



City of Richmond

Report to Committee

To: General Purposes Committee
From: Andrew Nazareth
General Manager, Finance & Corporate Services
Robert Gonzalez, P.Eng.
General Manager, Engineering & Public Works
Date: October 7, 2014
File: 10-6060-00/Vol 01
Re: 2015 Utility Budgets and Rates

Staff Recommendation

That the 2015 Utility Budgets, as outlined under Option 1 for Water and Sewer, Option 3 for Drainage and Diking, and Option 1 for Solid Waste and Recycling, as contained in the staff report dated October 7, 2014 from the General Manager of Finance & Corporate Services and General Manager of Engineering & Public Works, be approved as the basis for establishing the 2015 Utility Rates and preparing the 5 Year Financial Plan (2015-2019) Bylaw.

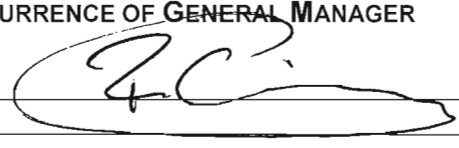

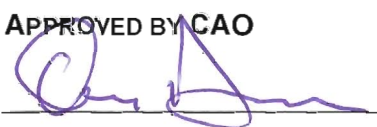


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General Manager, Finance
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Robert Gonzalez, P.Eng.
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Att. 1

REPORT CONCURRENCE	
CONCURRENCE OF GENERAL MANAGER 	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: 
APPROVED BY CAO 	

Staff Report

Origin

This report presents the recommended 2015 utility budgets and rates for Water, Sewer, Drainage & Diking and Solid Waste & Recycling. The utility rates need to be established by December 31, 2014, in order to facilitate charging from January 1, 2015.

Analysis

The 2015 budget has been prepared in advance of Metro Vancouver (MV) announcing their 2015 rates. MV rates will be announced in late October or early November. Staff estimated the 2015 MV rate increases based on a combination of MV's projections and actual historic rate increases. If MV increases are substantially different from the estimated rates, staff will report back to Council for further consideration. MV rate increases used to develop the City's 2015 utility rates are as follows:

- The estimated 2015 Greater Vancouver Water District (GVWD) increase is 5%. While MV's forecasted increase is 8.1% for 2015, their actual increases have been 6% or less in the last few years, whereas projections were 7% or more.
- The estimated 2015 Greater Vancouver Sewerage and Drainage District (GVS&DD) sewer levy increase is 6%. Based on historical projections and actual levies charged by Metro Vancouver, a higher increase than Metro's forecasted 4% is used in setting the City's sewer levy.
- MV solid waste tipping fees are projected to increase to \$109 per tonne for 2015 (from \$108 in 2014).

Another component of the utility budget relates to replacement of ageing/deteriorating municipal infrastructure. As noted in the "Ageing Infrastructure Planning – 2013 Update" report, dated August 14, 2013, increases to the annual capital funding contributions for sanitary and drainage & diking are required to meet long-term infrastructure replacement targets, whereas the required annual capital replacement funding contribution for the water distribution system is at a sustainable level.

Recognizing the challenges of increasing costs outside of the City's control and those associated with maintaining City infrastructure, staff have presented various budget and rate options for 2015. Budgets and rates are presented under 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 tables:

- | | |
|---------------------|----------------------------|
| • Water | • Sewer |
| • Drainage & Diking | • Sanitation and Recycling |

The concluding summary of proposed rates for 2015 is shown in Tables 15 and 16.

Water Utility

Table 1. Water Utility Budget				
Key Budget Areas	2014 Base Level Budget	Option 1 (Recommended) Non-Discretionary Increases	Option 2 Non-Discretionary Increases with 50% Rate Stabilization	Option 3 Non-Discretionary Increases with 0% Rate Stabilization
2014 OBI Adjustment	\$300			
Salary	\$5,049,500	\$120,000	\$120,000	\$120,000
PW Materials/Equipment/Power Costs	\$1,641,400	\$28,000	\$28,000	\$28,000
Vehicles Charges	\$687,400	\$34,000	\$34,000	\$34,000
Operating expenditures	\$368,400	\$4,500	\$4,500	\$4,500
Water Meter Reading and Maintenance	\$349,100	\$77,000	\$77,000	\$77,000
Toilet Rebate Program	\$100,000	\$0	\$0	\$0
GVRD Water Purchases (MV)	\$23,525,000	\$1,117,900	\$1,117,900	\$1,117,900
Capital Infrastructure Replacement Program	\$7,500,000	\$0	\$0	\$0
Asset Management System	\$50,000	\$0	\$0	\$0
Firm Price/Receivable	\$1,781,200	\$35,700	\$35,700	\$35,700
Residential Water Metering Program	\$1,320,000	\$0	\$0	\$0
Overhead Allocation	\$864,600	\$0	\$0	\$0
Total Base Level Budget	\$43,236,900	\$44,654,000	\$44,654,000	\$44,654,000
Revenues				
Provision (Rate Stabilization)	-\$750,000	\$0	\$375,000	\$750,000
Investment	-\$427,000	\$0	\$0	\$0
Firm Price/Receivable	-\$1,781,200	-\$35,700	-\$35,700	-\$35,700
Meter Rental	-\$1,677,100	-\$197,400	-\$197,400	-\$197,400
YVR Maintenance	-\$28,900	-\$600	-\$600	-\$600
Provision (Toilet Rebate/Flushing)	-\$251,100	\$0	\$0	\$0
Provision (OBI Adjustment)	-\$300	\$300	\$300	\$300
Miscellaneous	-\$10,000	-\$40,000	-\$40,000	-\$40,000
Net Budget	\$38,311,300	\$39,455,000	\$39,830,000	\$40,205,000
Net Difference Over 2014 Base Level Budget		\$1,143,700	\$1,518,700	\$1,893,700

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

Operating Expenditures

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

- Salary increases as per union agreements;
- BC Hydro rate increases;
- Increasing material costs;
- Postage rate increases; and
- Vehicle cost increases, including fuel and insurance increases.

