



City of Richmond

Report to Committee


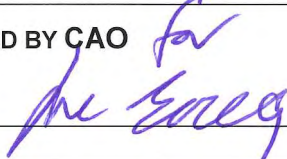
To: General Purposes Committee **Date:** October 24, 2016
From: Andrew Nazareth **File:** 03-0970-01/2016-Vol
General Manager, Finance & Corporate Services 01
Robert Gonzalez, P.Eng.
Deputy CAO and General Manager,
Engineering & Public Works
Re: 2017 Utility Budgets and Rates

Staff Recommendation

1. That the 2017 utility budgets, as outlined under Option 1 for Water, Option 2 for Sewer, Option 2 for Drainage and Diking, and Option 2 for Solid Waste and Recycling, as contained in the staff report dated October 24, 2016 from the General Manager of Finance & Corporate Services and General Manager of Engineering & Public Works, be approved as the basis for establishing the 2017 Utility Rates and preparing the 5 Year Financial Plan (2017-2021) Bylaw.
2. That the City's maximum reimbursement for the actual installation cost of volunteer multi-family water meters be increased to the greater of:
 - a. \$100,000 per multi-family complex; or
 - b. \$1,200 per dwelling unit within a multi-family complex.

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REPORT CONCURRENCE	
CONCURRENCE OF GENERAL MANAGER 	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: DW
APPROVED BY CAO <i>for the Energy</i> 	

Staff Report

Origin

This report presents the recommended 2017 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, 2016, in order to facilitate charging from January 1, 2017.

Analysis

Metro Vancouver's 2017 utility rates, as approved by the Metro Vancouver Board, are as follows:

- Greater Vancouver Water District (GVWD) rate increase is 3.2%.
- Greater Vancouver Sewerage and Drainage District (GVS&DD) sewer levy increase for Richmond is 3.7%.
- Metro Vancouver solid waste tipping fees for municipal customers will be \$100 per tonne for 2017, 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.

Another component of the City's utility budget relates to replacement of ageing municipal infrastructure. The City has achieved the target range for long term ageing infrastructure replacement in both the water and drainage utilities and has achieved 77% of the long range sanitary sewer utility funding target. The ageing infrastructure component is discussed in the water, sewer and drainage sections of this report.

Water conservation efforts, including water metering, toilet rebates, and pressure management have helped limit increases to bulk water purchases despite a growing population. In particular, multi-family water use per dwelling unit has declined in recent years. In 2016, water consumption per unit in apartments and townhouses is projected to decrease by 9% and 12% respectively as compared to 2014. This reduction is largely a combination of high efficiency fixtures in new units, and water conservation efforts leading to improved water use habits.

The recommended drainage and diking rate option in this report continues to improve equity in the rate by focusing rate increases on large (above 10,000 m²) industrial and commercial properties such as shopping malls and warehouse facilities. Prior to 2016, these facilities paid the same drainage rate as a single family home but place much larger demands on the drainage system. The recommended rate increases on the large industrial and commercial properties is designed to have these properties pay for the drainage system in accordance with the drainage requirements for these properties. No increase in drainage rates is proposed for residential and small industrial and commercial properties.

The implementation of bi-weekly garbage collection in 2016 has resulted in a notable reduction in the amount of garbage disposed, or a 17% reduction when comparing the first 9 months of data. It is evident this waste is being shifted to the organics stream, which has increased by a corresponding 17%. In 2017, the Metro Vancouver region will be lowering the threshold for food waste from 25% to 5%, which is expected to create further diversion of waste into the organics

stream. Also as a result of bi-weekly garbage implementation, there are some amounts of household garbage being diverted to litter containers in City parks, which was expected. There has also been an increase in the number of visits to the City's Recycling Depot. These shifts in residents' behaviour have resulted in the need to adjust resource levels to manage the impacts. These adjustments are reflected in the budgets and rates reflected in this report.

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 2017. Budgets and rates presented include two or three different options for each of the City's utilities. Option 1 presents the minimum non-discretionary increases necessary to meet those demands placed on the City by external or other 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 same 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 2017 is shown in Tables 11 and 12.

Water Utility

Table 1. Water Utility Budget

Key Budget Areas	2016 Base Level Budget (Restated for Comparison)	Option 1 (Recommended) Non-Discretionary Increases	Option 2 Non-Discretionary Increases with \$116,900 Drawdown from Rate Stabilization	Option 3 Non-Discretionary Increases with \$233,800 Drawdown from Rate Stabilization
Salary	\$5,099,900	\$49,200	\$49,200	\$49,200
PW Materials/Equipment/Power Costs	\$2,037,300	\$47,500	\$47,500	\$47,500
Vehicle Charges	\$723,400	\$14,200	\$14,200	\$14,200
Internal Shared Cost	\$312,600	\$4,600	\$4,600	\$4,600
Operating Expenditures	\$162,400	\$12,900	\$12,900	\$12,900
Water Meter Reading and Maintenance	\$426,100	\$0	\$0	\$0
Toilet Rebate Program	\$100,000	\$0	\$0	\$0
GVWD Water Purchases (Metro Vancouver)	\$24,023,200	\$280,500	\$280,500	\$280,500
Capital Infrastructure Replacement Program	\$7,500,000	\$0	\$0	\$0
Asset Management System	\$50,000	\$0	\$0	\$0
Firm Price/Receivable	\$2,518,700	\$25,600	\$25,600	\$25,600
Residential Water Metering Program	\$1,320,000	\$0	\$0	\$0
Overhead Allocation	\$910,100	\$0	\$0	\$0
Total Base Level Expenditure Budget	\$45,183,700	\$45,618,200	\$45,618,200	\$45,618,200
Revenues				
Provision (Rate Stabilization)	\$0	\$0	-\$116,900	-\$233,800
Investment Income	-\$392,000	\$0	\$0	\$0
Firm Price/Receivable	-\$2,518,700	-\$25,600	-\$25,600	-\$25,600
Meter Rental	-\$1,762,500	-\$277,500	-\$277,500	-\$277,500
YVR Maintenance	-\$30,000	\$0	\$0	\$0
Provision (Toilet Rebate/Flushing)	-\$251,100	\$0	\$0	\$0
Provision (OBI Adjustment)	-\$102,400	\$102,400	\$102,400	\$102,400
Meter Re-Reads and Other Services	-\$80,800	\$0	\$0	\$0
Total Base Level Revenue Budget	-\$5,137,500	-\$5,338,200	-\$5,455,100	-\$5,572,000
Net Budget	\$40,046,200	\$40,280,000	\$40,163,100	\$40,046,200
Net Difference Over 2016 Base Level Budget		\$233,800	\$116,900	\$0

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

Public Work Expenses

Public Work expenses have increased due to factors beyond the City's control including:

- Projected salary increases for union agreements and step increases;
- BC Hydro rate increases (3.7%);
- Material cost increases; and
- Vehicle cost increases, including fuel and insurance increases.

