rates and 2019 optional rates.

Table 7. 2019 Metered Rate Sewer Options (net of discount)					
Customer Class	2018 Rates	Option 1 (Recommended)	Option 2	Option 3	
Single-Family Dwelling	#220.15	\$349.43	\$354.82	\$344.04	
(based on 315 m ³ average)	\$330.15	\$19.28	\$24.67	\$13.89	
Townhouse	\$220.10	\$232.95	\$236.54	\$229.36	
(based on 210 m ³ average)		\$12.85	\$16.44	\$9.26	
Apartment	#1/7.70	\$177.49	\$180.22	\$174.75	
(based on 160 m ³ average)	\$167.70	\$9.79	\$12.52	\$7.05	
N. 1. D. 1. (ft) 3.	¢1 0491	\$1.1093	\$1.1264	\$1.0922	
Metered Rate (\$/m³)	\$1.0481	\$0.0612	\$0.0783	\$0.0441	

1.	aule 6, 2017 Plat IX	ate Sewer Options (ne	t of discount)	
Customer Class	2018 Rates	Option 1 (Recommended)	Option 2	Option 3
Cinala Family Dwalling	£420.74	\$454.81	\$461.82	\$447.79
Single-Family Dwelling	\$429.74	\$25.07	\$32.08	\$18.05
T	#202. 2 0	\$416.13	\$422.55	\$409.72
Townhouse	\$393.20	\$22.93	\$29.35	\$16.52
Apartment	#227.4B	\$346.58	\$351.93	\$341.24
	\$327.48	\$19.10	\$24.45	\$13.76

The rates outlined in Tables 7 and 8 are net rates. The bylaw provides a 10% discount for utility bills paid prior to a deadline. The rates shown will be increased by 10% in the supporting bylaws to provide for the discount incentive while ensuring appropriate cost recovery.

Advantages/Disadvantages of Various Options

Option 1 (Recommended)

- Represents the minimum increase necessary to maintain the current level of service.
- Maintains a \$5.25 million contribution to the Capital Infrastructure Replacement Program.
- Maintains a \$500,000 drawdown from the Sewer Levy Stabilization Provision to minimize the impact of regional increases on sewer rates.

Option 2

- Represents the minimum increase necessary to maintain the current level of service.
- Includes a \$500,000 increase to the capital infrastructure replacement program, in order to reduce the gap between the current funding level of approximately \$5.25 million and the long-term annual funding requirement of \$7.3 million, as recommended in the "Ageing Utility and Road Infrastructure Planning 2017 Update" report.
- Maintains a \$500,000 drawdown from the Sewer Levy Stabilization Provision to minimize the impact of regional increases on sewer rates.

Option 3

- Represents the minimum increase necessary to maintain the current level of service.
- Maintains a \$5.25 million contribution to the Capital Infrastructure Replacement Program.
- Includes a contribution of \$1,000,000 from the Sewer Levy Stabilization Provision to further minimize the impact of regional increases on sewer rates.

Recommended Option

Staff recommends the budgets and rates identified in Option 1 for Sewer Services. Due to significant Metro Vancouver's O&M levy increases, Staff recommends maintaining the current \$5.25 million contribution to the Capital Infrastructure Replacement Program to limit increases to sewer rates. Current funding levels are adequate for short to medium-term sanitary infrastructure replacement needs; however, the funding shortfall defers the financial obligation to future years and bridging the funding gap will be an important consideration in future utility budgets.

Due to significant increases in Metro Vancouver rates over recent years, the base level budget includes a \$500,000 drawdown from the Sewer Levy Stabilization Provision to offset rate increases. Additional drawdown from this Provision in 2019 is not recommended as larger Metro Vancouver rate increases are anticipated in 2021 and 2022. Staff recommend maintaining the Sewer Levy Stabilization Provision in 2019 for utilization in the near future when larger Metro Vancouver water rate increases are anticipated.

Drainage and Diking Utility

The drainage and diking utility was created to develop a reserve fund to operate, maintain and upgrade Richmond's flood protection infrastructure. The "Ageing Utilities and Roads Infrastructure Planning – 2017 Update" report identifies a capital funding target of \$12.8 million. As of 2018, the capital funding level has reached \$11.4 million and is within the target funding range. As at July 31, 2018, the drainage improvement reserve balance is \$23.7 million. In 2018, programs such as the Box Culvert Preventative Maintenance Program and the Dyke Repair Program have also been introduced to improve the maintenance of flood protection infrastructure.