GVWD Water Purchases – Metro Vancouver

Water is purchased from MV (GVWD) on a unit volume basis. The MV 2015 water rate will not be announced until it is approved by the MV Board in late October or early November. Staff estimate that MV will increase water rates by 5%. MV projections indicate water rates will rise by 8.1%; however, as documented in Table 2, MV actual water rate increases have generally been lower than their projections. On this basis, staff have utilized a 5% MV increase to develop the water rates presented in this report. If the actual MV water rate increase is substantially different, staff will report back to Council for further consideration.

Table 2. Metro Vancouver Projected vs. Actual Water Rate Increases

Year	2010	2011	2012	2013	2014
MV Projected Increase	12.30%	17.80%	13.44%	7.50%	7.00%
MV Actual Increase	11.90%	13.98%	5.88%	1.23%	4.00%

The City pays MV for bulk water based on a unit rate times the volume of water delivered to the City. The volume of water the City purchases from MV has a degree of variability, primarily due to weather impacts on summer irrigation demand. 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 approximately plus or minus 5%, and a similar variability can be anticipated in the 2015 water purchase.

Water conservation efforts, including water metering and toilet rebates, have helped limit increases to bulk water purchases despite a rapidly growing population, and this has contributed to lower utility rate increases. To date in 2014, water purchases are below the five-year average. 2014 has been a lower precipitation year, which would typically generate above average water use due to increased irrigation demand. However, residents are clearly improving their water use habits as it becomes measured in an increasing number of homes.

Capital Infrastructure Replacement Program

There are no proposed increases for contribution to water capital infrastructure replacement under any of the proposed options 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 – 2013 Update” report, dated August 14, 2013, the long-term annual water infrastructure replacement funding requirement is \$7.2 million. A reduction in the annual funding contribution is not recommended as inflation will reduce the 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, if required.

Residential Water Metering Program

With an increasing number of residential meters in place, an increase to the operating budget for meter reading and maintenance is recommended. The proposed budget allocates \$77,000 in increased funding for meter reading and maintenance. This increased operating cost is offset by increasing meter rental revenues generated by new single-family and multi-family water meter accounts from changeovers and new residential units and does not impact overall rates.

Recommended funding for single-family and multi-family water meter installations is similar to 2014, with \$1.32 million allocated from water rates and \$600,000 allocated from the water capital program.

Universal Single-Family Water Metering: The Universal Single-Family Water Meter Program is in progress and will be completed in 4 years. Approximately 1,800 single-family water meters will be installed in 2015.

Multi-Family Water Meter Program: The Multi-Family Water Meter Program has been very successful. To date, the City has received approval from 135 volunteer complexes (comprising 8,300 multi-family dwelling units) to install water meters. Of these, 130 complexes have been completed (8,128 units), including 48 apartment complexes (5,115 units) and 77 townhouse complexes (2,357 units). These voluntary installations will continue to be funded through the water metering program funding allocation.

Water Rate Stabilization Contribution (Water Rate Options)

The water rate stabilization provision was established by Council as a funding source to offset anticipated spikes in regional water purchase costs. Capital projects associated with the Capilano-Seymour Water Filtration Plant are substantially complete and the forecasted spike in rate increases is being realized. The base level budget currently reflects a \$750,000 drawdown from the water rate stabilization fund. Option 1 (recommended) maintains the \$750,000 drawdown of the rate stabilization fund, while Options 2 and 3 include reducing the drawdown to \$375,000 and \$0 respectively.

By the end of 2014, the water rate stabilization provision will have a balance of \$4.4 million plus any surplus that is appropriated to this provision at year-end.

Regional Issues

The MV water rate increases support the drinking water treatment program and transmission improvement programs. MV's current four-year projections for the regional water rate are outlined in Table 3.

Table 3. Metro Vancouver Bulk Water Rate Projections				
	2015	2016	2017	2018
Projected MV Water Rate (per m ³)	\$.6806	\$.7344	\$.7976	\$.8367
% Increase Over Prior Year	8.1%	7.9%	8.6%	4.9%

Impact on 2015 Water Rates

The impact of the three budget options on water rates is shown in Tables 4 and 5. Table 4 shows the various options for metered rate customers; Table 5 shows the options for flat rate customers.

Option 1 (recommended) results in the lowest rates as it includes the highest rate stabilization provision drawdown. Options 2 and 3 have increasingly higher rates as they include lower contributions from the rate stabilization provision. The percentage increase of the recommended Option 1 is lower than the MV increase, as efficiencies in City operations and well-managed budgets have allowed the City to mitigate cost impacts from MV.