The proposed budget includes various transfers within the water utility to better reflect program requirements.

GVWD Water Purchases – Metro Vancouver

Metro Vancouver's 2017 water rate increase is 3.2%. Bulk water is purchased from Metro Vancouver on a unit volume basis. It accounts for approximately 56% of Richmond's water utility rate and is a primary budget driver.

The volume of water the City purchases from Metro Vancouver has a degree of variability, primarily due to weather impacts on summer irrigation demand and the level of water use restrictions that is activated by Metro Vancouver. The total volume estimated for budget purposes is based on average City water demand over the last 5 years. The variability in the demand during this period has been plus or minus 5%, and a similar variability can be anticipated in the 2017 water purchase.

Water conservation efforts, including water metering, toilet rebates, and pressure management have helped limit increases to bulk water purchases despite a rapidly growing population. In particular, multi-family water use per dwelling unit has declined in recent years. In 2016, water consumption per unit in apartments and townhouses is projected to decrease by 9% and 12% respectively as compared to 2014. This reduction is a combination of high efficiency fixtures in new units and water conservation efforts leading to improved water use habits.

Capital Infrastructure Replacement Program

There are no proposed increases for contribution to water capital infrastructure replacement as this utility is at a sustainable funding level. The annual capital contribution for water-related infrastructure replacement has reached \$7.5 million. Per the "Ageing Infrastructure Planning – 2015 Update" report, dated June 26, 2015, the long-term annual water infrastructure replacement funding requirement is \$7.4 million. A reduction in the annual funding contribution is not recommended as inflation will reduce this \$100,000 difference in the medium term. Staff will continue to undertake further assessments to determine infrastructure replacement requirements going forward and identify any recommended changes to the annual contribution.

Residential Water Meter Program

Residential water metering plays a significant role in the City's Water Demand Management Program. Water meters help customers understand and improve their water use habits and help customers identify water leaks that would otherwise go undetected. In 2015, 86% of metered single-family dwellings and 98% of metered multi-family dwellings realized a utility cost reduction when compared to the flat rate as a result of the water meter programs.

The Universal Single-Family Water Meter Program is in progress and is scheduled to be completed by the end of 2017, with approximately 1,300 single family water meters scheduled to be installed next year. The Multi-Family Water Meter Program has been very successful. To date, the City has installed 184 mandatory water meters, comprising 9,353 units and 143 voluntary water meters, comprising 8,702 units.

Per the "Water Meter Program Update" report, dated September 7, 2016, staff recommend modifying multi-family water meter incentives to encourage participation in the multi-family volunteer water metering program and provide equity with the current cost of single-family water meter installs. Staff propose in this budget to increase the City's maximum reimbursement for actual installation cost of volunteer multi-family water meters to the greater of:

- \$100,000 per multi-family complex; or
- \$1,200 per dwelling unit within a multi-family complex

Increasing the multi-family metering subsidy as recommended would align the multi-family subsidy to that of single-family volunteer program subsidy. These voluntary installations will continue to be funded through the water meter program funding allocation and impacts are reflected within the budget options presented.

The water metering program has installed over 30,000 water meters to date. These meters require regular servicing including meter testing and preventative maintenance. Funding to facilitate the meter maintenance work is made available through Operating Budget Impacts (OBI's) identified in previous year's capital programs and corresponding Operating Budget updates over the course of the water metering program. The recommended water utility budget includes two new full-time Water Technician positions to perform the ongoing meter maintenance work, with no additional financial impact to the utility budget. These workers will replace existing auxiliary and contract staff that are currently performing meter maintenance work. The full-time staff will provide the continuity necessary to improve overall program efficiencies at no additional cost.

Water Rate Stabilization Contribution (Water Rate Options)

The Water Levy Stabilization Provision was established by Council as a funding source for water rate stabilization. In past years, it has been used to offset spikes in regional water purchase costs. In 2016, there was no drawdown from the Water Levy Stabilization Provision as Metro Vancouver's capital projects associated with the Capilano-Seymour Water Filtration Plant have been completed, the forecasted spike in regional water purchase cost has been realized, and water operational programs are within budget.

The Water Levy Stabilization Provision has a current balance of \$9.1 million. Option 1 maintains a \$0 impact on the Water Levy Stabilization Provision, while Options 2 and 3 include \$116,900 and \$233,800 drawdown from the Water Levy Stabilization Provision respectively. Option 1 is recommended as the need to subsidize the water rate is not prominent at this time.

Impact on 2016 Water Rates

The impact of the three budget options on water rates is shown in Tables 2 and 3. Table 2 shows the various options for metered rate customers; Table 3 shows the options for flat rate customers. The rates presented include fixed costs for metering including meter reading, billing and maintenance.

Option 1 results in the highest rates as it includes non-discretionary increases with no subsidy from the Water Levy Stabilization Provision. Options 2 and 3 have increasingly lower rates as they include higher contributions from the Water Levy Stabilization Provision.

Table 2. 2017 Metered Rate Water Options (net of discount)				
Customer Class	2016 Rates	Option 1 (Recommended)	Option 2	Option 3
Single-Family Dwelling (based on 315 m ³ average)	\$399.69	\$408.41 <i>\$8.72</i>	\$407.28 <i>\$7.59</i>	\$406.17 <i>\$6.48</i>
Townhouse (based on 210 m ³ average)	\$273.66	\$279.47 <i>\$5.81</i>	\$278.72 <i>\$5.06</i>	\$277.98 <i>\$4.32</i>
Apartment (based on 160 m ³ average)	\$190.07	\$194.50 <i>\$4.43</i>	\$193.93 <i>\$3.86</i>	\$193.37 <i>\$3.30</i>
Metered Rate (\$/m ³)	\$1.1317	\$1.1595 <i>\$0.0278</i>	\$1.1558 <i>\$0.0241</i>	\$1.1523 <i>\$0.0206</i>

Note: *Italicized numbers indicate the net increase from 2016 rates.*

Table 3. 2017 Flat Rate Water Options (net of discount)				
Customer Class	2016 Rates	Option 1 (Recommended)	Option 2	Option 3
Single-Family Dwelling	\$600.94	\$615.62 <i>\$14.68</i>	\$613.73 <i>\$12.79</i>	\$611.85 <i>\$10.91</i>
Townhouse	\$491.93	\$503.94 <i>\$12.01</i>	\$502.40 <i>\$10.47</i>	\$500.86 <i>\$8.93</i>
Apartment	\$316.99	\$324.73 <i>\$7.74</i>	\$323.73 <i>\$6.74</i>	\$322.74 <i>\$5.75</i>

The rates outlined in Tables 2 and 3 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 infrastructure funding levels at the general target identified in the “Ageing Infrastructure Planning – 2015 Update” report to meet the community’s long term needs.
- Maintains a \$0 impact on the Water Levy Stabilization Provision.
- Includes regularizing two new full-time Water Technician positions from current auxiliary and contract staff.