Flood Protection Rate Equity (Rate Options)

In 2003, Council adopted an initial net rate of \$10 per property for flood protection. Council approved a \$10 increase each year from 2004 to 2015. Since 2016, new rate classes have been introduced to enhance equity amongst users and that reflect varying demands users place on the City's drainage and diking systems. Over the last three years, the following five rate classes have been established:

- Multi-family residential;
- Single-family residential and agricultural;
- Stratified or small industrial, commercial and institutional ("ICI") properties;
- Medium non-stratified ICI properties; and
- Large non-stratified ICI properties.

Separate drainage and diking rates have previously been developed for each of these rate classes. Staff proposes to further improve equity by varying the rate increases for the different rate classes in 2019. Option 1 has no increase to individual rate payers, however, there is a budget increase due to population growth and increasing number of units (an estimated 1,263 additional residential units are anticipated 2019). Option 2 maintains current flood protection rates for multi-family properties, increases rates for single-family, agricultural and small or stratified ICI properties by 2%, and increases rates for medium and large, non-stratified ICI properties by 8%. Option 3 increases flood protection rates for medium and large ICI properties by 10%.

Impact on 2018 Flood Protection Rates

Table 9 provides a summary of the proposed flood protection rates for each rate class and the impact on the net utility budget. The rates outlined in Table 9 are net rates. The bylaw provides a 10% discount for utility bills paid prior to a deadline. The net rates shown will be increased by 10% in the supporting bylaws to provide for the discount incentive while ensuring appropriate cost recovery. Numbers in italics represent the difference between 2018 rates and 2019 optional rates.

Table 9. 2019 Flood Protection Rate Options (Net of Discount)					
Rate Class	2018 Rates	Option 1 Non- discretionary increases	Option 2 (Recommended) 8% increase medium and large non-stratified ICI properties, 2% increase to single-family, agricultural and small or stratified ICI properties, no increase to multi-family properties	Option 3 10% increase medium and large non-stratified ICI properties, no increases to residential or small ICI properties	
Multi-family Residential	\$140.31	\$140.31	\$140.31	\$140.31	
Watti-failing Residential	\$140.51	\$0.00	\$0.00	\$0.00	
Single-family and Agricultural	\$141.71	\$141.71	\$144.55	\$141.71	
Single-failing and Agricultural	\$141./1	\$0.00	\$2.84	\$0.00	
Small or Stratified ICI (less than	\$141.71	\$141.71	\$144.55	\$141.71	
800 m ²)		\$0.00	\$2.84	\$0.00	
Medium Non-stratified ICI	#201.60	\$301.60	\$325.73	\$331.76	
(between 800 m ² and 10,000 m ²)	\$301.60	\$0.00	\$24.13	\$30.16	
Large Non-Stratified ICI (above	#c02.20	\$603.20	\$651.45	\$663.52	
10,000 m ²)	\$603.20	\$0.00	\$48.25	\$60.32	
Net Budget	\$11,920,000	\$11,982,900	\$12,106,800	\$12,027,200	
Capital Infrastructure Replacement Program	\$11,391,000	\$11,453,900	\$11,577,800	\$11,498,200	
Box Culvert Preventative Maintenance Program	\$380,000	\$380,000	\$380,000	\$380,000	
Dyke Repair Program	\$149,000	\$149,000	\$149,000	\$149,000	
Net Difference Over 2018 Base Level Budget		\$62,900	\$186,800	\$107,200	

Advantages/Disadvantages of Various Options

Option 1

- Represents no increase to flood protection rates.
- Increases funding for the Capital Infrastructure Replacement Program to \$11,453,900.
- Maintains existing funding for the Box Culvert Preventative Maintenance program and the Dyke Repair Program.

Option 2 (Recommended)

- Improves equity by increasing the rate for all medium and large, non-stratified ICI properties by 8% and all single-family residential, agricultural and small or stratified ICI properties by 2%.
- Represents no rate increase for multi-family residential properties.
- Maintains existing funding for the Box Culvert Preventative Maintenance program and the Dyke Repair Program.
- Increases funding for the Capital Infrastructure Replacement Program to \$11,577,800.

Option 3

- Improves equity by increasing the rate for all medium and large non-stratified ICI properties by 10%.
- Represents no rate increase for residential, agricultural and small or stratified ICI properties.
- Maintains existing funding for the Box Culvert Preventative Maintenance program and the Dyke Repair Program.
- Increases funding for the Capital Infrastructure Replacement Program to \$11,498,200.