Table 4. 2015 Metered Rate Water Options (net of discount)				
Customer Class	2014 Rates	Option 1 (Recommended)	Option 2	Option 3
Single-Family Dwelling (based on 325 m ³ average)	\$360.62	\$364.29 \$3.67	\$367.90 \$7.28	\$371.54 \$10.92
Townhouse (based on 205 m ³ average)	\$227.47	\$229.78 \$2.31	\$232.06 \$4.59	\$234.36 \$6.89
Apartment (based on 164 m ³ average)	\$181.97	\$183.83 \$1.86	\$185.65 \$3.68	\$187.48 \$5.51
Metered Rate (\$/m ³)	\$1.1096	\$1.1209 \$.0113	\$1.1320 \$.0224	\$1.1432 \$.0336

*Metered rates above do not include base rates.

Table 5. 2015 Flat Rate Water Options (net of discount)				
Customer Class	2014 Rates	Option 1 (Recommended)	Option 2	Option 3
Single-Family Dwelling	\$589.20	\$595.17 \$5.97	\$601.10 \$11.90	\$607.03 \$17.83
Townhouse	\$482.32	\$487.21 \$4.89	\$492.06 \$9.74	\$496.92 \$14.60
Apartment	\$310.80	\$313.95 \$3.15	\$317.08 \$6.28	\$320.20 \$9.40

The rates outlined in Tables 4 and 5 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.
- Updates water operating expenditures to include \$77,000 for water meter reading and maintenance.
- Maintains the \$750,000 subsidy from the water rate stabilization fund.

Option 2

- Represents the minimum increase necessary to maintain the current level of service.
- Updates water operating expenditures to include \$77,000 for water meter reading and maintenance.
- Reduces the subsidy from the water rate stabilization fund to \$375,000.

Option 3

- Represents the minimum increase necessary to maintain the current level of service.
- Updates water operating expenditures to include \$77,000 for water meter reading and maintenance.
- Reduces the subsidy from the water rate stabilization fund to \$0.

Recommended Option

Staff recommend the budgets and rates outlined under Option 1 for Water Services. This option maintains infrastructure funding levels above those identified in the “Ageing Infrastructure Planning – 2013 Update” report, includes the universal water metering program for single-family homes that will be completed in 2018, and allows for volunteer water metering of multi-family homes. It includes an appropriate toilet rebate budget and maintains a \$750,000 drawdown of the rate stabilization fund to minimize rate increases.

Sewer Utility

Table 6. Sewer Utility Budget				
Key Budget Areas	2014 Base Level Budget	Option 1 (Recommended) Non-Discretionary Increases	Option 2 Non-Discretionary Increases with 50% Rate Stabilization	Option 3 Non-Discretionary Increases with 0% Rate Stabilization
2014 OBI Adjustment	\$20,000			
Salary	\$2,474,500	\$52,600	\$52,600	\$52,600
PW Materials/Equipment/ Power Costs	\$1,366,300	\$78,700	\$78,700	\$78,700
Vehicle Charges	\$474,600	-\$47,800	-\$47,800	-\$47,800
Internal Shared Costs	\$197,600	\$3,200	\$3,200	\$3,200
Operating expenditures	\$145,800	\$5,600	\$5,600	\$5,600
GVS&DD O&M (MV)	\$18,867,900	\$1,132,100	\$1,132,100	\$1,132,100
GVS&DD Debt (MV)	\$85,700	\$0	\$0	\$0
Capital Infrastructure Replacement Program	\$4,256,400	\$0	\$0	\$0
Asset Management System	\$50,000	\$0	\$0	\$0
Firm Price/Receivable	\$586,300	\$13,900	\$13,900	\$13,900
Overhead Allocation	\$498,200	\$0	\$0	\$0
Total Base Level Budget	\$29,023,300	\$30,261,600	\$30,261,600	\$30,261,600
Revenues				
Provision (Rate Stabilization)	-\$500,000	\$0	\$250,000	\$500,000
Provision (OBI Adjustment)	-\$20,000	\$20,000	\$20,000	\$20,000
Investment	-\$166,000	\$0	\$0	\$0
Firm Price/Receivable	-\$586,300	-\$13,900	-\$13,900	-\$13,900
Property Tax for DD Debt (MV)	-\$85,700	\$0	\$0	\$0
Net Budget	\$27,665,300	\$28,909,700	\$29,159,700	\$29,409,700
Net Difference Over 2014 Base Level Budget		\$1,244,400	\$1,494,400	\$1,744,400

A description explaining the increases and budget reductions in each of the areas identified above is described below.

Operating Expenditures

Operating expenses have increased due to factors beyond the City's control, including:

- Salary increases as per union agreements;
- BC Hydro rate increases;
- Increasing materials costs; and
- Vehicle cost increases, including fuel and insurance increases.

GVS&DD Operating and Maintenance Costs – Metro Vancouver

Richmond pays MV (GVS&DD) for bulk transmission and treatment of collected liquid waste on a flat rate basis through a sewer levy. The 2015 MV sewer levy charges will not be announced until they are approved by the MV Board in late October. While MV has projected a 3.0% sewer charge increase for 2015, staff have utilized an estimated 6% increase to the sewer levy based on previous MV projections and increases (Table 7). If MV sewer levy increases are substantially different than the staff estimate, staff will report to Council for further consideration.