Option 2

- Represents the minimum increase necessary to maintain the current level of service.
- Maintains infrastructure funding levels at the general target identified in the “Ageing Infrastructure Planning – 2015 Update” report to meet the community’s long term needs.
- Includes a \$116,900 drawdown from the Water Levy Stabilization Provision.
- Includes regularizing two new full-time Water Technician positions from current auxiliary and contract staff.

Option 3

- Represents the minimum increase necessary to maintain the current level of service.
- Maintains infrastructure funding levels at the general target identified in the “Ageing Infrastructure Planning – 2015 Update” report to meet the community’s long term needs.
- Includes a \$233,800 drawdown from the Water Levy Stabilization Provision.
- Includes regularizing two new full-time Water Technician positions from current auxiliary and contract staff.

Recommended Option

Staff recommend the budgets and rates outlined under Option 2 for Water Services. This option maintains infrastructure funding levels in the target range identified in the “Ageing Infrastructure Planning – 2015 Update” report to meet the community’s long term needs, includes the Universal Water Meter Program for single-family homes that will be completed by the end of 2017, allows for volunteer water metering of multi-family homes, and includes an appropriate toilet rebate budget.

Given that the Metro Vancouver major projects are complete, the need to subsidize the water rate has diminished. Thus, staff recommend maintaining a \$0 impact on the Water Levy Stabilization Provision, allowing it to accumulate again until such time as Metro Vancouver introduces additional projects requiring that the rate be subsidized to level water rate spikes.

Sewer Utility**Table 4. Sewer Utility Budget**

Key Budget Areas	2016 Base Level Budget (Restated for Comparison)¹	Option 1 Non-Discretionary Increases	Option 2 (Recommended) Non-Discretionary Increases with \$53,300 transfer from Vehicle Charges to Overtime Salaries and Full- Time Grease Inspector	Option 3 Non-Discretionary Increases with \$500,000 for Additional Capital Infrastructure Replacement, \$53,300 transfer from Vehicle Charges to Overtime Salaries and Full- Time Grease Inspector
Salary	\$2,650,800	\$25,000	\$116,000	\$116,000
PW Materials/Equipment/Power Costs	\$1,591,800	\$71,000	\$71,000	\$71,000
Internal Shared Cost	\$260,400	\$6,400	\$6,400	\$6,400
Operating Expenditures	\$504,500	-\$1,500	-\$54,800	-\$54,800
GVS&DD O&M (Metro Vancouver)	\$19,412,600	\$726,400	\$726,400	\$726,400
GVS&DD Debt (Metro Vancouver)	\$365,500	\$68,800	\$68,800	\$68,800
Capital Infrastructure Replacement Program	\$5,256,400	\$0	\$0	\$500,000
Asset Management System	\$50,000	\$0	\$0	\$0
Firm Price/Receivable	\$610,000	\$3,900	\$3,900	\$3,900
Overhead Allocation	\$515,200	\$5,000	\$5,000	\$5,000
Total Base Level Expenditure Budget	\$31,217,200	\$32,122,200	\$32,159,900	\$32,659,900
Revenues				
Provision (Grease Inspector)	\$0	\$0	-\$37,700	-\$37,700
Provision (Rate Stabilization)	-\$500,000	\$0	\$0	\$0
Provision (OBI Adjustment)	-\$34,925	\$34,925	\$34,925	\$34,925
Investment Income	-\$152,000	\$0	\$0	\$0
Firm Price/Receivable	-\$610,000	-\$3,900	-\$3,900	-\$3,900
Property Tax for DD Debt (Metro Vancouver)	-\$365,500	-\$68,800	-\$68,800	-\$68,800
Total Base Level Revenue Budget	-\$1,662,425	-\$1,700,200	-\$1,737,900	-\$1,737,900
Net Budget	\$29,554,775	\$30,422,000	\$30,422,000	\$30,922,000
Net Difference Over 2016 Base Level Budget		\$867,225	\$867,225	\$1,367,225

¹ One-time increases in 2016 for emergency repair work are excluded for sake of comparison

The following is an explanation of the budget reductions and increases outlined in Table 4.

Public Works Expenses

Public Work expenses have increased due to factors beyond the City's control including:

- Projected salary increases for union agreements and step increases;
- BC Hydro rate increases (3.7%); and
- Equipment cost increases.

The reduction in Operating Expenditures is due to a decrease in postage cost.

Transfer from Vehicle Charges to Overtime Salaries (Options 2 and 3)

Based on trends from the past three years, there have been shortfalls within the Overtime Salaries budget due to unexpected storm events leading to emergency repair works and the need to attend to pump stations during power outages. Efficiencies in the Sewer Utility's use of fleet vehicles has led to a reduction in the number of vehicles required therefore staff recommend that the savings be transferred to Salaries in Options 2 (recommended) and 3. These options include a transfer of \$53,300 from the Vehicle budget to Overtime Salaries, with no net impact on the utility budget.

Grease Bylaw Inspector (Options 2 and 3)

The impact of grease on municipal sanitary sewer collection systems is an ongoing concern for the City of Richmond and Metro Vancouver. A key component of Richmond's grease mitigation program is through source control. Richmond's Drainage, Dyke and Sanitary System Bylaw No. 7551 and Metro Vancouver's Sewer Use Bylaw requires food sector establishments to have and maintain grease traps.

In 2008, per the 2008 Utility Budgets report dated October 25, 2007, Council approved funding of \$33,100 for a part-time Bylaw Enforcement staff member to ensure that grease interceptors are installed per the above bylaws in all new food sector buildings. Since then, increasing population has led to increasing amounts of grease within the City's sanitary system. The part-time officer can currently inspect approximately half of Richmond's food service businesses within a calendar year.

Included within Options 2 and 3 is a one-time transfer of \$37,000 from the Sewer Levy Stabilization Provision to change the part-time inspector to a full-time inspector for 2017. The Sewer Levy Stabilization Provision has a current balance of \$7.8 million. This option is recommended as it allows staff to assess the effectiveness of this increased level of service based on results observed in 2017. Staff will provide further recommendations to Council as part of the 2018 Utility Budgets and Rates Report.