Recommended Option

Staff recommends the budgets and rates identified in Option 2 for flood protection services. This option continues the City's ongoing efforts to increase equity within the drainage and diking utility rates and supports an incremental increase to the Drainage and Diking capital program to address the funding gap identified in the "Ageing Utility and Road Infrastructure Planning – 2017 Update" report.

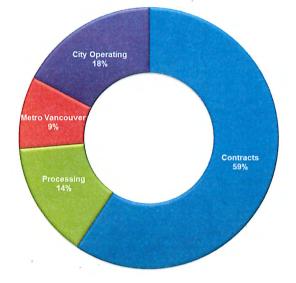
Solid Waste and Recycling

Ta	able 10. 2019 So	olid Waste & Rec	ycling Budget	
Key Budget Areas	2018 Base Level Budget (Restated for Comparison)	Option 1 Non- Discretionary Increases	Option 2 Recycling Depot Open 6 Days per Week 6 Large Item Pick Up per Household	Option 3 (Recommended) Same as Option 2 Plus Enhanced Program for 80% Waste Diversion
Expenditures				
Salary	\$2,640,400	\$106,600	\$230,600	\$306,800
Contracts	\$8,851,800	-\$248,300	-\$146,100	-\$26,100
Equipment/Materials	\$650,600	\$224,100	\$246,600	\$326,600
Metro Vancouver Disposal Costs	\$1,283,500	\$75,100	\$120,100	\$84,100
Recycling Materials Processing	\$1,829,700	\$336,500	\$344,700	\$423,000
Container Rental/Collection	\$157,700	\$14,900	\$28,800	\$64,900
Operating Expenditures	\$312,700	\$4,400	\$4,400	\$25,600
Internal Shared Costs	\$340,500	-\$9,700	-\$9,700	-\$9,700
Agreements	\$188,100	\$4,800	\$4,800	\$4,800
Rate Stabilization	\$368,400	\$0	\$0	\$0
Base Level Expenditure Budget	\$16,623,400	\$17,131,800	\$17,447,600	\$17,823,400
Revenues				
Recycling Material	-\$176,800	\$600	\$600	\$600
Garbage Tags	-\$17,500	\$0	\$0	\$0
Revenue Sharing Grant	-\$3,100	\$0	\$0	\$0
Recycle BC Incentive	-\$1,831,700	\$21,000	\$21,000	\$21,000
Base Level Revenue Budget	-\$2,029,100	-\$2,007,500	-\$2,007,500	-\$2,007,500
Net Budget	\$14,594,300	\$15,124,300	\$15,440,100	\$15,815,900
Net Difference Over 2018 Base Level Budget		\$530,000	\$845,800	\$1,221,600

The following is an explanation of the budget reductions and increases outlined in Table 10.

Metro Vancouver Disposal Costs

Figure 3. 2019 Solid Waste and Recycling User Rate Breakdown



The regional tipping fee for local governments has recently been projected by Metro Vancouver to increase by \$5 from \$103/tonne in 2018 to \$108/tonne for 2019. The \$5 per load transaction fee remains in effect and is unchanged. The projected 2019 tipping fee increase is expected to be 4.9%, which is higher than Metro Vancouver's previous 5-year projection of 3% (\$106/tonne).

The higher disposal cost in Option 2 includes estimated amounts for expanding the scope of the Large Item Pick Up Program from four to six items per household. The increase in Option 3 relates to a proposed education/outreach initiative to divert materials from garbage into recycling streams. These program options are discussed in more detail later in this report.

City Operating Expenditures

A number of operating expenditures have increased due to many factors beyond the City's control, including:

- Salary increases per committed union agreements; and
- New Employer Health Tax introduced by the Province of BC (39% of Option 1 salary budget increase).

Increases to equipment and material costs are primarily associated with increasing costs for handling illegally dumped drywall. The total estimated cost of illegal dumping for 2018 is \$300,000. WorkSafe requirements for handling drywall relating to the potential presence of asbestos has led to increased illegal dumping of this material as well as added costs for handling and disposal. Increases in this category also relate to handling and storage costs for recycling equipment (i.e. carts) per pricing obtained in the procurement process for the new solid waste and recycling service contract.