Table 7. Metro Vancouver Projected Sewer Charge Increase vs. Actual Sewer Levy Increase					
Year	2010	2011	2012	2013	2014
MV Projected Overall Increase	2.50%	6.00%	6.00%	3.00%	3.00%
MV Actual Sewer Levy Increase	0.47%	9.33%	7.68%	10.11%	8.95%

The difference between MV's estimated sewer charge increases and the actual sewer levy increases is largely driven by a MV policy regarding retiring debt. MV sewer charges have two components – sewer debt charges and sewer levy charges. When sanitary sewer debt is retired or matures, MV transfers the value of the retired debt charge to the sewer levy. In Richmond, the sewer debt charges are recovered through property tax while the sewer levy charges are recovered through sewer utility rates. The shift in MV sewer charges reduces the recovery from property tax, but increases the recovery from the sewer utility rates.

Capital Infrastructure Replacement Program

All options maintain the annual contribution to the sewer infrastructure capital replacement program at \$4.3 million. The "Ageing Infrastructure Planning – 2013 Update" report noted that the annual funding contribution required to support long-term sustainability is \$6.4 million. Staff recommend the funding level be maintained at \$4.3 million at this time given the significant anticipated MV cost increase.

Sewer Rate Stabilization Contribution (Sewer Rate Options)

The sewer rate stabilization provision was established by Council as a funding source to offset significant spikes in regional sewer treatment and capacity costs. The sewer rate stabilization provision is projected to have a \$6.5 million balance by the end of 2014. Any surplus in the sewer operating budget at the end of 2014 will be appropriated to add to this balance.

Option 1 maintains the \$500,000 drawdown on the sewer rate stabilization fund to partially offset MV O&M increases. Options 2 and 3 reduce the drawdown to \$250,000 and \$0, respectively.

Regional Issues

Table 8 lists MV's projected sewer charge increases for 2015 through 2018. The main budget drivers impacting the projected increase in MV 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. MV projections indicate a 4.0% sewer charge increase (combined debt reduction and sewer levy cost increases) for 2015. Staff estimate the sewer levy, which is supported by the City's utility rates, will increase by 6% in 2015 as MV retires debt, which is supported by tax rates, and adds that value to the sewer levy.

Table 8. Metro Vancouver Sewer Charge Projections				
	2015	2016	2017	2018
Projected MV Sewer Charge per Household	\$183	\$192	\$203	\$216
% Increase Over Prior Year	4%	5%	6%	6.5%

Impact on 2015 Sewer Rates

The impact of the three budget options on the sewer rates is shown in Tables 9 and 10. Table 9 identifies the impact of each option on metered customers; Table 10 identifies the impact on flat rate customers.

Table 9. 2015 Metered Rate Sewer Options (net of discount)				
Customer Class	2014 Rates	Option 1 (Recommended)	Option 2	Option 3
Single Family Dwelling (based on 325 m ³ average)	\$313.46	\$316.58 \$3.12	\$319.35 \$5.89	\$322.14 \$8.68
Townhouse (based on 205 m ³ average)	\$197.72	\$199.69 \$1.97	\$201.43 \$3.71	\$203.20 \$5.48
Apartment (based on 164 m ³ average)	\$158.18	\$159.75 \$1.57	\$161.15 \$2.97	\$162.56 \$4.38
Metered Rate (\$/m ³)	\$.9645	\$0.9741 \$.0096	\$.9826 \$.0181	\$.9912 \$.0267

Table 10. 2015 Flat Rate Sewer Options (net of discount)				
Customer Class	2014 Rates	Option 1 (Recommended)	Option 2	Option 3
Single Family Dwelling	\$395.45	\$399.39 \$3.94	\$402.88 \$7.43	\$406.37 \$10.92
Townhouse	\$361.83	\$365.43 \$3.60	\$368.62 \$6.79	\$371.81 \$9.98
Apartment	\$301.35	\$304.35 \$3.00	\$307.01 \$5.66	\$309.66 \$8.31

The rates outlined in Tables 9 and 10 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.
- Does not meet the City's long-term infrastructure plan to increase the capital program for replacement of ageing infrastructure. Capital replacement remains fixed at \$4.25 million for 2015, which represents an annual \$2.15 million shortfall from the funding recommended in the "Ageing Infrastructure Planning – 2013 Update" report. The ultimate objective is to build the annual infrastructure replacement for sewer to \$6.4 million.
- Utilizes a \$500,000 drawdown from the sewer levy stabilization account to minimize the impact of regional increases on sewer rates.

Option 2

- Represents the minimum increase necessary to maintain the current level of service.
- Does not meet the City's long-term infrastructure plan to increase the capital program for replacement of ageing infrastructure. Capital replacement remains fixed at \$4.25 million for 2015, which represents an annual \$2.15 million shortfall from the funding recommended in the "Ageing Infrastructure Planning – 2013 Update" report. The ultimate objective is to build the annual infrastructure replacement for sewer to \$6.4 million.
- Includes a \$250,000 reduction in rate stabilization drawdown.

Option 3

- Represents the minimum increase necessary to maintain the current level of service.
- Does not meet the City's long-term infrastructure plan to increase the capital program for replacement of ageing infrastructure. Capital replacement remains fixed at \$4.25 million for 2015, which represents an annual \$2.15 million shortfall from the funding recommended in the "Ageing Infrastructure Planning – 2013 Update" report. The ultimate objective is to build the annual infrastructure replacement for sewer to \$6.4 million.
- Includes a \$500,000 reduction in rate stabilization drawdown.