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

The 2017 Metro Vancouver GVS&DD O&M levy has increased by 3.7% to \$20,138,948 for 2017. Richmond pays Metro Vancouver for bulk transmission and treatment of collected liquid

waste on a flat rate basis through the Metro Vancouver O&M levy, which accounts for approximately 65% of Richmond sewer utility rate and is a primary budget driver.

Metro Vancouver has adopted an overall sewer increase of 4% for Richmond in 2017. 3.7% is the Metro Vancouver's O&M levy increase that is recovered through the City's sewer utility rate. The remaining 0.3% is due to Metro Vancouver sewer debt, which is recovered through Richmond's tax system.

Potential future increases to Metro Vancouver costs include a variety of capital infrastructure projects, such as the Gilbert Trunk Sewer twinning project, and the Lions Gate and Iona Wastewater Treatment Plant upgrades. Metro Vancouver had previously projected 8% annual cost increases due to projected capital expenditures and is currently working on a new long-range financial projection.

Metered and Flat Rate Billing Revenues

Properties with a water meter are charged a metered sewer rate based on water consumption; and revenues are variable based on water use. The City's operational expenses as well as Metro Vancouver's O&M levy are fixed expenditures. As such, the sewer utility budget is sensitive to annual fluctuations in water consumption.

As identified in the GVWD Water Purchases section of this report, metered water consumption per unit has declined since 2014. In particular, consumption in multi-family dwellings is averaging down due to high efficiency fixtures in new units improving water use habits and unoccupied units, resulting in decreasing metered sewer revenues. Staff projections of metered sewer revenues for 2017 reflect the decrease in consumption observed in the past 2 years. This results in a corresponding increase in sewer utility rate to accommodate the fixed Metro Vancouver O&M levy and City operating expenses.

Staff will review potential options to reduce the impact of metered utility variability on the sanitary sewer revenues. This may include introduction of a fixed fee component to the rate, which would reduce the sensitivity of sewer utility revenues to fluctuations in water consumption patterns while continuing to incentivize residents to maintain water conservation efforts. Findings from this review will be presented for Council's consideration in a subsequent report.

Capital Infrastructure Replacement Program (Option 3)

Options 1 and 2 maintain the annual contribution to the sewer infrastructure capital replacement program at \$5.25 million. The "Ageing Infrastructure Planning – 2015 Update" report noted that the annual funding contribution required to support long-term sustainability is \$6.8 million. To reduce this gap between current and required funding, Options 3 includes an increase to the capital replacement program by \$0.5 million in order to reduce the gap between current and required funding. Option 2 is recommended to minimize increases to the sanitary utility rate given the 3.7% Metro Vancouver rate increase.

Impact on 2016 Sewer Rates

The impact of the three budget options on the sewer rates is shown in Tables 5 and 6. Table 5 identifies the impact of each option on metered customers; Table 6 identifies the impact on flat rate customers.

Table 5. 2017 Metered Rate Sewer Options (net of discount)				
Customer Class	2016 Rates	Option 1	Option 2 (Recommended)	Option 3
Single Family Dwelling (based on 315 m ³ average)	\$310.31	\$321.05 \$10.74	\$321.05 \$10.74	\$326.43 \$16.12
Townhouse (based on 210 m ³ average)	\$206.87	\$214.03 \$7.16	\$214.03 \$7.16	\$217.62 \$10.75
Apartment (based on 160 m ³ average)	\$157.62	\$163.07 \$5.45	\$163.07 \$5.45	\$165.81 \$8.19
Metered Rate (\$/m ³)	\$0.9851	\$1.0192 \$0.0341	\$1.0192 \$0.0341	\$1.0363 \$0.0512

Table 6. 2017 Flat Rate Sewer Options (net of discount)				
Customer Class	2016 Rates	Option 1	Option 2 (Recommended)	Option 3
Single Family Dwelling	\$403.93	\$417.89 \$13.96	\$417.89 \$13.96	\$424.90 \$20.97
Townhouse	\$369.58	\$382.35 \$12.77	\$382.35 \$12.77	\$388.76 \$19.18
Apartment	\$307.81	\$318.45 \$10.64	\$318.45 \$10.64	\$323.79 \$15.98

The rates outlined in Tables 5 and 6 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

- 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 (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.
- Facilitates the re-allocation of resources between Vehicle Charges and Overtime Salaries to better reflect program requirements with no impacts to the utility budget.

- Includes a one-time transfer of \$37,000 from the Sewer Levy Stabilization Provision to change the part-time Grease Inspector to a full-time inspector for 2017. This will enable staff to pilot the full-time inspection services and report back in 2017 with the results.

Option 3

- 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 \$6.8 million, as recommended in the “Ageing Infrastructure Planning – 2015 Update” report.
- Maintains a \$500,000 drawdown from the Sewer Levy Stabilization Provision minimize the impact of regional increases on sewer rates.
- Facilitates the re-allocation of resources between Vehicle Charges and Overtime Salaries to better reflect program requirements with no impacts to the utility budget.
- Includes a one-time transfer of \$37,000 from the Sewer Levy Stabilization Provision to change the part-time Grease Inspector to a full-time inspector for 2017

Recommended Option

Due to significant Metro Vancouver’s O&M levy increases and decreasing metered revenues resulting from decreasing water use, staff recommend maintaining the current \$5.25 million contribution to the Capital Infrastructure Replacement Program to limit further increases to sewer rates. The budget and rates outlined under Option 2 is recommended as it includes the re-allocation of resources to better meet program requirements, and facilitates a one-time change for the Grease Inspector to a full-time position without impacts to the utility rates.

Drainage and Diking Utility

The drainage and diking utilities were created to develop a reserve fund for drainage infrastructure replacements and dike upgrades. The objective, as outlined in the “Ageing Infrastructure Planning – 2015 Update” report, is to build the fund to an anticipated annual target contribution of approximately \$11.0 million, subject to on-going review of the drainage and diking infrastructure replacement requirements.

In 2003, Council adopted a starting net rate of \$10 per property for drainage infrastructure replacements with an increase of an addition \$10 each each year, and a net rate of \$10 per property for dike upgrades. This concluded in 2015 when funding for drainage infrastructure replacements reached the target range. In 2016, drainage and diking rates were increased for large, non-stratified ICI properties with lot areas greater than 800 m² to enhance equity amongst users, as outlined and adopted in the “2016 Utility Budgets and Rates” report dated October 21, 2015. Residential and smaller ICI properties received no drainage and diking rate increases in 2016.