Cost increases under Option 2 and 3 include more aggressive actions targeted at increased diversion of waste from garbage into recycling streams, as well as expanded recycling options at the Recycling Depot – discussed in more detail later in this report. The recommended approach

is designed with the objective of the final push toward the target of 80% waste diversion target by 2020. The City is currently diverting 78% of single-family residential waste.

Cost increases under Options 2 and 3 are associated with estimated costs to expand the type and volume of materials received at the Recycling Depot based on increased hours of operation as well as equipment and material costs for handling a broadened scope of recycling materials.

Contracts

Contract costs are marginally reduced under Option 1 as a result of favourable unit pricing obtained in the procurement process for a new solid waste and recycling service contract, scheduled to commence in January 2019. Options 2 and 3 include contract costs to expand the large item collection service to six items per household annually (from the current allotment of four). Option 3 includes expanded contract costs for a targeted program to promote further diversion of garbage to recycling programs.

Recycling Materials Processing

Recycling material processing costs increased slightly and are associated with increased volumes from commercial landscape drop off of yard and garden trimmings at Ecowaste.

The major component of increases relates to new rates obtained under a new organics material processing contract. Another contributing factor relates to increased fees for processing materials received at the Recycling Depot due to declining worldwide market conditions for recycling materials, coupled with more stringent material quality standards. Options 2 and 3 assume higher processing costs associated with handling increased volumes and types of materials at the Recycling Depot.

Rate Stabilization

Rate stabilization costs remain unchanged. The Sanitation and Recycling provision has a current balance of \$2.3 million as of July 31, 2018.

Service Level Enhancements Discussion - Options 2 and 3

Large Item Pick Up Program

Options 2 and 3 include a proposed expansion of the large item curbside pick up program from four to six items annually. This service is available to residents who receive City garbage collection and/or curbside Blue Box collection service. By expanding up to six items per year, this program enhancement is designed to help improve convenience for residents to dispose of additional household items. This program is particularly convenient for residents who do not have the ability to transport large items to the Recycling Depot and/or disposal facilities. Household items and furniture remain the highest percentage of items dumped illegally. It is also suggested to expand the scope of eligible items for large item pick up to include tires. Cost increases for this program expansion are reflected in additional contract costs (to collect the additional items) and disposal costs (estimated cost to dispose and/or process the additional items collected).

Recycling Depot

The Recycling Depot is conveniently located and is highly used by residents since a wide range of materials is accepted for recycling. There are approximately 160,000 visits per year, averaging over 13,000 visits per month, or 67 customers for every hour the Recycling Depot is open.

The Recycling Depot is currently open 5 days per week (Wednesday to Sunday), from 9:00 a.m. -6:15 p.m. Options 2 and 3 include opening the facility an additional one day per week (from Tuesday to Sunday) with the same operating hours. Service level increases are reflected in additional salary, equipment/material and related estimated material handling and processing costs.

Option 3 also proposes to expand the range of materials accepted at the Recycling Depot to include: propane tanks, butane cylinders, electronics, and those furniture items for which recycling opportunities exist — upholstered furniture, etc. The expansion of these materials would help to further divert materials from garbage and provide further progress toward the 80% waste diversion target. Estimated costs are reflected in added equipment/materials and processing fees.

Target 80% Waste Diversion

In addition to the items proposed for expansion at the Recycling Depot, Option 3 also includes a targeted education program to promote further material diversion from garbage and into recycling streams. The most recent Metro Vancouver waste composition study indicates there remain considerable amounts of compostable organics (29%) and plastics (21%) in the waste stream. A program similar to the Gold Star program would be undertaken to further diversion efforts. Removing additional materials from garbage and into recycling streams is the most beneficial approach to achieving the remaining 2% of the City's 80% waste diversion target. This program will also assist in avoiding financial penalties related to contamination at facilities that receive the City's recyclables. Cost increases are reflected in salary and contracts to administer and deliver the program, along with estimates for lower disposal costs and higher recycling material handling and processing fees.

Base Level Expenditure Budget - General

The recommended Solid Waste & Recycling budget also includes regularizing two current waste and recycling coordinator positions from temporary and auxiliary staff to create two regular full-time positions. There is no financial impact to the 2019 utility budget as the applicable funding was approved as part of implementing related programs. Two Position Control Complements (PCCs) are included.

Construction Period Revenues

The City receives construction period revenues from development customers for solid waste and recycling during construction. This revenue is not budgeted due to the long term variability in these revenues. Any actual revenues will be transferred to the Sanitation and Recycling Provision for future rate stabilization funding.

