



To GP - ~~Nov~~ 19/12

To: General Purposes Committee

Date: November 14, 2012

From: Andrew Nazareth
General Manager, Finance & Corporate
Services

File: 03-0970-01/2012-Vol 01

Robert Gonzalez, P. Eng., General Manager,
Engineering & Public Works

Re: 2013 Utility Budgets and Rates

Staff Recommendation

That

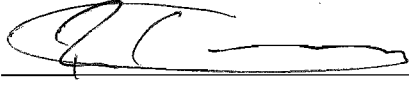



1. the 2013 Utility Expenditure Budgets, as outlined under Option 3 for Water, Sewer, Drainage & Diking, and Option 2 for Solid Waste & Recycling as contained in the staff report dated November 14, 2012 from the General Managers of Finance & Corporate Services and Engineering & Public Works, be approved as the basis for establishing the 2013 Utility Rates and for preparing the 5 Year Financial Plan (2013-2017) Bylaw;
2. the Chief Administrative Officer and General Manager, Engineering & Public Works be authorized to negotiate and execute an amendment to Contract T.2988, Residential Solid Waste & Recycling Collection Services, to:
 - i) include acquisition, storage, assembly, labelling, delivery, replacement and related tasks for the carts and kitchen containers associated with an expanded yard trimmings/food scraps recycling program at a one-time cost of up to \$3 million (excluding HST);
 - ii) add yard trimmings/food scraps collection and large item pickup services to townhomes with blue box service, effective June 3, 2013;
 - iii) add collection of yard trimming/food scraps using City-provided carts and large item pickup services to residents in single-family homes effective June 3, 2013;
 - iv) revise the annual contract amount to approximately \$5,788,664 (depending on contract variables such as inflationary and unit count increases), effective June 3, 2013;
 - v) extend the term of the contract to December 31, 2017.
3. the existing agreement (dated September, 2010) with Neptune Technology be extended for one year, ending December 31, 2013, using the 2010 unit rates with an adjustment made for the HST to GST/PST conversion effective April 1, 2013.



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REPORT CONCURRENCE			
ROUTED TO: Finance Division	CONCURRENCE <input checked="" type="checkbox"/>	CONCURRENCE OF GENERAL MANAGER 	
REVIEWED BY SMT SUBCOMMITTEE	INITIALS: 	REVIEWED BY CAO 	INITIALS: 

Staff Report

Origin

This report presents the recommended 2013 utility budgets and rates for Water, Sewer, Drainage and Solid Waste & Recycling. The utility rates need to be established by December 31, 2012 in order to facilitate charging from January 1, 2013.

Analysis

Key issues of note pertaining to the utility budgets in 2013 include:

- Metered rates have increased due to a number of variables. The primary driver relates to a revenue reduction due to an increasing number of residents converting from the flat rate to the metered rate, which requires redistribution of fixed water and sewer system costs.
- GVS&DD sewer operating and maintenance costs are increased significantly, or by approximately 10% for costs relating to various projects including the Iona and Lions Gate Treatment Plant upgrades, twinning of the Gilbert/Brighthouse trunk and various other infrastructure growth and maintenance programs. This increase represents a \$1.576 m increase which must be collected via the sewer utility rate.
- GVWD (Greater Vancouver Water District) regional water rates are increased in 2013 – 1.2% (from .5980 per cubic metre to .6054 per cubic metre (blended rate)). The increase is significantly less than previous forecasts as a result of lower debt charges due to Metro Vancouver's debt management strategy.
- GVS&DD debt costs are reduced significantly or 55% (\$1.1 m) as a result of debt repayments. As debt costs are recovered through property taxes, utility rates will not be affected. However, these savings will be realized through a reduction in the sewer debt levy on property taxes.
- Metro Vancouver solid waste tipping fees have remained at \$107 per tonne as a result of stabilized waste flows at regional disposal facilities.

A significant component of utility budget relates to infrastructure planning to replace ageing/deteriorating municipal infrastructure. As noted in the "Ageing Infrastructure Planning – 2011 Update" report presented to Council on June 27, 2011, increases in the annual capital funding contributions for sanitary and drainage are required, whereas the required annual capital replacement funding contribution for water has been met. The annual required contribution for sanitary is \$6.2 million, whereas the current funding level is \$4.25 million. The annual required contribution for drainage is \$9.8 million, whereas the current funding level is \$6.77 million. The annual water reserve contribution is \$7.5 million and is sufficient at this time to meet reserve funding requirements. Therefore, no increase in the annual reserve contribution for water is proposed. The 2013 budget figures outlined represent options for infrastructure replacement increases in drainage and sanitary only.

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 2013. The budgets and rates are presented under three different options. Option 1 presents the minimum 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 lessen 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 utility areas in the following charts:

- Water
- Drainage & Diking
- Sewer
- Sanitation & Recycling

The concluding summary of proposed rates for 2013 is shown on pages 18.