Drainage Rate Equity (Drainage Rate Options)

When the City’s Drainage and Diking Utility was first introduced, a uniform rate was charged for properties of all sizes. In 2016, through Council’s adoption of the “2016 Utility Budgets and Rates” report, the City took the first step in a multi-year process to improve equity to the rate payers, as larger properties place a greater demand on the City’s drainage and diking infrastructure.

Option 2 furthers this process to double the rate (from \$270 to \$540 annually) for non-stratified ICI properties with areas above 10,000 m². This group of rate payers represents shopping malls and warehouses which contribute a significant portion to the City’s drainage system demands. There are no increases proposed for smaller ICI or residential properties. Staff will continue to review the phasing in of rate classes to enhance equity in future years, including a review of single-family versus multi-family rates.

Operation and Maintenance Funding

The Drainage and Diking Utility currently provides funding for future capital construction costs only and does not fund operating and maintenance costs. Drainage operating and maintenance costs are funded through the City’s operating budget. This creates misconceptions for residents that they are charged twice for drainage and diking services, as they pay for capital work through the utility budget and for operating and maintenance costs through the operating budget.

The 2016 drainage operating and maintenance program costs approximately \$4.7 million. With the phasing in of rate classes for equity enhancement, staff will review the possibility of transferring drainage operating and maintenance costs into the utility budget to ensure consistency and eliminate any misconception that there is duplication of charges. Results of this review will be presented to Council for consideration in a subsequent report.

Box Culvert Preventative Maintenance Program

Over the past few years, Council has supported individual capital projects related to box culvert repairs on No. 2 Road, No. 1 Road and No. 4 Road. Most recently, a necessary box culvert repair was identified at the intersection of No. 2 Road and Walton Road. This repair is required due to a box culvert failure resulting from ingress of fine material through deteriorated box culvert joints.

Staff have investigated the resources required to establish a preventative maintenance program. The City's drainage system has approximately 56 kilometres of concrete box culverts ranging in sizes from 0.7 m x 0.9 m to 4.4 m x 2.9 m. The box culverts were constructed 20-50 years ago. Preventative maintenance for box culverts includes flushing, inspection, grouting and crack repairs. The recommended preventative maintenance measures will enable a 10 year inspection cycle, which would extend the life cycle of the box culverts to realize the expected 75+ year replacement or major repair cycle.

Staff recommend introducing an additional level of service with respect to the box culvert preventative maintenance program through Option 2 in the Drainage and Diking Utility, with a budget impact of \$240,000 annually which includes three additional staff (\$215,000 in salaries, including overhead) plus \$25,000 for materials, supplies, and specialty contractors where necessary. Increases in the utility funding collected through Option 2 are sufficient to accommodate both the impacts of inflation as well as additional costs associated with the Box Culvert Preventative Maintenance Program.

Impact on 2017 Drainage and Diking Rates

Table 7. 2017 Drainage and Diking Net Rate Options							
Utility	2016 Rates		Option 1 – No Rate Increase		Option 2 – Rate Increase for Non-stratified Accounts Over 10,000 m ² Only (Recommended)		
	Non-Stratified ICI ¹ (Above 800 m ²)	All Other Accounts	Non-Stratified ICI ¹ (Above 800 m ²)	All Other Accounts	Non-Stratified ICI ¹ (Above 10,000 m ²)	Non-Stratified ICI ¹ (Between 800 m ² and 10,000 m ²)	All Other Accounts
Drainage	\$270.00	\$130.31	\$270.00	\$130.31	\$540.00	\$270.00	\$130.31
Diking	\$20.00	\$10.00	\$20.00	\$10.00	\$40.00	\$20.00	\$10.00
Total Drainage & Diking	\$290.00	\$140.31	\$290.00	\$140.31	\$580.00	\$290.00	\$140.31
Increase Over 2016	-	-	\$0	\$0	\$290	\$0	\$0
Budgeted Utility Funding	\$10,985,000		\$11,418,000		\$11,631,000		

¹ ICI includes industrial, commercial and institutional properties that are non-strata with lot areas as specified

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.

The increase in the utility budget for Option 1 from 2016's budget is a result of an increase in the total number of properties and accommodates the impacts of inflation. Option 2 includes

sufficient increases in funding to accommodate both the impacts of inflation and the Box Culvert Preventative Maintenance Program.

Advantages/Disadvantages of Various Options

Option 1

- Maintains infrastructure funding levels within the target range identified in the “Ageing Infrastructure Planning – 2015 Update” report to meet the community’s long term needs.

Option 2 (recommended)

- Increases the rate for non-stratified industrial, commercial and institutional (ICI) properties with lot areas above 10,000 m².
- Improves equity by increasing drainage rates for large ICI properties while maintaining rates for smaller ICI and residential properties. All residential, agricultural and stratified ICI properties will pay the same rate as in 2016.
- Maintains infrastructure funding levels within the target range identified in the “Ageing Infrastructure Planning – 2015 Update” report to meet the community’s long term needs.
- Includes a Box Culvert Preventative Maintenance program with three new positions and an annual cost of \$240,000.

Recommended Option

Option 2 is recommended as it improves equity by introducing a rate that requires larger ICI properties to contribute a larger amount to the utility. Stratified ICI, which most small businesses are, and all forms of residential properties would not see an increase to the drainage utility rate. This option delivers an increase to the fund that will account for both inflationary costs, meet the funding required by the Ageing Infrastructure Report for a sustainable utility, and support the recommended Box Culvert Preventative Maintenance Program. Funding for the drainage utility is expected to be \$10.7 million in 2017 while the diking utility funding is expected to be \$823,000 for the recommended option.