Revenues - General Solid Waste and Recycling Provision

Recycling Material Revenues

Recycling material revenues are reduced slightly associated with the decline in commodity markets for materials received at the Recycling Depot.

Recycle BC (previously MMBC) Incentive

The net Recycle BC revenue incentive is adjusted to offset inflationary cost increases in order to maintain no net impact in the Blue Box/Multi-Family Recycling Rate. Overall, the Recycle BC program is expected to generate net revenues of approximately \$630,500 for 2018 and can be deposited into the solid waste provision account subject to Council approval. This is in alignment with previous Council direction (November 25, 2013) when the decision to join Recycle BC was made.

Impact on 2019 Rates

The impact of the budget options to ratepayers is provided in the tables which follow. The principal reason for the increase in 2019 relates to increased costs associated with organics processing requirements in accordance with costing obtained in new agreements. Other key contributing factors include costs for handling increasing amounts of illegally dumped asbestos containing drywall and the projected increase in the Metro Vancouver disposal tipping fee. Numbers in italics represent the difference between 2018 rates and 2019 optional rates.

Table 11 provides total costs based on standard garbage cart sizes for single-family (240L) and townhouse (120L). Table 12 provides a more detailed breakdown of Option 3 rates based on the four different garbage cart size options that are available to residents in single-family and townhouse units. The percentage of container sizes subscribed by each customer class is also presented for reference. Residents are able to reduce or increase the amount they pay based on the cart size they select for garbage collection services.

Table 11. 2019 Solid Waste and Recycling Rate Options (net of Discount)					
Customer Class	2018 Rates	Option 1	Option 2 Recycling Depot Open 6 Days per Week 6 Large Item Pick Up per Household	Option 3 (Recommended) Same as Option 2 Plus Enhanced Program for 80% Waste Diversion	
Single-Family Dwelling	\$313.10	\$318.25	\$323.90	\$334.15	
(Standard 240L Cart)		\$5.15	\$10.80	\$21.05	
Townhouse	\$223.95	\$229.65	\$235.30	\$239.40	
(Standard 120L Cart)		\$5.70	\$11.35	\$15.45	
Apartment	\$99.80	\$101.95	\$104.10	\$106.20	
		\$2.15	\$4.30	\$6.40	
Durings Date	\$32.29	\$34.12	\$34.55	\$34.97	
Business Rate		\$1.83	\$2.26	<i>\$2.68</i>	

Table 12. 2019 Single-Family and Townhome Net Rates by Garbage Cart Size						
	Single-Fan	nily	Townhomes			
Cart Size	Full Service Rate (Including Recycling, Organics, Other Services)	Approximate Percent - Subscribed Size	Full Service Rate (Including Recycling, Organics, Other Services)	Approximate Percent - Subscribed Size		
80L	\$291.15	5%	\$217.40	12%		
120L	\$313.15	12%	\$239.40	78%		
240L	\$334.15	78%	\$260.40	9%		
360L	\$436.15	5%	\$362.40	1%		

The rates outlined in Tables 11 and 12 are net rates. The bylaw provides a 10% discount for utility bills paid prior to a deadline. The rates shown will be increased by 10% in the supporting bylaws to provide for the discount incentive while ensuring appropriate cost recovery.

Regional Issues

For 2019, tipping fees are expected to increase by \$5 per tonne. Announced estimates are not yet available for Metro Vancouver's 5-Year financial plan for the 2019 – 2022 periods.

Key actions implemented in 2018 include the introduction of an expanded polystyrene disposal ban, the Coquitlam Transfer Station replacement, Surrey small vehicle drop-off facility, and reduction activities focused on food waste and construction and demolition waste. The expanded polystyrene disposal ban applies to polystyrene used for packaging and distributing products (excludes food and beverage packaging, packing peanuts, etc.) and attracts a 100% surcharge on threshold levels above 20% (by weight or volume). Staff anticipate that the recent announcement of Harvest Power's intention to close their organics processing facility in Richmond (in April, 2020) and increasing public sentiment about odours from composting facilities is likely to lead to the need for more fully enclosed facilities in order to better capture and treat odours. This will result in an overall increase in costs, in general, to manage the organics portion of the waste stream. Additional efforts at the regional level to encourage greater processing capacity investment are likely to be needed.

Advantages/Disadvantages of Various Options

Option 1

• Represents full cost recovery via rates of all program costs, including substantial cost increases in organics processing and material handling for illegally dumped asbestos containing drywall.