Water Services Section Chart

2013 Water Budget – Options				
<i>Key Budget Areas</i>	<i>2012 Base Level Budget</i>	<i>2013: Option 1 Non-Discretionary Increases</i>	<i>2013: Option 2 Non-Discretionary Increases Plus Increase to Toilet Rebate & Flushing Program</i>	<i>2013: Option 3 Recommended: Same as Option 2 with Reduction to Metering Program</i>
Operating Expenditures	\$7,614,400			
• 2012 OBI Adjustment	\$30,400			
• Salary		\$47,500	\$77,500	\$77,500
• PW Material/Equipment/ Monthly Vehicles		\$27,300	\$27,300	\$27,300
• Internal Shared Costs		\$17,300	\$17,300	\$17,300
• Power Costs/Contracts		\$8,300	\$8,300	\$8,300
• Postage/Safety Certifications		\$9,900	\$9,900	\$9,900
Toilet Rebate Program	\$100,000	\$0	\$50,000	\$50,000
GVRD Water Purchases (MV)	\$21,205,100	\$189,900	\$311,000	\$311,000
Capital Infrastructure Replacement Program Asset Management System	\$7,550,000	\$0	\$0	\$0
Firm Price/Receivable	\$1,748,200	\$13,000	\$13,000	\$13,000
Residential Water Metering Program/Appropriated Surplus	\$1,600,000	\$0	\$0	(\$200,000)
Overhead Allocation	\$864,000	\$0	\$0	\$0
Total 2012 Base Level Budget	\$40,712,100	\$313,200	\$514,300	\$314,300
Total Incremental Increase				
<i>Revenues:</i>				
<i>Apply Rate Stabilization Fund</i>	<i>(\$750,000)</i>	\$0	\$0	\$0
<i>Investment Income</i>	<i>(\$427,000)</i>	\$0	\$0	\$0
<i>Firm Price/Receivable Income</i>	<i>(\$1,748,200)</i>	<i>(\$13,000)</i>	<i>(\$13,000)</i>	<i>(\$13,000)</i>
<i>Meter Rental Income</i>	<i>(\$1,176,200)</i>	<i>(\$18,200)</i>	<i>(\$18,200)</i>	<i>(\$18,200)</i>
<i>Miscellaneous Revenue</i>	<i>(\$10,000)</i>	\$0	\$0	\$0
<i>Provision (Toilet Rebate/Flushing)</i>	<i>(\$100,000)</i>	\$0	(\$201,100)	(\$201,100)
<i>Provision (OBI Adjustment)</i>	<i>(\$30,400)</i>	\$30,400	\$30,400	\$30,400
Net Budget	\$36,470,300			
Net Difference over 2012 Base Level Budget		\$312,400	\$312,400	\$112,400

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

Operating Expenditures

Salary costs are increased associated with anticipated wage settlements as part of the non-discretionary Option 1 costs. Salary costs are increased under Options 2 and 3 as part of a recommended enhanced flushing program. It is proposed to offset these cost increases via a corresponding offset from provision funding. Public Works materials, equipment and vehicle costs are increased as a result of external cost factors, such as vendor increases. Internal shared costs relate to anticipated salary adjustments to support the Public Works Patroller program. Power costs are increased per BC Hydro costs and contracts are increased associated with the water metering program. Postage and certification costs are increased for the mail out of the annual utility bill and to meet new certification requirements under the Drinking Water Protection Act.

Toilet Rebate Program

Option 1 retains the current funding level of \$100,000 for 2013. However, due to the success of this program, it is recommended under Option 2 (and 3) that the rebate funding level be increased by \$50,000 to a total of \$150,000. It is further recommended to offset this increase through a corresponding offset from the Water provision, thereby having no impact on the water rates.

This program is one of the key markedly successful water conservation programs for existing apartments, townhomes and single-family homes. This program includes a rebate of \$100 per toilet, with a maximum allowable rebate of \$200 per household replacing a 6 litre (or more) toilet with a 4.8 litre or 4.1 litre/6 litre dual-flush (or less) toilet. To date in 2012, approximately 1,320 (1,045 in 2011) toilet rebates have been issued, at a cost of approximately \$132,000 (\$100,000 in 2011). As this program is funded from the water provision, there is no net impact to the water rate charged since there will be a corresponding increase in the amount of money applied from the provision account.

GVRD Water Purchases – Metro Vancouver

Metro Vancouver has advised that water rates increased 1.2% for 2013, or from .5980 per cubic meter to .6054 per cubic meter. This is less than prior projections due to declining debt charges. This assumes a certain degree of risk in terms of water consumption, which can be impacted by swings in the weather. Option 1 includes costs relating to the Metro Vancouver water rate increase only.

Enhanced Flushing Program: Options 2 and 3 include an increase for water consumption as part of a recommended enhanced flushing program. This program, if approved, would be implemented over a 5 year period commencing in 2013 for unidirectional flushing to remove sediment accumulations due to a lack of filtering from some Metro Vancouver sources. This 5-year program will provide flushing of the City's entire system to reduce instances of dirty water complaints. At the end of the 5-year program, it is anticipated that Metro Vancouver will have completed their phased program to filter all water supplied to Richmond, hence the flushing program will no longer be required. The increased cost associated with this program is recommended to be completely offset through a contribution from the Water Provision account, thereby having no impact on the water rates.

Water Consumption Levels: The City has implemented a number of water conservation initiatives which have reduced consumption over several years. While very successful, we have reached the point where our overall water consumption has now flat-lined despite population growth. Going forward, we can expect consumption to increase over time commensurate with population growth.

Capital Infrastructure Replacement Program

There are no increases proposed under any of the options for contribution to water capital infrastructure replacement. This is due to the fact that the annual capital contribution for water-related infrastructure

replacement has reached \$7.5 million, which meets and exceeds recommended funding levels (the remaining \$50,000 is earmarked for future upgrade/replacement of the asset management system). Per the June, 2011 “Ageing Infrastructure Planning – 2011 Update” report, the minimum required annual funding for Water is \$7 million. A reduction in the annual funding contribution is not recommended due to anticipated growth in water infrastructure over the next few years. 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

Currently, \$1.6 million is allocated annually to the residential water metering program. Expenses in 2011 were approximately \$1.75 million and to date in 2012 are approximately \$1.6 million. The proposed budget under Options 1 and 2 maintains the allocation at \$1.6 million to allow for further expansion of the residential metering program. Option 3 includes an option to reduce the metering program by \$200,000 (or to \$1.4 million). While this will reduce available funding for water meter installations, staff feel this reduction can be accommodated in light of the significant progress that has already been made in meter conversions, i.e. 68% of single-family households and 32% of multi-family households have meters installed. In addition, funding is available via accumulated funding balances from prior year’s programs. As such, Option 3 is recommended. If Option 3 is approved, the 2013 capital program for water metering would be set accordingly and this amount would be incorporated into the 5 Year Financial Plan (2013-2017) Bylaw.

Multi-Family Water Metering Program: The City’s multi-family water metering program has been very successful. To date, the City has received approval from 104 volunteer complexes (comprising 6,637 multi-family dwelling units) to install water meters. Of these, 87 complexes have been completed (5,674 units), including 33 apartment complexes (3,999 units) and 51 townhouse complexes (1,373 units). These voluntary installations will continue to be funded through the water metering program funding allocation, to a maximum of the funding level approved by Council.