Solid Waste and Recycling

Table 8. 2017 Solid Waste & Recycling Budget				
Key Budget Areas	2016 Base Level Budget (Restated for Comparison)	Option 1 Non-Discretionary Increases	Option 2 (Recommended) Non-Discretionary Increases with Addition of Supervisor 3	Option 3 Non-Discretionary Increases with Addition of Supervisor 3 and \$300,000 Transfer for Rate Stabilization
Salaries	\$2,456,000	\$19,400	\$140,800	\$140,800
Contracts	\$8,171,800	\$10,200	\$10,200	\$10,200
Equipment/Materials	\$524,200	\$40,800	\$40,800	\$40,800
Metro Vancouver Disposal Costs	\$1,459,400	-\$218,400	-\$218,400	-\$218,400
Recycling Materials Processing	\$1,279,900	-\$4,100	-\$4,100	-\$4,100
Container Rental/Collection	\$151,100	\$3,000	\$3,000	\$3,000
Operating Expenditures	\$323,100	-\$12,200	-\$12,200	-\$12,200
Internal Shared Costs	\$334,700	\$8,000	\$8,000	\$8,000
Agreements	\$179,900	\$3,600	\$3,600	\$3,600
Rate Stabilization	\$87,500	\$403,400	\$282,000	\$582,000
Base Level Expenditure Budget	\$14,967,600	\$15,221,300	\$15,221,300	\$15,521,300
Revenues				
Recycling Material	-\$301,000	\$77,400	\$77,400	\$77,400
Garbage Tags	-\$17,500	\$0	\$0	\$0
Revenue Sharing Grant	-\$2,100	-\$400	-\$400	-\$400
MMBC Incentive	-\$1,426,100	-\$273,900	-\$273,900	-\$273,900
Base Level Revenue Budget	-\$1,746,700	-\$1,943,600	-\$1,943,600	-\$1,943,600
Net Budget	\$13,220,900	\$13,277,700	\$13,277,700	\$13,577,700
Net Difference Over 2016 Base Level Budget		\$56,800	\$56,800	\$356,800

The following is an explanation of the budget reductions and increases outlined in Table 8.

Salaries

All options include non-discretionary salary increases. Options 2 and 3 includes an additional position for a Supervisor 3 at a cost of \$81,450 plus overhead to support overseeing the increasing requirements and users at the Recycling Depot, as well as to support litter collection and illegal dumping operations. The addition of the Supervisor 3 position has no impact on the rates as it is recommended that surplus revenue from the MMBC program originally to be

transferred to rate stabilization be diverted to offset the total salary cost. The household impact of this position, if not for MMBC revenue contributions, would be \$1.55 for a single-family household.

The number of visits to the City's Recycling Depot has grown to approximately 145,000 per year. This translates to 560 visitors per day or over 50 per hour. Scheduling of staff and contractors at the Recycling Depot as well as managing increasing product stewardship programs (including MMBC, batteries, cell phone, light fixtures, etc.) have placed additional oversight demand on ensuring service levels can be maintained. There is also increasing demand to support waste management/recycling at City events (over 50 events, with 170,000 attendees in 2016). Increased illegal dumping associated with donation bins and WorkSafe BC requirements for asbestos containing drywall has also added to operational demands. Staff recommend Option 2, as it allows customer service at the Recycling Depot to be managed more effectively and avoids delays in responding to illegal dumping incidents.

Contracts

Contract cost increases relate to non-discretionary increases for solid waste and recycling collection services as outlined in Council-approved agreements and a small amount for growth in the number of units serviced.

Equipment/Materials

Equipment and material costs increases are primarily associated with additional costs for handling illegally dumped drywall. New requirements imposed by WorkSafe 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 testing, handling and disposal.

Metro Vancouver Disposal Costs

The regional tipping fee for local governments will remain unchanged at \$100/tonne in 2017, plus a \$5 per load transaction fee. The reduction in disposal costs noted in Table 8 is due largely to the new bi-weekly garbage cart program, introduced in April 2016. This program created a significant shift in waste being diverted from the waste stream to the organics stream.

In addition, and as expected, there are increased amounts of waste being diverted to litter containers in parks and City streetscapes and related program costs are included.

Recycling Materials Processing

Recycling material processing costs are reduced due to the change in 2017 whereby the City no longer has to incur consolidation fees for recycling materials. As previously reported to Council, staff have been in on-going negotiations with MMBC and have successfully negotiated a more convenient and less costly location in New Westminster for delivery of the City's recycling materials. This new arrangement took place in April, 2016. Recycling Materials Processing costs have decreased due to savings in the costs for processing blue box type materials, which more

than offsets an increase in the costs of processing organic materials, which have increased due to increased organics volumes.

Processing fees at the Recycling Depot are increased due to the overall decline in commodity market values for recycling materials. Due to increasing patron use of the Recycling Depot, there is increased demand for staffing resources to maintain service levels. The overall net effect is a minimal change at the high level for recycling material processing costs.

Container Rental/Collection and Operating Expenditures

Container rental/collection costs are increased slightly associated with Recycling Depot service costs.

Internal Shared/Agreements

Increases in Internal Shared Costs include salary increases which align with the Collective Agreement. Agreement costs are increased slightly based on the consumer price index and contractual increase with Vancouver Coastal Health Authority for the City's public health protection service agreement.

The recommended Solid Waste & Recycling budget also includes a full-time Sanitation & Recycling Assistant position to support the variety of new programs implemented, including bi-weekly garbage, multi-family organics recycling, MMBC program, etc. There is no financial impact to the utility budget as the funding was approved as part of implementation of these programs and only represents a consolidation of temporary functions into a single, regular full time position. There is no change in service level or increased staffing levels associated with this full time position as the work is currently being performed on a temporary full time basis by several staff.

Rate Stabilization (Option 3)

Rate stabilization costs have increased to offset anticipated increased MMBC revenue. Option 3 includes an additional \$300,000 transfer from provision for rate stabilization.

Revenues – General Solid Waste and Recycling Provision

Recycling Material Revenues

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

MMBC Revenue Incentive

The net MMBC revenue incentive is increased as a result of the new consolidation arrangement and to more closely align with projections. Overall, the MMBC program is expected to generate net revenue of approximately \$1 million for 2016 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 MMBC was made.

Impact on 2017 Rates

The impact of the budget options to ratepayers is provided in the tables which follow. In light of the implementation of bi-weekly garbage collection service in the first quarter of 2016, a variable rate structure was introduced. This allows residents the opportunity to subscribe to their desired size of garbage cart/container and the associated fee. The principal reason for the increase in 2017 relates to increased organics processing requirements due to additional waste being diverted to this recycling stream.

Table 9 provides total costs based on standard garbage cart sizes for single-family (240L) and townhouse (120L). Table 10 provides a more detailed breakdown of Option 2 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 to by each customer class is also shown for information.

Rates have been adjusted in 2017 to encourage smaller sized containers to promote waste reduction. Residents are able to reduce or increase the amount they pay for service based on the cart size they select for garbage collection service. The standard garbage cart size for townhouse is 120L; incentives to encourage the use of this smaller size are reflected within the Townhouse rates shown in Table 9. Apartments are assumed to be on City weekly organics collection service, but not on City garbage collection service, and are not affected by the adjustments in City garbage service fees.