Option 2

- Represents full cost recovery via rates of all program costs, including substantial cost increases in organics processing and material handling for illegally dumped asbestos containing drywall.
- Includes enhanced service levels through:

- Expanding the operating hours at the Recycling Depot from 5 to 6 days per week;
- Expanding the annual allocation of items eligible for Large Item collection from four to six items per household.

Option 3 (Recommended)

- Includes a targeted program to reach the 80% waste diversion target by 2020.
- Represents full cost recovery via rates of all program costs, including substantial cost increases in organics processing and material handling for illegally dumped asbestos containing drywall.
- Includes enhanced service levels through:
 - o Expanding the operating hours at the Recycling Depot from 5 to 6 days per week;
 - Expanding the annual allocation of items eligible for Large Item collection from four to six items per household; and
 - Combined initiatives designed toward diverting additional household waste into existing recycling services, plus the addition of a broader range of materials accepted at the Recycling Depot.

Recommended Option

Staff recommend the budget and rates identified in Option 3 for Solid Waste and Recycling. This option provides full funding for all existing programs in 2019. Additionally, this option allows for expansion of the City's successful Large Item Pick Up Program to six items per eligible household per year (increased from four). Option 3 also expands the Recycling Depot service to six days per week (currently five) and expands the range of materials collected at the Recycling Depot to include items most frequently requested by residents such as propane tanks, butane cylinders, electronics and upholstered furniture.

A targeted outreach program designed to promote further diversion of materials from garbage into recycling streams is also included in this option. Two waste/recycling coordinator positions are also converted to regular full time positions, with no budget impact, as the work is currently undertaken by temporary and auxiliary staff.

Total Recommended 2019 Utility Rate Option

In light of the significant challenges associated with the impacts of regional costs and new programs in the City, Staff recommend the budget and rates options as follows:

- Option 1 is recommended for Water
- Option 1 is recommended for Sewer
- Option 2 is recommended for Drainage and Diking
- Option 3 is recommended for Solid Waste and Recycling

Table 13 summarizes the estimated total metered rate utility charge, based on average water and sewer consumption. Table 14 summarizes the total flat rate utility charge. Numbers in italics represent the difference between 2018 rates and 2019 proposed rates.

Table 13. 2019	9 Estimated Total Net Rates to Meter	ed Customers		
Customer Class	2018 Estimated Net Metered Rates	2019 Estimated Net Metered Rates (Recommended)		
C: 1 5 11 5 111	•			
Single-Family Dwelling	\$1,198.51	\$1,261.36		
(based on 315 m ³ average)	,	\$62.85		
Townhouse	\$867.26	\$908.68		
(on City garbage service)	\$807.20	\$41.42		
Townhouse		\$814.68		
(not on City garbage service)	\$777.76	\$36.92		
Apartment	\$604.92	\$631.11		
(based on 160 m ³ average)	\$604.92	\$26.19		
	Commercial/Industrial			
3	4	\$1.2382		
Metered Water (\$/m³)	\$1.1757	\$0.0625		
N 10 (b) 3	41.0404	\$1.1093		
Metered Sewer (\$/m³)	\$1.0481	\$0.0612		
P : G I	#20.00	\$34.97		
Business: Garbage	\$32.29	\$2.68		
Business: Drainage & Diking		\$325.73		
(800 m ² to 10,000 m ²)	\$301.60	\$24.13		
Business: Drainage & Diking	4,00,00	\$651.45		
(above 10,000 m ²)	\$603.20	\$48.25		
Business: Drainage & Diking	¢141.71	\$144.55		
(Others)	\$141.71	\$2.84		

Table 14. 2019 Total Net Rates to Flat Rate Customers					
Customer Class	2018 Net Flat Rates	2019 Net Flat Rates (Recommended)			
Single-Family Dwelling	#1.500.0C	\$1,591.02			
	\$1,508.86	\$82.16			
Townhouse	#1.0C0.50	\$1,334.06			
(on City garbage service)	\$1,268.50	\$65.56			
Townhouse	£1.170.00	\$1,240.06			
(not on City garbage service)	\$1,179.00	\$61.06			
Apartment	0.0 0.00	\$939.92			
	\$896.90	\$43.02			

The rates outlined in Tables 13 and 14 are net rates. The bylaw provides a 10% discount for utility bills paid prior to a deadline. The rates shown will be increased by 10% in the supporting bylaws to provide for the discount incentive while ensuring appropriate cost recovery. The recommended rates outlined above result in gross rate charges to residents as outlined in Attachment 1. These rates would be reflected in the amending bylaws for each utility area, should they be approved by Council.