Volunteer Single-Family Water Metering Agreement: The existing 3-year agreement with Neptune Technology Group to manage the Volunteer Single-Family Water Meter Program (3793P) expires on December 31, 2012. The agreement allows for extension and staff recommends, as part of this report, that the agreement be extended to December 31, 2013. The existing unit rates will be used with an adjustment made for the HST to GST/PST conversion, effective April 1, 2013.

Meter Rate

From inception, the water meter rate has included an incentive to encourage those on the flat rate to switch to meters. For example, the flat rate charge to residents in single-family homes with no meter reflects more than double the consumption than that of a resident on a water meter (550 m³ vs average 270 m³). In other words, the estimates of water consumption for flat rate customers is considerably higher than average metered customers as an incentive to move more residents toward metering.

However, as more residents have switched to meters, this results in a higher than relative increase in the flat rate charge to compensate for the lost revenue. The proposed meter rates continue to offer that incentive over flat rate customers, however, the meter rate is increased by a higher percentage in 2013 in order to begin closing the current gap that exists to move toward a more accurate reflection of the costs associated with providing high quality potable water. Eventually, as more residents switch to meters and there are fewer flat rate customers, the meter rate will need to increase more substantially to create greater equity and sharing the burden of costs for all programs (i.e. capital replacement). The charts presented in this report detail both the impact of the budget increases on meter and flat rate customers in 2013 for clarity and comparison between metered vs. flat rate customers.

Water Rate Stabilization Contribution

A rate stabilization fund was established a number of years ago by Council to help build a fund to offset the anticipated significant spikes in regional water purchase costs. These increases were anticipated due to Metro Vancouver infrastructure upgrades associated with water treatment and filtration requirements. The base level budget currently reflects a \$750,000 draw down from the water rate stabilization fund. The proposed budget under all options maintains the \$750,000 stabilization fund application.

As of October 15, 2012, the water stabilization account has a balance of \$6,686,313 and any surplus is appropriated to this account at year end.

Regional Issues

The Regional District increases are for the drinking water treatment program. Metro's current 5-year projections for the regional water rate are outlined as follows:

	2013	2014	2015	2016	2017
Projected Metro Vancouver Water Rate/m ³	\$.6054	\$.7000	\$.7720	\$.8220	\$.8600
% Increase over Prior Year	1.2%	15.6%	10.3%	6.5%	4.6%

Staff note that capacity exists within the existing rate stabilization fund to manage/level out required rate increases due to significant variations in Metro Vancouver increases.

Impact on 2013 Water Rates

The impact of these various budget options on the water rates by customer class is as follows. The first chart shows the various options for meter rate customers. The second chart shows the options for flat rate customers. As noted in the "***Meter Rate***" section above, the impact to metered customers is increased by a larger percentage overall than flat rate customers due to the need to phase out the incentive program as more residents transition to meters.

The impact of the Water budget options on metered customers is as follows. There is no change in the rates between Options 1 and 2 since cost increases under Option 2 are offset by a contribution from the water provision account for a net zero impact. Option 3 represents a reduced charge due to the proposed reduction in the annual metering program allocation.

<i>2013 Water Net Meter Rate Options</i>				
<i>Customer Class</i>	<i>2012 Rates</i>	<i>2013 Rate Options which Include Increase Identified Below in Italics</i>		
		<i>2013 Option 1 Rate</i>	<i>2013 Option 2 Rate</i>	<i>Recommended: 2013 Option 3 Rate</i>
Single Family Dwelling (based on avg. 270 m ³)	\$271.57	\$292.64 <i>\$21.07</i>	\$292.64 <i>\$21.07</i>	\$291.02 <i>\$19.45</i>
Townhouse (based on avg. 161 m ³)	\$161.93	\$174.50 <i>\$12.57</i>	\$174.50 <i>\$12.57</i>	\$173.53 <i>\$11.60</i>
Apartment (based on avg. 132 m ³)	\$132.77	\$143.07 <i>\$10.30</i>	\$143.07 <i>\$10.30</i>	\$142.27 <i>\$9.50</i>
Metered Rate (\$/m ³)	\$1.0058	\$1.0839 <i>\$.0781</i>	\$1.0839 <i>\$.0781</i>	\$1.0778 <i>\$.0720</i>

Similarly, the impact of the Water budget options on the flat rate customers is as follows.

2013 Water Net Flat Rate Options				
		2013 Rate Options which Include Increase Identified Below in Italics		
Customer Class	2012 Rates	2013 Option 1 Rate	2013 Option 2 Rate	Recommended: 2013 Option 3 Rate
Single Family Dwelling	\$559.36	\$581.22 <i>\$21.86</i>	\$581.22 <i>\$21.86</i>	\$577.95 <i>\$18.59</i>
Townhouse	\$457.90	\$475.79 <i>\$17.89</i>	\$475.79 <i>\$17.89</i>	\$473.11 <i>\$15.21</i>
Apartment	\$295.07	\$306.60 <i>\$11.53</i>	\$306.60 <i>\$11.53</i>	\$304.87 <i>\$9.80</i>

The rates outlined in the above tables are net rates. Due to the bylaw provisions which provide for a 10% discount if utility bills are paid within a specified timeframe, the net rates shown will be increased by 10% in the supporting bylaws to provide for the discount incentive while ensuring cost recovery for the net budget requirement.

Advantages/Disadvantages of Various Options

Option 1

- Represents the minimal increase necessary to sustain operations, while maintaining business as usual.
- Provides for a continued \$1.6 million annual contribution to the residential water metering program to continue expanding this program.
- Maintains the contribution from the rate stabilization fund in the amount of \$750,000.

Option 2

- In addition to the minimal increases necessary to sustain operations, includes funding increases to the toilet rebate program (\$50,000) as well as funding for a new program for watermain flushing (~\$151,100). These increases are offset by an equal contribution from provision, thereby having no impact on rates.
- Maintains the contribution from the rate stabilization fund in the amount of \$750,000.