Recommended Option

In light of the considerable impact of the MV operations and maintenance charges, staff recommend the budgets and rates outlined under Option 1 for Sewer Services.

Drainage and Diking Utility

Table 11. 2015 Drainage and Diking Net Rate Options				
Utility Area	2014 Rates	Option 1	Option 2	Option 3 (Recommended)
Drainage	\$120.31	\$120.31	\$125.31	\$130.31
Diking	\$10.00	\$10.00	\$10.00	\$10.00
Total Drainage & Diking	\$130.31	\$130.31	\$135.31	\$140.31
<i>Increase Over 2014</i>		<i>\$0</i>	<i>\$5.00</i>	<i>\$10.00</i>

The rates outlined in Table 11 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.

Background

Drainage

In 2003, a drainage utility was created to develop a reserve fund for drainage infrastructure replacement costs. The objective, as outlined in the “Ageing Infrastructure Planning – 2013 Update” report, is to build the fund to an anticipated annual contribution of approximately \$10.4 million, subject to ongoing review of the drainage infrastructure replacement requirements.

As adopted by Council in 2003, the rate started at \$10 (net) per property and is increased an additional \$10 each year until such time as the \$10.4 million annual reserve target is reached. While \$10.4 million is the optimum annual target, the Ageing Infrastructure report identifies a target range that could be acceptable based on a sensitivity analysis of contributing variables. The lower bound of the sustainable funding range is \$9.4 million and Richmond will cross this threshold in 2015 if Council chooses to continue the practice of increasing rates by \$10 (net) per year (Option 3).

Option 1 presents no increase from 2014; Option 2 has an increase of \$5; Option 3 (recommended) includes the full increase of \$10, as per prior Council approvals. The recommended increase under Option 3 will result in approximately \$9.7 million in annual reserve contributions for drainage in 2015. This level of funding would enable a sustainable drainage infrastructure replacement program. A continued increase in capital contributions for drainage is recommended due to the importance of drainage infrastructure in Richmond.

Diking

An annual budget amount of approximately \$600,000 was established in 2006 to undertake structural upgrades at key locations along the dike, which equated to a net charge of \$10 per property. Continued annual funding is required to support studies and dike upgrades required to protect the City from long-term sea level rise due to climate change. There is no increase proposed to the \$10 net rate for 2015. This will result in revenues of approximately \$744,000 in 2015, based on total estimated number of properties in Richmond.

Recommended Option

Staff recommend the budgets and rates outlined under Option 3 for Drainage and Diking Services.

Solid Waste and Recycling

Table 12. 2015 Solid Waste & Recycling Budget

Key Budget Areas	2014 Base Level Budget (Amended)	Option 1 (Recommended) Non-Discretionary Increases	Option 2 (\$200,000 from Provision to Offset Rates)	Option 3 (\$300,000 from Provision to Offset Rates)
Salaries	\$2,264,000	\$110,600	\$110,600	\$110,600
Contracts	\$6,686,800	\$506,800	\$506,800	\$506,800
Equipment/Materials	\$481,000	(\$1,100)	(\$1,100)	(\$1,100)
MV Disposal Costs	\$1,810,600	\$0	\$0	\$0
Recycling Materials Processing	\$1,080,905	\$129,895	\$129,895	\$129,895
Container Rental/Collection	\$161,300	(\$10,700)	(\$10,700)	(\$10,700)
Operating Expenditures	\$243,250	\$32,850	\$32,850	\$32,850
Internal Shared Costs	\$160,600	\$3,200	\$3,200	\$3,200
Agreements	\$174,200	\$1,800	\$1,800	\$1,800
Rate Stabilization	\$77,000	\$0	\$0	\$0
Base Level Budget	\$13,139,655	\$13,913,000	\$13,913,000	\$13,913,000
Total Incremental Increase		\$773,345	\$773,345	\$773,345
Revenues				
Apply General Solid Waste and Recycling Provision	(\$550,000)	\$0	(\$200,000)	(\$300,000)
Recycling Material	(\$382,599)	\$125,599	\$125,599	\$125,599
Garbage Tags	(\$17,500)	\$0	\$0	\$0
Revenue Sharing Grant	(\$2,100)	\$0	\$0	\$0
MMBC Incentive	(\$846,856)	(\$505,719)	(\$505,719)	(\$505,719)
Net Budget	\$11,340,600	\$11,733,825	\$11,533,825	\$11,433,825
Net Difference Over 2014 Base Level Budget		\$393,225	\$193,225	\$93,225

A description explaining the increases and budget reductions in each of the areas outlined above is outlined below.

Salaries

Salary cost increases under all options correspond with collective agreements. Approximately forty percent of the increase (\$46,275) is for a staff position to support the MMBC program, due to considerable added administration requirements. There is no impact to the rates associated with the staff position as it is completely offset through MMBC financial incentive funding.

Contracts

The majority of contract cost increases relate to added collection costs associated with meeting the contractual obligations under MMBC agreements (approximately \$450,000). There is no impact to the rates associated with this increase as all added costs have been completely offset from MMBC financial incentive funding. The balance is for 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.