Flat Rate and Metered Customers

All ICI properties and single-family units in the City are metered. The single-family residential flat rate will continue to apply to duplex units that share one water service. These units require significant internal plumbing separation work to facilitate metering and were not included in the universal metering program. The majority of townhouses and apartments are still on flat rate utility services; however, the number with meters will continue to increase with the ongoing volunteer and mandatory water meter programs for multi-family dwellings. The number of units by customer class is identified in Table 15:

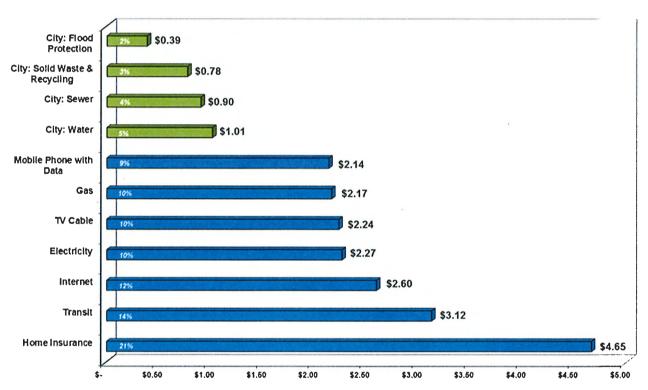
Table 15. Flat Rate and Metered Property Unit Counts					
	2018 Percentages (Mid-year)	2018 Counts (Mid-year)	2019 Counts (Mid-year Estimate)	Difference	
Single-Family Residential	Flat Rate (3%)	853	853	0	
	Metered (97%)	27,031	27,225	194	
Townhouse	Flat Rate (68%)	11,647	11,633	-14	
	Metered (32%)	5,581	5,819	238	
Apartment	Flat Rate (46%)	14,946	14,826	-120	
	Metered (54%)	17,238	18,203	965	
Total Residential Units		77,296	78,559	1,263	
Commercial Units	Metered	3,549	3,549	0	
Farms	Metered	47	47	0	

Comparison of 2018 City Utility Rates to Other Major Household Expenses

City utility fees represent approximately 14% of total average daily household expenses and are of good value when compared with common household expenses. Water, sewer, solid waste and recycling, and flood protection services are fundamental to a quality of life for residents as well as necessary infrastructure to support the local economy. Figure 4 illustrates the value of these services when compared to other common daily household expenses.

Figure 4. Cost Comparison of Main Household Expenses for a Single-Family Dwelling

2018 Average Daily Costs of General Household Expenses

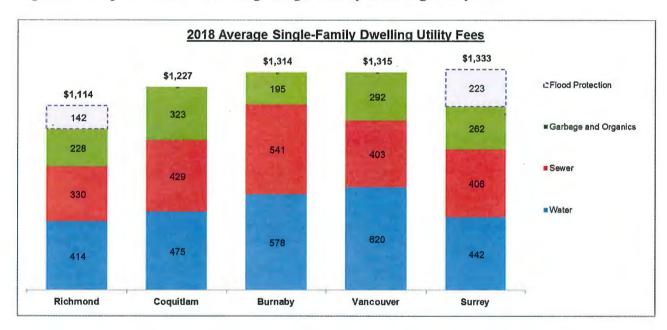


Source: BC Hydro, Fortis BC, Rogers, Shaw, TD Insurance, and Translink Figure 4 Reference REDMS 5909777

Comparison of 2018 Comparator Municipality Utility Fees

Figure 5 provides a comparison between the City's 2018 average single-family dwelling utility fees with comparator municipalities. All utility fees presented below are net of applicable discounts. Richmond and Surrey water and sewer rates includes applicable metering costs and are based on average annual consumptions of 315 m³ and 375 m³ respectively as single-family dwellings in these cities are 100% and 70% metered respectively; all other comparator municipalities are predominately charged a flat rate for water and sewer services. Large item pick up, blue box, general recycling and waste management fees have been excluded in the garbage and organics fee presented for comparison purposes as not all municipalities offer the same services. Coquitlam, Burnaby and Vancouver do not have applicable rates for drainage and flood protection services. The City of Richmond offers this additional and critical service while still maintaining the lowest combined fee for utility services.