Option 3

- Represents a \$200,000 reduction in the residential water metering program, reducing the annual funding for this program from the current budget level of \$1.6 million to \$1.4 million. This reduction will reduce the funding available for this program but, at the same time, helps to mitigate the impact of rate increases.
- Maintains the contribution from the rate stabilization fund in the amount of \$750,000.

Recommended Option

Staff recommend the budgets and rates as outlined under Option 3 for Water Services. This allows for an increase to the toilet rebate program (offset from provision funding) as well as an expanded flushing program to remove sediment in water lines as the first of a 5-year enhanced program (also offset from provision funding). This option results in a reduction in the meter program funding (from \$1.6 million to \$1.4 million) to help reduce the impact on water rates. Staff consider this program funding reduction can be accommodated with no negative impact to the metering program. If approved, the 2013 capital program for water metering would be reduced accordingly and this amount would be incorporated into the 5 Year Financial Plan (2013-2017) Bylaw.

Sewer Services Section Chart

2013 Sewer Budget – Options				
<i>Key Budget Areas</i>	<i>2012 Base Level Budget</i>	<i>2013: Option 1 Non-Discretionary Increases</i>	<i>2013: Option 2 Non-Discretionary with Partial (\$200,000) Increase to Capital</i>	<i>2013: Option 3 Recommended: Non-Discretionary with \$500,000 Drawdown from Rate Stabilization</i>
Operating Expenditures	\$4,575,037			
• Salary		\$25,100	\$25,100	\$25,100
• PW Equipment/Monthly Vehicles		\$39,400	\$39,400	\$39,400
• Postage/Internal Shared Costs		\$6,600	\$6,600	\$6,600
• Power Costs		\$12,800	\$12,800	\$12,800
GVS&DD O&M (MV)	\$15,774,400	\$1,576,500	\$1,576,500	\$1,576,500
GVS&DD Debt (MV)	\$1,999,200	(\$1,082,400)	(\$1,082,400)	(\$1,082,400)
GVS&DD Sewer DCC's (MV)	\$1,000,000	\$0	\$0	\$0
Capital Infrastructure Replacement Program/ Asset Management System	\$4,306,400	\$0	\$200,000	\$0
Firm Price/Receivable	\$576,400	\$3,500	\$3,500	\$3,500
Overhead Allocation	\$498,200			
Operating Debt	\$157,800			
Total 2012 Base Level Budget	\$28,887,437	\$581,500	\$781,500	\$581,500
Total Incremental Increase				
<i>Revenues:</i>				
<i>Apply Rate Stabilization Fund</i>		\$0	\$0	(\$500,000)
<i>Debt Funding</i>	(\$42,600)	\$0	\$0	\$0
<i>Investment Income</i>	(\$166,000)	\$0	\$0	\$0
<i>Firm Price/Receivable Income</i>	(\$576,400)	(\$3,500)	(\$3,500)	(\$3,500)
<i>Property Tax for DD Debt (MV)</i>	(\$1,999,200)	\$1,082,400	\$1,082,400	\$1,082,400
<i>GVS&DD Sewer DCC Levy to Developers (MV)</i>	(\$1,000,000)	\$0	\$0	\$0
Net Budget	\$25,103,237			
Net Difference Over 2012 Base Level Budget		\$1,660,400	\$1,860,400	\$1,160,400

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

Operating Expenditures

Salary costs are increased associated with anticipated wage settlements. Public Works equipment and vehicle costs are increased as a result of external cost factors, such as inflationary increases. Postage and internal shared costs are increased for the mail out of the annual utility bill as well as increases to support the Public Works Patroller program. Increases in power costs are due to hydro increases to operate pump stations, and are outside of the City's control.

GVS&DD O&M (Greater Vancouver Sewerage and Drainage District Operating and Maintenance Costs) – Metro Vancouver

Greater Vancouver Sewerage and Drainage District operations and maintenance charges are increased by approximately \$1.576 million, or 10%. These costs relate principally to the operation of the Lulu Island Wastewater Treatment Plant, since these costs are borne entirely by Richmond. Other projects of specific interest to Richmond include the Gilbert/Brighthouse Trunk Pressure Sewer twinning project, Digester No. 3 at the Lulu Island Wastewater Treatment Plant as well as ammonia removal to improve wastewater treatment quality at the Lulu Island Treatment Plan.

GVS&DD Debt (Greater Vancouver Sewerage and Drainage District Debt)

GVS&DD debt costs are reduced 54% per Metro Vancouver in association with debt reduction. These costs are recovered from property taxes and, therefore, do not benefit the sewer utility rates charged. There will, however, be a corresponding reduction in the amount recovered from the sewer debt levy on the property tax bill (\$1,082,446) for regional sewer debt.

The overall/combined net impact of regional costs (operating/maintenance and debt) to the City is 2.8%; however, since operating and maintenance costs are recovered via utility rates, this portion has a more significant impact on sewer rates.

Capital Infrastructure Replacement Program

Options 1 and 3 maintains the annual contribution to the sewer infrastructure capital replacement program at \$4.25 million (the remaining \$50,000 portion is earmarked for future upgrade/replacement of the asset management system). The “Ageing Infrastructure Planning – 2011 Update” report noted that the annual funding contribution for sewer to sustain the current infrastructure is \$6.2 million, a \$1.95 million shortfall. Option 2 includes an option to increase the contribution by \$200,000 for a total of \$4.45 million. Given the impact on the sewer rates, staff recommend the funding level be maintained at current levels or \$4.25 million annually at this time given the Metro Vancouver cost increase.

Sewer Rate Stabilization Contribution

As with the water budget, there is a sewer rate stabilization fund that was established a number of years ago to offset any significant spikes in regional sewer treatments costs. The sewer levy stabilization account (as of October 15, 2012) has a balance of \$5.2 million.