Table 9. 2017 Solid Waste and Recycling Rate Options (net of discount)				
Customer Class	2016 Rates	Option 1	Option 2 (Recommended)	Option 2
Single Family Dwelling (Standard 240L Cart)	\$276.25	\$285.10 \$8.85	\$285.10 \$8.85	\$289.12 \$12.87
Townhouse (Standard 120L Cart)	\$217.25	\$213.60 (\$3.65)	\$213.60 (\$3.65)	\$217.62 \$0.37
Apartment	\$86.85	\$94.95 \$8.10	\$94.95 \$8.10	\$98.47 \$11.62
Business Rate	\$27.95	\$29.31 \$1.36	\$29.31 \$1.36	\$30.11 \$2.16

Table 10. 2017 Single-Family and Townhome Net Rates by Garbage Cart Size				
Cart Size	Single Family		Townhomes	
	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	\$248.10	5%	\$191.60	13%
120L	\$270.10	12%	\$213.60	78%
240L	\$285.10	78%	\$228.60	8%
360L	\$381.10	5%	\$324.60	1%

As noted previously within the water and sewer sections, the above rates are net rates and will be increased by 10% in the rate amending bylaws in accordance with the bylaw early payment discount provisions.

Regional Issues

In 2017, tipping fees are expected to remain unchanged for waste disposal. Recycling fees for Source-Separated Organic Waste, Green Waste and Clean wood at the North Shore Transfer Station has reduced by 5.6%, while the surcharge for Hazardous and Operational Impact Materials and Product Stewardship materials has increased by 30%. GVS&DD's costs of providing dedicated recycling depots at the North Shore and Coquitlam Transfer Stations are to be apportioned among participating municipalities on a population basis.

Other changes in the 2017 Tipping Fee Bylaw effective July 1, 2017 include improved weigh scale precision, changes in Peak Hours definition, changes in surcharge thresholds for Food Waste and Clean Wood, a new surcharge for Unsecured Loads, the addition of Personal Hygiene Products to Hazardous and Operational Impact Materials, and the removal of ban exemption for Wax Paper and Cardboard.

Advantages/Disadvantages of Various Options

Option 1

- Represents the minimum increase necessary to maintain the current level of service.

Option 2 (Recommended)

- Represents the minimum increase necessary to maintain the current level of service.
- Includes a new Supervisor 3 position to oversee increasing demands at the Recycling Depot and Litter Collection operations at a cost of \$81,450 plus fringe to a total of \$121,360, to be offset by additional MMBC revenues for a total impact of \$0 to the utility budget.

Option 3

- Represents the minimum increase necessary to maintain the current level of service.
- Includes a new Supervisor 3 position to oversee increasing demands at the Recycling Depot and Litter Collection operations at a cost of \$81,450 plus fringe to a total of \$121,360, to be offset by additional MMBC revenues for a total impact of \$0 to the utility budget.
- Contributes \$300,000 to the Sanitation & Recycling Provision.

Recommended Option

Staff recommend the budget and rates outlined under Option 2 for Solid Waste and Recycling. This option provides full funding for all existing programs and changes as outlined in this report, and allows the Recycling Depot and illegal dumping incidents to be managed more effectively, with no net impact to rates.

Total Recommended 2017 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 2 is recommended for Sewer
- Option 2 is recommended for Drainage and Diking
- Option 2 is recommended for Solid Waste and Recycling

Table 11 summarizes the estimated total metered rate utility charge, based on average water and sewer consumption. Table 12 summarizes the total flat rate utility charge.

Table 11. 2017 Estimated Total Net Rates to Metered Customers		
Customer Class	2016 Estimated Net Metered Rates	2017 Estimated Net Metered Rates (Recommended)
Single-Family Dwelling (based on 315 m ³ average)	\$1,126.56	\$1,154.87 \$28.31
Townhouse (on City garbage service) (based on 210 m ³ average)	\$838.09	\$847.41 \$9.32
Townhouse (not on City garbage service) (based on 210 m ³ average)	\$737.09	\$758.91 \$21.82
Apartment (based on 160m ³ average)	\$574.85	\$592.83 \$17.98
Commercial/Industrial		
Metered Water (\$/m ³)	\$1.1317	\$1.1595 \$0.0278
Metered Sewer (\$/m ³)	\$0.9851	\$1.0192 \$0.0341
Business: Garbage	\$27.95	\$29.31 \$1.36
Business: Drainage & Diking (800 m ² to 10,000 m ²)	\$290.00	\$290.00 \$0

Table 12. 2017 Total Net Rates to Flat Rate Customers		
Customer Class	2016 Net Flat Rates	2017 Net Flat Rates (Recommended)
Single-Family Dwelling	\$1,412.37	\$1,458.92 \$46.55
Townhouse (on City garbage service)	\$1,219.07	\$1,240.19 \$21.12
Townhouse (not on City garbage service)	\$1,118.07	\$1,151.69 \$33.62
Apartment	\$851.96	\$878.44 \$26.48

As noted previously, the rates presented in this report reflect the net rates. This is the actual cost that property owners pay after the 10% discount incentive is applied, as outlined in the rate bylaws. The discount incentive provided in the bylaws is a very effective strategy in securing utility payments in a timely manner. To ensure full cost recovery while maintaining the payment incentive, the bylaw rates are adjusted by the discount amount. The recommended rates outlined above result in gross rate charges to residents as outlined in Attachment 2. These rates would be reflected in the amending bylaws for each utility area, should they be approved by Council.

Flat Rate and Metered Customers

The residential metering program has been successful in transitioning 93% of single-family households from flat rates to metered rates. The majority of townhouses and apartments are still on flat rate; 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 13:

Table 13. Flat Rate and Metered Property Unit Counts at Mid-Year				
	(2016 percentages)	2016 Counts	2017 Counts (Estimated)	Difference
Single-Family Residential	Flat Rate (11%)	3,112	1,203	-1,909
	Metered (89%)	25,448	27,873	2,425
Townhouse	Flat Rate (70%)	11,696	11,446	-250
	Metered (30%)	4,902	5,321	419
Apartment	Flat Rate (54%)	15,312	14,912	-400
	Metered (46%)	13,153	14,973	1,820
Total Residential Units		73,623	75,728	2,105
Commercial Units	Metered	3,547	3,547	0
Farms	Metered	47	47	0

Comparison of 2016 City Utility Rates to Other Major Household Expenses

In relation to other common household expenses, City utility expenses represent good value when compared with other daily major household expenses, such as telephone, cable, internet, electricity, transit and others. Water, sewer, garbage and drainage utility services are fundamental to a quality lifestyle for residents as well as necessary infrastructure to support the local economy. The following Figure 1 illustrates the value of these services when compared to other common household expenses.