Metro Vancouver Disposal Costs

The regional tipping fee is expected to increase by \$1.00/tonne for 2015, from \$108/tonne to \$109/tonne. However, due to the success of recycling initiatives such as the Green Cart program, no increase in regional disposal costs are expected although there are increased processing costs for handling the added Green Cart volumes, as noted in the following section.

MV has not developed an updated five-year tipping fee projection at this time due to uncertainties regarding future waste flows and waste-to-energy funding. The impact on tipping fees will depend on financing and amortization periods, etc. In general, increases in tipping fees are designed to, in part, help drive additional recycling (create greater financial incentive to recycle) as well as manage existing and planned added infrastructure. Staff note that MV has withheld the significant planned increases over the last two years in light of significant challenges with waste being exported from the regional system. MV is looking to again minimize the regional tipping fee increase in 2015 pending provincial consideration of Bylaw 280, which would require that all waste generated in the MV region be disposed of at regional facilities.

Prior estimated regional tipping fee projections are outlined below for information.

Table 13. Metro Vancouver Tipping Fee Projections				
	2015	2016	2017	2018
Projected MV Tipping Fee/Tonne	\$109	\$137	\$151	\$157
% Increase from Prior Year	1%	26%	10%	4%

Recycling Materials Processing

Recycling materials processing costs are increased associated with added volumes of yard trimmings generated by landscapers servicing multi-family properties in Richmond. Drop off is free for commercial landscapers and the City pays Ecowaste on their behalf. Processing costs are also increased associated with significant increased volumes of yard trimmings and organics collected through the City's Green Cart program, which was also expanded to service townhomes.

Container Rental/Collection and Operating Expenditures

Container rental/collection costs are decreased due to MMBC assuming costs associated with hauling and handling Styrofoam at the Recycling Depot. Operating expenditures are increased associated with printing and advertising associated with the expanded recycling program due to the MMBC agreement.

Internal Shared/Agreements

Internal shared costs are increased for the Patroller program salary increases, and 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.

Revenues – General Solid Waste and Recycling Provision (Solid Waste Options)

The contribution from provision under Option 1 remains unchanged at \$550,000. This amount represents the costs to fund the multi-family organics pilot program and bi-weekly garbage cart pilot program undertaken in 2014. This amount allows the status quo to remain pending a decision from Council on these two programs.

Option 2 includes an increased draw from the provision of \$200,000 to offset rates. Option 3 includes an amount of \$300,000 drawdown from provision to further offset rates. These amounts are presented for Council's consideration.

Recycling Material Revenues

Revenues from the sale of recycling commodities are decreased as a result of the MMBC agreement, under which MMBC retains all revenues from the sale of recycling materials collected through the City's program.

MMBC Revenue Incentive

The incentive funding is increased in 2015 to absorb the additional costs incurred under the MMBC agreement. A separate information report to Council outlines the original and updated overall anticipated value of the incentive based on the most current information available.

Impact on 2015 Rates

The impact of the budget options to ratepayers is provided in the table which follows.

Table 14. 2015 Solid Waste and Recycling Rate Options (net of discount)				
Customer Class	2014 Rates	Option 1 (Recommended)	Option 2	Option 3
Single Family Dwelling	\$263.80	\$277.50 \$13.70	\$274.84 \$11.04	\$273.52 \$9.72
Townhouse	\$224.00	\$232.50 \$8.50	\$229.84 \$5.84	\$228.52 \$4.52
Apartment	\$54.40	\$56.50 \$2.10	\$53.84 (\$0.56)	\$52.52 (\$1.88)
Business Rate	\$26.75	\$27.70 \$0.95	\$25.04 (\$1.71)	\$23.72 (\$3.03)

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

As previously noted, the regional tipping fee is increased to \$109/tonne in 2015. Key drivers impacting regional costs include landfill management contracts, costs for managing fly and bottom ash, proposed contributions to recycling depot operations, and expected decreases in waste quantities disposed. Key actions at the regional level in 2015 will include implementation of the organics disposal ban in 2015, identification of potential sites for waste to energy capacity, implementation of the Waste Flow Management Bylaw and Strategy (subject to provincial approval) as well as other related initiatives. Projections continue to be based on achieving approximately 70% diversion by 2015.

Costs for regional and local government initiatives identified in the Integrated Solid Waste and Resource Management Plan are other factors that will impact costs going forward. For its part, the City's key actions in 2015 will be reviewing implementing organics recycling programs for all residents in preparation for the regional organics disposal ban as well as additional initiatives to reduce overall waste disposed.

Recommended Option

Staff recommend the budgets and rates as outlined under Option 1 for Solid Waste and Recycling. This option provides full funding for all existing programs. In light of significant draws in recent years from the General Solid Waste and Recycling Provision to fund acquisition of carts to residents and future expected capital cost requirements for provision of carts for garbage and funding for an Eco Centre, it is not recommended to draw any added amounts from the provision in 2015 to offset rates.

Total Recommended 2015 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 and Sewer
- Option 3 is recommended for Drainage and Diking
- Option 1 is recommended for Solid Waste and Recycling

Table 15 summarizes the estimated total metered rate utility charge, based on average water and sewer consumption. Table 16 summarizes the total flat rate utility charge.