Options 1 and 2 maintain the status quo where no funding is applied from the sewer rate stabilization fund to offset rates. Option 3 includes a proposed \$500,000 draw down from the rate stabilization fund in order to mitigate the impact of regional rate increases on the sewer utility rate. If selected, this amount will become part of the base level revenue portion of the budget, so will impact the rates in future years by this amount when the stabilization funding is no longer available.

Regional Issues

The main budget drivers impacting the projected increase in Metro Vancouver costs include a variety of capital infrastructure projects, such as the Gilbert/Brighthouse trunk pressure sewer and digester at the Lulu Island treatment plant; various treatment plant upgrades (Iona, Lions Gate, etc.); and various infrastructure upgrades and capacity improvements. While Metro Vancouver projections indicate a 5% blended overall increase (combined debt reduction and operating cost increase), staff estimate the regional impact on rates to increase an average of 8% per year in accordance with trends in regional operations and maintenance costs, which are recovered through utility rate charges.

Impact on 2013 Sewer Rates

The impact of these various budget options on the sewer rates by customer class is provided in the table which follows. The first chart shows the various options for meter rate customers. The second chart shows the options for flat rate customers.

The impact of the Sewer budget options on metered customers is as follows:

2013 Sewer Net Meter Rate Options				
		2012 Rate Options which Include Increase Identified Below in Italics		
Customer Class	2012 Rates	2013 Option 1 Rate	2013 Option 2 Rate	Recommended: 2013 Option 3 Rate
Single Family Dwelling (based on avg. 270 m ³)	\$225.10	\$255.42 <i>\$30.32</i>	\$257.26 <i>\$32.16</i>	\$250.75 <i>\$25.65</i>
Townhouse (based on avg. 161 m ³)	\$134.23	\$152.30 <i>\$18.07</i>	\$153.41 <i>\$19.18</i>	\$149.52 <i>\$15.29</i>
Apartment (based on avg. 132 m ³)	\$110.05	\$124.87 <i>\$14.82</i>	\$125.77 <i>\$15.72</i>	\$122.59 <i>\$12.54</i>
Metered Rate (\$/m ³)	\$0.8337	\$0.9460 <i>\$.1123</i>	\$0.9528 <i>\$.1191</i>	\$0.9287 <i>\$.0950</i>

The impact of the Sewer budget options on the flat rate customers is as follows:

2013 Sewer Net Flat Rates Options				
		2013 Rate Options which Include Increase Identified Below in Italics		
Customer Class	2012 Rates	2013 Option 1 Rate	2013 Option 2 Rate	Recommended: 2013 Option 3 Rate
Single Family Dwelling	\$360.23	\$392.81 <i>\$32.58</i>	\$395.82 <i>\$35.59</i>	\$385.38 <i>\$25.15</i>
Townhouse	\$329.60	\$359.41 <i>\$29.81</i>	\$362.16 <i>\$32.56</i>	\$352.61 <i>\$23.01</i>
Apartment	\$274.51	\$299.34 <i>\$24.83</i>	\$301.63 <i>\$27.12</i>	\$293.68 <i>\$19.17</i>

The rates outlined in the above tables are net rates. Due to the bylaw provisions which provide for a 10% discount if utility bills are paid within a specified timeframe, the net rates shown will be increased by 10% in the supporting bylaws to provide for the discount incentive while ensuring cost recovery for the net budget requirement.

Advantages/Disadvantages of Various OptionsOption 1

- Represents the minimal increase necessary to sustain operations, while maintaining business as usual.
- Does not meet the City's long-term infrastructure plan to increase the capital program for replacement of aging infrastructure. Capital replacement remains fixed at \$4.25 million for 2012. The objective is to build the annual infrastructure replacement for sewer to \$6.2 million, representing an annual \$1.95 million shortfall.

Option 2

- Represents the minimal increase necessary to sustain operations, while maintaining existing service levels.

- Increases the annual contribution for capital infrastructure replacement by \$200,000, or to \$4,456,400 to begin closing the current gap that exists for replacement of sewer infrastructure, i.e. reduces the gap to \$1.74 million (from \$1.95 million).

Option 3

- Represents a lower cost option in light of the proposed \$500,000 draw down from the sewer levy stabilization account thereby minimizing the impact of regional increases on the sewer rate.
- Does not meet the City’s long-term infrastructure plan to increase the capital program for replacement of aging infrastructure. Capital replacement remains fixed at \$4.25 million for 2012. The objective is to build the annual infrastructure replacement for sewer to \$6.2 million, representing an annual \$1.95 million shortfall.

Recommended Option

In light of the considerable impact of the Metro Vancouver operations and maintenance charges, staff recommend the budgets and rates as outlined under Option 3 for Sewer Services.

Drainage and Diking Section Chart

<i>2013 Drainage and Diking Net Rate Options</i>				
<i>Utility Area</i>	<i>2012 Rates</i>	<i>2013 Rate Options which Include Increase Identified Below in Italics</i>		
		<i>2013 Option 1 Rate</i>	<i>2013 Option 2 Rate</i>	<i>Recommended: 2013 Option 3 Rate</i>
Drainage	\$100.31	\$100.31	\$105.31	\$110.31
Diking	\$10.00	\$10.00	\$10.00	\$10.00
Total Drainage & Diking	\$110.31	\$110.31	\$115.31	\$120.31
<i>Increase Over 2012</i>		\$0	\$5.00	\$10.00

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.

Background

Drainage - In 2003, a drainage utility was created to begin developing a reserve fund for drainage infrastructure replacement costs. The objective as outlined in the “Ageing Infrastructure Planning – 2011 Update” report is to build the fund to an anticipated annual contribution of approximately \$9.8 million, subject to ongoing review of the drainage infrastructure replacement requirements.