Figure 1. Cost Comparison of Main Household Expenses for a Single-Family Dwelling

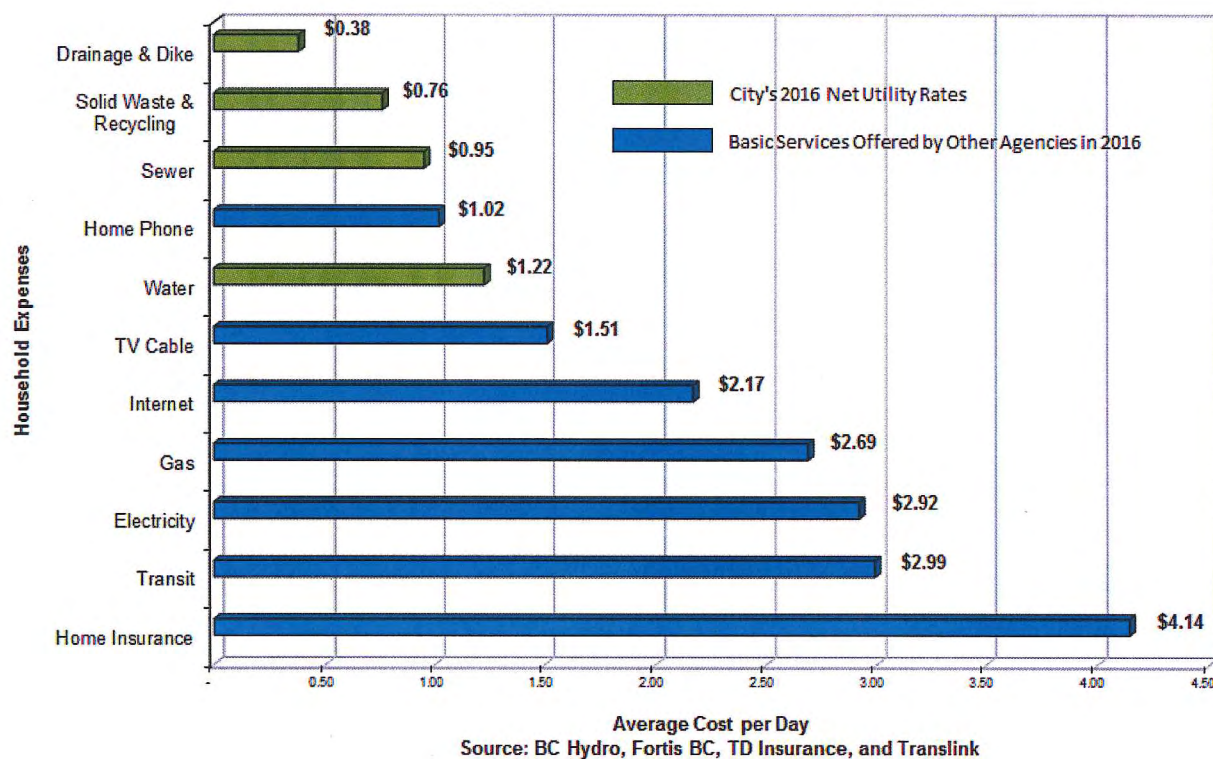


Figure 1 Reference REDMS 5174947

Financial Impact

The budgetary 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 2017 utility budgets and rates stem from estimated Metro Vancouver increases for bulk water purchase and the sewer levy as well as ongoing reductions in metered consumption. Staff recommend the budget and rates options as follows:


- Option 1 is recommended for Water
- Option 2 is recommended for Sewer
- Option 2 is recommended for Drainage and Diking
- Option 2 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.

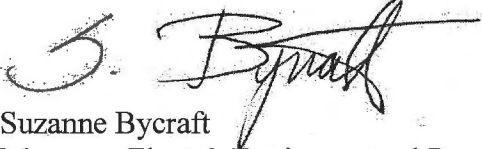
Conclusion

This report presents the 2017 proposed utility budgets and rates for City services relating to the provision of water, the connection of wastewater, 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, power and postage increases, etc. Regional costs are expected to continue increasing to meet demands for high quality drinking water and sewer treatment.

Staff recommend 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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LB:bn

- Att. 1: 2017 Estimated Total Net Rate to Metered Customers
2: 2017 Annual Utility Charges – Recommended Gross Rates per Bylaw

Attachment 1

2017 Estimated Total Net Rates to Metered Customers

Customer Class	2016 Estimated Net Metered Rates	2017 Estimated Net Metered Rates (Recommended)
Single-Family Dwelling (based on 315 m ³ average)	\$1,126.56	\$1,154.87 \$28.31
Townhouse (on City garbage service) (based on 210 m ³ average)	\$838.09	\$847.41 \$9.32
Townhouse (not on City garbage service) (based on 210 m ³ average)	\$737.09	\$758.91 \$21.82
Apartment (based on 160m ³ average)	\$574.85	\$592.83 \$17.98
Commercial/Industrial		
Metered Water (\$/m ³)	\$1.1317	\$1.1595 \$0.0278
Metered Sewer (\$/m ³)	\$0.9851	\$1.0192 \$0.0341
Business: Garbage	\$27.95	\$29.31 \$1.36
Business: Drainage & Diking (800 m ² to 10,000 m ²)	\$290.00	\$290.00 \$0

Attachment 2

2017 Annual Utility Charges – Recommended Gross Rates per Bylaw (Estimated Metered and Actual Flat Rates)

	Water	Sewer	Drainage/ Diking	Garbage/ Recycling	Total
Metered (Based on Average Consumption)					
Single-Family Dwelling	\$453.79	\$356.72	\$155.90	\$316.78	\$1,283.19
Townhouse (with City garbage)	\$310.52	\$237.81	\$155.90	\$237.33	\$941.56
Townhouse (no City garbage)	\$310.52	\$237.81	\$155.90	\$139.00	\$843.23
Apartment	\$216.11	\$181.19	\$155.90	\$105.50	\$658.70
Flat Rate (Actual)					
Single-Family Dwelling	\$684.02	\$464.32	\$155.90	\$316.78	\$1,621.02
Townhouse (with City garbage)	\$559.93	\$424.83	\$155.90	\$237.33	\$1,377.99
Townhouse (no City garbage)	\$559.93	\$424.83	\$155.90	\$139.00	\$1,279.66
Apartment	\$360.81	\$353.83	\$155.90	\$105.50	\$976.04
General – Other/Business					
Metered Water (\$/m ³)	\$1.2883				
Metered Sewer (\$/m ³)		\$1.1324			
Business: Garbage				\$32.57	
Non-Stratified ICI: Drainage & Diking (800 m ² to 10,000 m ²)			\$322.23		