Table 15. 2015 Estimated Total Net Rates to Metered Customers		
Customer Class	2014 Estimated Net Metered Rates	2015 Estimated Net Metered Rates (Recommended)
Single-Family Dwelling (based on 325 m ³ average)	\$1,068.19	\$1,098.69 \$30.50
Townhouse (on City garbage service) (based on 205 m ³ average)	\$779.50	\$802.29 \$22.79
Townhouse (not on City garbage service) (based on 205 m ³ average)	\$673.30	\$692.79 \$19.49
Apartment (based on 164 m ³ average)	\$524.86	\$540.39 \$15.53
Commercial/Industrial		
Metered Water (\$/m ³)	\$1.1096	\$1.1209 \$.0113
Metered Sewer (\$/m ³)	\$. 9645	\$.9741 \$.0096
Business: Garbage	\$26.75	\$27.70 \$0.95
Business: Drainage & Diking	\$130.31	\$140.31 \$10.00

As 75% of single-family dwellings are on meters, the metered charges in Table 15 are representative of what the majority of residents in single-family dwellings would pay versus the flat rate charges outlined in Table 16.

Table 16. 2015 Total Net Rates to Flat Rate Customers

Customer Class	2014 Net Flat Rates	2015 Net Flat Rates (Recommended)
Single-Family Dwelling	\$1,378.75	\$1,412.37 \$33.62
Townhouse (on City garbage service)	\$1,198.46	\$1,225.45 \$26.99
Townhouse (not on City garbage service)	\$1,092.26	\$1,115.95 \$23.69
Apartment	\$796.86	\$815.11 \$18.25

As noted previously, the rates highlighted 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 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

The residential metering program has been successful in transitioning the majority of single-family households from flat rates. Approximately 75% of single-family homes are now on meters. The majority of townhouses and apartments are still on flat rate; however, the number with meters will continue to increase with the volunteer and mandatory water meter programs for multi-family dwellings. The number of units by customer class, including those on meters, is shown below:

Table 17. Flat Rate and Metered Property Unit Counts

		2014 Counts	2015 Counts (Estimated)	Difference
Single-Family Residential	Flat Rate (25%)	7,192	5,328	(1,864)
	Metered (75%)	21,511	23,663	2,152
Townhouse	Flat Rate (75%)	12,134	12,034	(100)
	Metered (25%)	4,113	4,419	306
Apartment	Flat Rate (60%)	15,495	15,145	(350)
	Metered (40%)	10,245	11,501	1,256
Total Residential Units		70,690	72,090	1,400
Commercial Units	Metered	3,850	3,860	10
Farms	Metered	48	48	0

Comparison of 2014 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

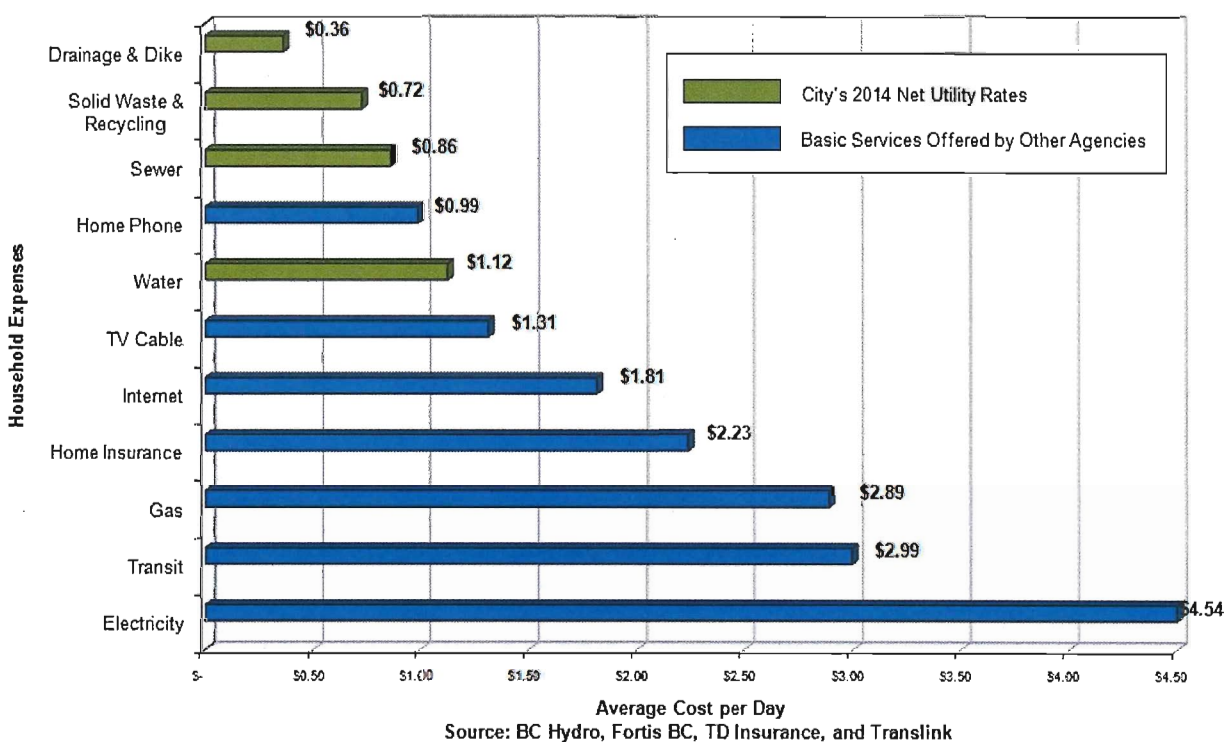


Figure 1 Reference REDMS 4371068
Source: BC Hydro, Fortis BC, TD Insurance, Translink