As adopted by Council in 2003, the rate started at \$10.00 (net) per property and is increased an additional \$10.00 each year until such time as the \$9.8 million annual reserve requirement is reached -- expected to take approximately 6 more years. The net rate in 2012 was \$100.31 resulting in approximately \$6.77 million being collected towards drainage services. The options presented above represent no increase under Option 1, approximately one-half of the increase under Option 2, and the full increase of \$10.00 under Option 3 per prior Council approvals. The recommended increase under Option 3 will result in approximately \$8.13 million in annual reserve contributions for drainage. A continued increase in capital contributions for drainage is recommended in light of 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 \$10.00 charge per property. Continued annual funding is required to facilitate continued studies and upgrades as identified through

further seismic assessments of the dikes. No increase in the \$10.00 per property rate is proposed for 2013. This will result in revenues of approximately \$737,000 in 2013, based on total estimated properties.

Recommended Option

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

Solid Waste & Recycling Section Chart

2013 Solid Waste & Recycling Budget - Options				
<i>Key Budget Areas</i>	<i>2012 Base Level Budget</i>	<i>Option 1 Non-Discretionary Increases</i>	<i>Option 2 Recommended: Expanded Organics Program/Large Item Collection</i>	<i>Option 3 Same as Option 2 with Existing Drawdown from Provision</i>
Salaries	\$2,001,000	\$56,700	\$56,700	\$56,700
Contracts	\$4,922,900	\$169,000	\$583,500	\$583,500
Equipment/Materials	\$372,500	\$16,000	\$47,800	\$47,800
Metro Disposal Costs (MV)	\$1,815,900	(\$76,500)	(\$125,300)	(\$125,300)
Recycling Materials Processing	\$1,121,100	(\$77,400)	(\$26,400)	(\$26,400)
Container Rental/Collection	\$162,300	(\$15,000)	(\$15,000)	(\$15,000)
Operating Expenditures	\$141,600	\$200	\$6,700	\$6,700
Program Costs	\$197,100	\$5,300	\$5,300	\$5,300
Agreements	\$167,400	\$3,900	\$3,900	\$3,900
Rate Stabilization	\$138,700	\$0	\$0	\$0
Total 2012 Base Level Budget	\$11,040,500			
Total Incremental Increase		\$82,200	\$537,200	\$537,200
<i>Revenues:</i>				
<i>Apply General Solid Waste & Recycling Provision</i>	<i>(\$192,100)</i>	<i>(\$4,600)</i>	<i>\$106,600</i>	<i>\$0</i>
<i>Recycling Material</i>	<i>(\$786,800)</i>	<i>\$5,400</i>	<i>\$5,400</i>	<i>\$5,400</i>
<i>Garbage Tags</i>	<i>(\$17,500)</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
Net Budget	\$10,044,100			
Net Difference Over 2012 Base Level Budget		\$83,000	\$649,200	\$542,600

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

Salaries

Salary cost increases are associated with anticipated wage settlements under all options.

Contracts

Contract costs under Option 1 relate to non-discretionary increases for solid waste and recycling collection services as outlined in Council-approved agreements. Option 2 (and Option 3) includes an increased level of service to the community commencing June, 2013 for organics and large item pick up services as outlined in a September 4, 2012 report (Attachment 1) as noted in the following section.

Additional Level of Service for Food Scraps/Large Item Collection Program: The report referenced in Attachment 1 was considered by Council at their September 24, 2012 meeting at which the following resolution was approved:

“That

1. the new and enhanced recycling program service levels, effective June, 2013, outlined in Option 2 of the staff report from the Director, Public Works Operations be referred for consideration as part of the 2013 utility and capital budget processes to:
 - i) add a new level of service for food scraps and organics collection services using City-provided wheeled carts for all multi-family townhome residents currently receiving the City’s blue box collection services;
 - ii) provide wheeled carts to all residents in single-family households for the storage and weekly collection of food scraps and organic materials;
 - iii) provide kitchen containers for the temporary storage of food scraps/organics to all residents in single-family and townhome units who currently receive the City’s blue box collection services;
2. a large item pickup program, limited to four items per household per year, as outlined in Option 2a) of the staff report from the Manager, Fleet and Environmental Programs, be considered as part of the 2013 utility budget process for implementation in June, 2013 for all single-family and townhome residents in conjunction with the proposed expanded food scraps/organics recycling program; and
3. staff review and report on potential options for food scraps and organics collection services for residents in multi-family dwellings and commercial businesses.”

As outlined in the September 4, 2012 staff report, the services outlined above would be provided through a contract amendment and extension to the City’s existing service provider, Sierra Waste Services Ltd., under Contract T.2988 as this approach provides economies of scale for optimal pricing. Therefore, a contract amendment and extension to December 31, 2017 are recommended as part of this report. The current annual contract value of approximately \$4,932,000 would be increased to approximately \$5,788,700, subject to contract variables such as annual unit count and inflationary increases.

To expedite implementation of this project in order to meet the proposed June, 2013 implementation date, it is further recommended that the contract amendments under T.2988 include one-time services and costs associated with the acquisition, delivery, replacement and other tasks for the carts and kitchen containers required for the expanded program, at a cost of up to \$3 million, exclusive of HST. Total capital costs associated with this project are \$3.25 million and were approved by Council at their November 13, 2012

meeting as part of the “2013 Capital Budget” submission. Funding for the capital portion of this project is from the general solid waste and recycling provision, which was established a number of years ago for recycling program enhancements such as this. This fund will have approximately \$4.75 million remaining after purchase of the carts and other components associated with implementation of the expanded organics/food scraps recycling program.

If this program expansion is approved, it is further recommended that a cart replacement fee cost of \$25.00 be included in the rate amending bylaws for residents requesting a change in their cart (size, suitability, etc.) The fee would only be charged post-implementation phase in situations where a cart has already been provided (not to new residents, etc.).

Utility Budget Impact: The total increased annual operating cost of this program is \$950,000, as outlined in the original September 4, 2012 staff report. The costs reflected in the budget outlined above have been pro-rated to correspond with the proposed June, 2013 start date, and represent approximately \$550,000 for 2013.

Equipment/Materials

Material costs are increased associated with demand requirements under Option 1. Increased costs under Option 2 (and 3) include equipment cost increases as an ongoing annual allowance for replacement of carts due to wear and tear (breakage, damage, etc.) as well as to accommodate growth under the proposed organics/large item collection program expansion.