Figure 5. Comparison of 2018 Average Single-Family Dwelling Utility Fee



Sources:

City of Richmond:

- Waterworks and Water Rates Bylaw No. 5637; amending by-law No. 9785
- Drainage, Dyke and Sanitary Sewer System Bylaw No. 7551; amending by-law No. 9782
- Solid Waste & Recycling Regulation Bylaw No. 6803; amending by-law No. 9791

City of Coquitlam:

- Water Distribution Bylaw No. 4428; amending by-law No. 4825
- Sewer and Drainage Bylaw No. 4429; amending by-law No. 4826 Solid Waste Management amending by-law No. 4827

City of Burnaby:

- Waterworks Regulation Bylaw No 1953; amending by-law No. 3325C
- Sewer Charge Bylaw No. 1961; amending by-law No. 4231C
- Solid Waste & Recycling Bylaw No. 2010; amending by-law No. 12875C
- https://www.burnaby.ca/Assets/city+services/property+taxes/2018+Utility+Charges+and+Garbage+Disposal+Fees+Brochure.pdf

City of Vancouver:

- Water Works By-law No. 4848; amending by-law No. 11980
- Sewer & Watercourse By-law No. 8093; amending by-law No. 11979
- Solid Waste By-law No. 8417; amending by-law No. 11981

City of Surrey:

- Waterworks Regulation and Charges Bylaw No 2007; amending by-law No. 16337
- Sanitary Sewer Regulation and Charges By-law No. 2008; amending by-law No. 16611
- Waste Management Regulations and Charges By-law No. 2015; amending by-law No. 18412

Financial Impact

The budget and rate impacts associated with each option are outlined in detail in this report. In all options, the budgets and rates represent full cost recovery for each City service.

The key impacts to the recommended 2019 utility budgets and rates stem from Metro Vancouver's forecast increases for bulk water purchase and the sewer levy. Staff recommend the budget and rates options as follows:

- Option 1 is recommended for Water
- Option 1 is recommended for Sewer
- Option 2 is recommended for Drainage and Diking
- Option 3 is recommended for Solid Waste & Recycling

Considerable effort has been made to minimize City costs and other costs within our ability in order to minimize the impact to property owners.

Conclusion

This report presents the 2019 proposed utility budgets and rates for City services relating to the provision of water, the connection of wastewater, drainage and flood protection, as well as the provision of solid waste and recycling services. Considerable measures are taken to reduce costs where possible in order to minimize rate increases. A significant portion of the City's costs relate to impacts from influences outside of the City's direct control, such as regional cost impacts, the new provincial Employer Health Tax, power and postage increases, etc. Regional costs are expected to continue increasing to meet demands for high quality drinking water and sewer treatment. Staff recommends that the budgets and rates as outlined in this report be approved and that the appropriate amending bylaws be brought forward to Council to bring these rates into effect.

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Att. 1 2019 Annual Utility Charges – Recommended Gross Rates per Bylaw

Attachment 1

2019 Annual Utility Charges – Recommended Gross Rates per Bylaw (Estimated Metered and Actual Flat Rates)

	Water	Sewer	Flood Protection	Solid Waste & Recycling	Total
Metered (Based on Average Con	sumption)	1			
Single-Family Dwelling	\$481.37	\$388.26	\$160.61	\$371.28	\$1,401.51
Townhouse (with City garbage)	\$328.91	\$258.83	\$155.90	\$266.00	\$1,009.64
Townhouse (no City garbage)	\$328.91	\$258.83	\$155.90	\$161.56	\$905.20
Apartment	\$230.12	\$197.21	\$155.90	\$118.00	\$701.23
Flat Rate (Actual)					
Single-Family Dwelling	\$730.57	\$505.34	\$160.61	\$371.28	\$1,767.80
Townhouse (with City garbage)	\$598.02	\$462.37	\$155.90	\$266.00	\$1,482.29
Townhouse (no City garbage)	\$598.02	\$462.37	\$155.90	\$161.56	\$1,377.85
Apartment	\$385.37	\$385.09	\$155.90	\$118.00	\$1,044.36
General – Other/Business					
Metered Water (\$/m³)	\$1.3758				
Metered Sewer (\$/m³)	The second secon	\$1.2326			
Business: Garbage				\$38.86	
Flood Protection (Medium Non- stratified ICI)			\$361.92		
Flood Protection (Large Non- Stratified ICI)			\$723.83		
Flood Protection (Small or Stratified ICI)			\$160.61		,