Financial Impact

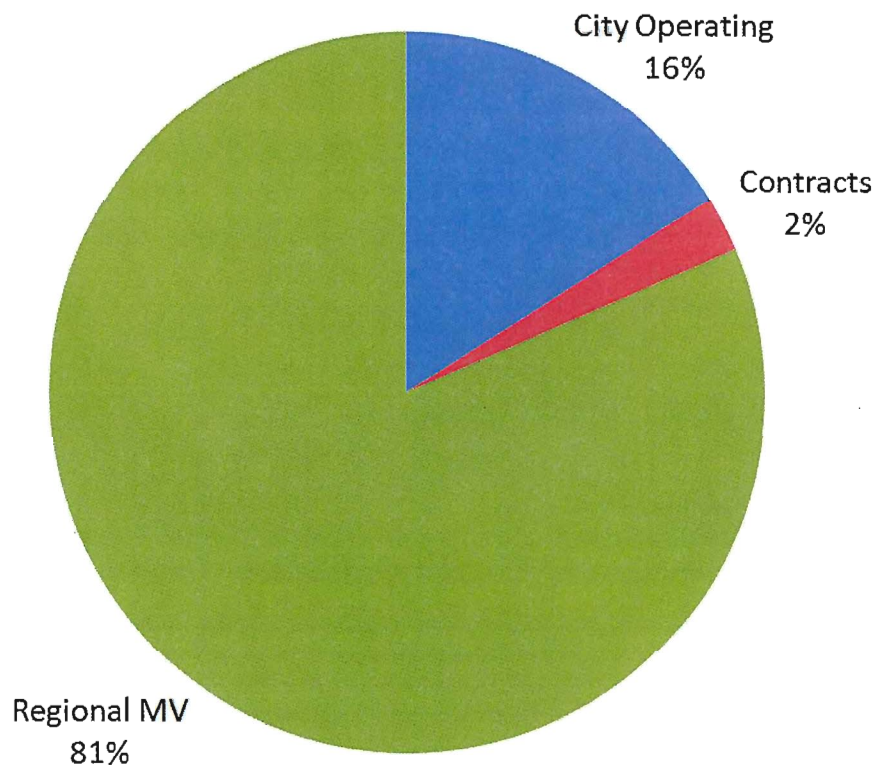
The budgetary and rate impacts associated with each option are outlined in detail in this report. In all options, the budgets and rates represent full cost recovery for each City service.

The key impacts to the recommended 2015 utility budgets and rates stem from estimated Metro Vancouver increases for bulk water and the sewer levy and total funding amounts for new programs in recycling and solid waste management. Cost impacts have been largely offset through efficiencies in City operations and well-managed budgets. Staff recommend the budget and rates options as follows:

- Option 1 is recommended for Water and Sewer
- Option 3 is recommended for Drainage and Diking
- Option 1 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. The following Figure 2 illustrates the principal factors in determining the 2015 budget in terms of regional costs, contract costs, net capital infrastructure contribution (drainage) and other City operating costs.

Figure 2. % Increase for 2015 Utility Budget Recommended Option (by Category)



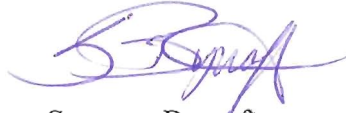
Conclusion

This report presents the 2015 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 fuel cost increases, etc. Regional costs are expected to continue increasing to meet demands for high quality drinking water and sewer treatment. The percentage increase of the recommended options is lower than the MV increase, as efficiencies in City operations and well-managed budgets have allowed the City to mitigate cost impacts from MV.

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.

A handwritten signature in black ink, appearing to read 'L. Bie'.

Lloyd Bie, P.Eng.
Manager, Engineering Planning
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A handwritten signature in purple ink, appearing to read 'S. Bycraft'.

Suzanne Bycraft
Manager, Fleet & Environmental Programs
(604-233-3338)

LB:lb

Attachment 1**2015 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	\$404.77	\$351.76	\$155.90	\$308.33	\$1,220.76
Townhouse (on City garbage)	\$255.32	\$221.88	\$155.90	\$258.33	\$891.43
Townhouse (no City garbage)	\$255.32	\$221.88	\$155.90	\$136.67	\$769.76
Apartment	\$204.25	\$177.50	\$155.90	\$62.78	\$600.43
Flat Rate (Actual)					
Single-Family Dwelling	\$661.30	\$443.77	\$155.90	\$308.33	\$1,569.30
Townhouse (on City garbage)	\$541.34	\$406.03	\$155.90	\$258.33	\$1,361.61
Townhouse (no City garbage)	\$541.34	\$406.03	\$155.90	\$136.67	\$1,239.94
Apartment	\$348.83	\$338.17	\$155.90	\$62.78	\$905.68
General – Other/Business					
Metered Water (\$/m ³)	\$1.2454				
Metered Sewer (\$/m ³)		\$1.0823			
Business: Garbage				\$30.78	
Business: Drainage & Diking			\$155.90		