Metro Vancouver Disposal Costs (MV)

The regional tipping fee is unchanged in 2013, i.e. remains fixed at \$107 per tonne. Regional waste volumes have stabilized, therefore, Metro Vancouver’s solid waste program costs are sufficiently offset at the \$107/tonne amount. As such, an increase in the tipping fee is not required. Waste disposal charges are reduced in 2013 as a result of anticipated reductions in total waste disposed associated with improved waste reduction and diversion programs. Disposal costs are further reduced under Option 2 (and 3) due to the fact a higher volume of food scraps/organic waste is expected to be diverted from waste disposal under the proposed organics/large item collection program expansion.

The City’s Green Can program has helped to significantly reduce disposal tonnages, helping to minimize total disposal costs. For example, had the Green Can/organics program not been introduced to divert more waste from garbage, the metro disposal costs noted above would have been an estimated \$350,000 higher.

Regional tipping fee projections have been reduced compared with prior projections due to adjustments in waste flows and timing associated with capital programs. Following are the current 5-year projections from Metro Vancouver:

	2013	2014	2015	2016	2017
Projected Metro Vancouver Tipping Fee/Tonne	\$107	\$108	\$119	\$137	\$151
% Increase over Prior Year	0%	.9%	10%	15%	10%

Recycling Materials Processing

Recycling materials processing costs are reduced associated with adjustments to corresponding tonnage/volumes received for processing under Option 1. The reduction is not as great under Option 2 (and 3) due to the proposed organics/large item collection program expansion resulting in more materials, i.e. organics/food scraps – being diverted from the disposal stream to the processing stream. Note, however, that Metro Vancouver disposal costs are further reduced under this option.

Container Rental/Collection & Operating Expenditures

Container rental and operating expenditures are adjusted slightly to align with servicing requirements. Annual operating expenditures under Option 2 (and 3) are increased associated with anticipated cart replacements under the proposed organics/large item collection program.

Program/Internal Costs & Agreements

Program costs are increased due to Patroller Program costs and agreement costs are increased slightly based on the consumer price index contractual increase with Vancouver Coastal Health Authority for the City's public health protection service agreement.

Revenues – General Solid Waste & Recycling Provision

There are only minor balancing adjustments to the amount applied against the overall budget from the general solid waste and recycling provision under Option 1.

The decreased amount under Option 2 is reflective of the fact that the townhouse Green Cart Pilot Program would cease at the end of May, 2013 if the decision is made to transition to a permanent, full-scale and expanded organics/large item collection program commencing June, 2013. Under this expanded program, costs will be assessed to all those eligible for the services as opposed to being offset via a contribution from the provision (as was done for participants in the Green Cart Pilot Program due to the temporary nature of the program).

Option 3 retains the current drawdown amount from the provision (\$192,100) to mitigate the cost impacts of the expanded program to residents. As the cost increases are within that previously anticipated, Option 3 is not recommended.

Recycling Material Revenues

Revenues from the sale of recycling commodities are increased slightly to align with amounts received over the course of the year. The City bears the market risk and therefore benefits from any increases in recycling commodity markets. On the flip side, should revenues be below expectations, the City would be required to absorb the loss. As such, revenue amounts shown are estimates only. Revenues from the sale of recycling materials are applied against expenditures to help offset rates.

Impact on 2013 Rates

The impact of the budget options to ratepayers is provided in the table which follows. It should be noted that the cost increases in 2013 associated with the expanded food scraps/large item pick up program are pro-rated to correspond with the June, 2013 implementation date.

2013 Solid Waste & Recycling Net Rates Options				
		2013 Rate Options which Include Increase Identified Below in Italics		
Customer Class	2012 Rates	2013 Option 1 Rate	Recommended: 2013 Option 2 Rate	2013 Option 3 Rate
Single Family Dwelling	\$241.95	\$242.40 <i>\$.45</i>	\$251.40 <i>\$9.45</i>	\$248.40 <i>\$6.45</i>
Townhouse	\$173.45	\$171.90 <i>(\$1.55)</i>	\$197.90 <i>\$24.45</i>	\$195.90 <i>\$22.45</i>
Apartment	\$52.25	\$51.45 <i>(\$0.80)</i>	\$51.45 <i>(\$0.80)</i>	\$51.45 <i>(\$0.80)</i>
Business Metered Rate	\$25.86	\$25.76 <i>(\$0.10)</i>	\$25.76 <i>(\$0.10)</i>	\$25.76 <i>(\$0.10)</i>

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 has remain fixed at \$107/tonne in 2013. Projected tipping fees have been reduced from prior estimates due to adjustments in expected waste flows as well as updates to capital programs and, in particular, updates to the projected timing for new waste-to-energy capacity funding requirements. 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. Key focus over the next year will be in organics recycling program expansion as well as partnerships with producers under expanded product stewardship programs.

Recommended Option

Staff recommend the budgets and rates as outlined under Option 2 for Solid Waste and Recycling as it allows the expansion of services with full cost recovery to provide carts to residents in single-family homes for food scraps and yard trimmings, expands food scraps/organics services to all townhomes currently receiving blue box collection services and adds a large item collection program service for residents in single-family homes and those townhomes currently serviced with City blue box collection.

Total Recommended 2013 Utility Rate Option

In light of the significant challenges associated with the impacts of regional costs and new programs in the City, staff are recommending a combination of various budget and rates options as follows:

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

This results in the following 2013 recommended utility rates as summarized in the following tables. The first table provides a summary of the estimated meter rate charge, based on average water and sewer consumption. The second table provides a summary of the flat rate charge.

2013 Estimated Total Charges to Metered Customers (Net Rates)		
<i>Customer Class</i>	2013 Recommended Rate (Increase Identified Below in Italics)	
	2012 Estimated Net Rates	Total 2013 Recommended Option – Estimated Net Rates
Single-Family Dwelling (based on avg. 270 m ³)	\$848.93	\$913.48 <i>\$64.55</i>
Townhouse (on City garbage service) (based on avg. 161 m ³)	\$579.92	\$641.26 <i>\$61.34</i>
Townhouse (not on City garbage service) (based on avg. 161 m ³)	\$470.92	\$535.26 <i>\$64.34</i>
Apartment (based on avg. 132 m ³)	\$405.38	\$436.62 <i>\$31.24</i>
General – Other/Business		
Metered Water (\$/m ³)	\$1.0058	\$1.0778 <i>\$0.072</i>
Metered Sewer (\$/m ³)	\$0.8337	\$0.9287 <i>\$0.095</i>
Business: Garbage	\$25.86	\$25.76 <i>(\$0.10)</i>
Business: Drainage & Diking	\$110.31	\$120.31 <i>\$10.00</i>

As 68% of single-family dwellings are on meters, the above charges are representative of what the majority of residents in single-family dwelling would pay vs. the flat rate charges outlined below.

2013 Total Annual Utility – Recommended Flat Rates (Net Rates)		
<i>Customer Class</i>	2013 Recommended Rate (Increase Identified Below in Italics)	
	2012 Net Rates	Total 2013 Recommended Option – Net Rates
Single-Family Dwelling	\$1,271.85	\$1,335.04 <i>\$63.19</i>
Townhouse (on City garbage service)	\$1,071.26	\$1,143.93 <i>\$72.67</i>
Townhouse (not on City garbage service)	\$962.26	\$1,037.93 <i>\$75.67</i>
Apartment	\$732.13	\$770.31 <i>\$38.18</i>
General – Other/Business		
Metered Water (\$/m ³)	\$1.0058	\$1.0778 <i>\$0.072</i>
Metered Sewer (\$/m ³)	\$0.8337	\$0.9287 <i>\$0.095</i>
Business: Garbage	\$25.86	\$25.76 <i>(\$0.10)</i>
Business: Drainage & Diking	\$110.31	\$120.31 <i>\$10.00</i>

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 inflated by the discount amount. The recommended rates outlined above result 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 the majority of single-family households from flat rates. Approximately 68% of single-family homes are now on meters. The majority of townhomes and apartments are still on flat rate, however, the number with meters is starting to increase as we turn our focus to promoting water metering in the multi-family sector. The number of units by customer class, including those on meters, is shown below for Council’s information. The number of units will vary to some degree based on the type of service (e.g. some units are not on sewer service), therefore, the following is based on the water services unit count:

<i>Residential Unit Counts – Flat Rate and Metered Customers</i>				
		2012 Counts	2013 Counts	Difference
<i>Single-Family Residential</i>	Flat Rate (32%)	10,635	9,364	(1,271)
	Metered (68%)	17,816	19,502	1,686
<i>Townhouse</i>	Flat Rate (91%)	14,308	13,366	(942)
	Metered (9%)	703	1,373	670
<i>Apartment</i>	Flat Rate (76%)	20,109	17,972	(2,137)
	Metered (24%)	1,715	5,674	3,959
<i>Total Residential Units</i>		65,286	67,251	1,965
<i>Commercial Units</i>	Metered	3,467	3,470	3
<i>Farms</i>	Metered	49	49	No change

Comparison of Recommended 2013 Utility Rate Option to 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 chart demonstrates the value of these services when compared to other common household expenses.

Daily Cost Comparison of Major Household Expenses for a Single Family Dwelling

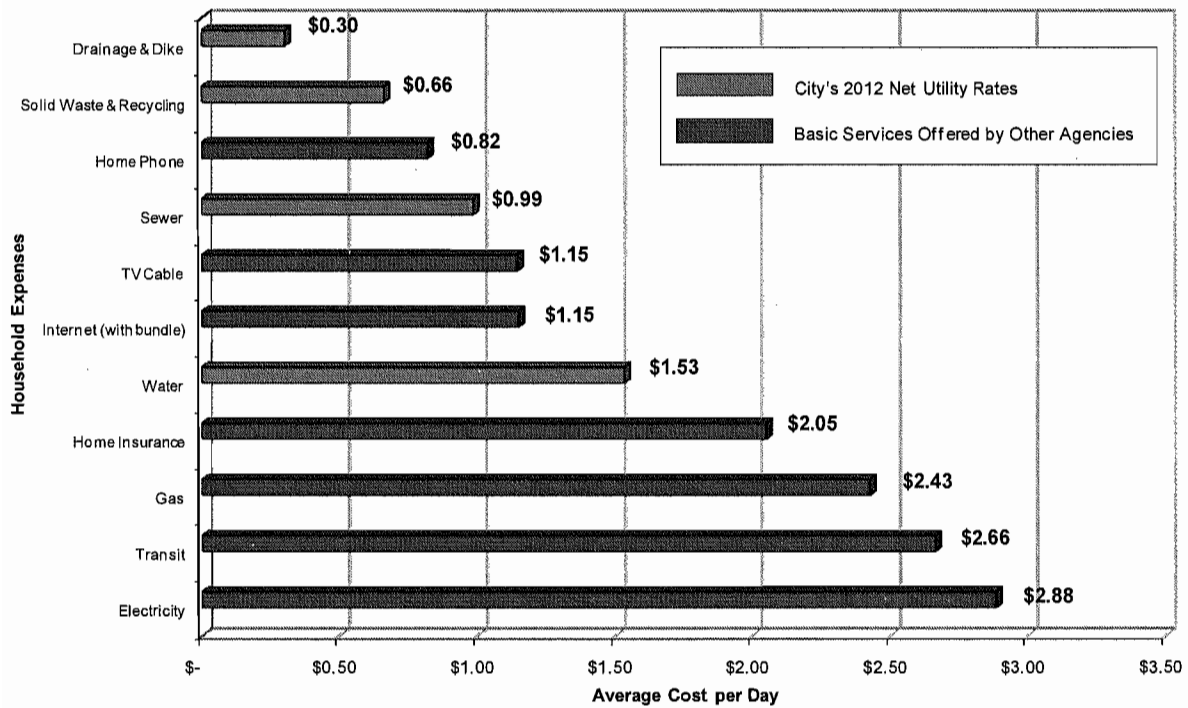


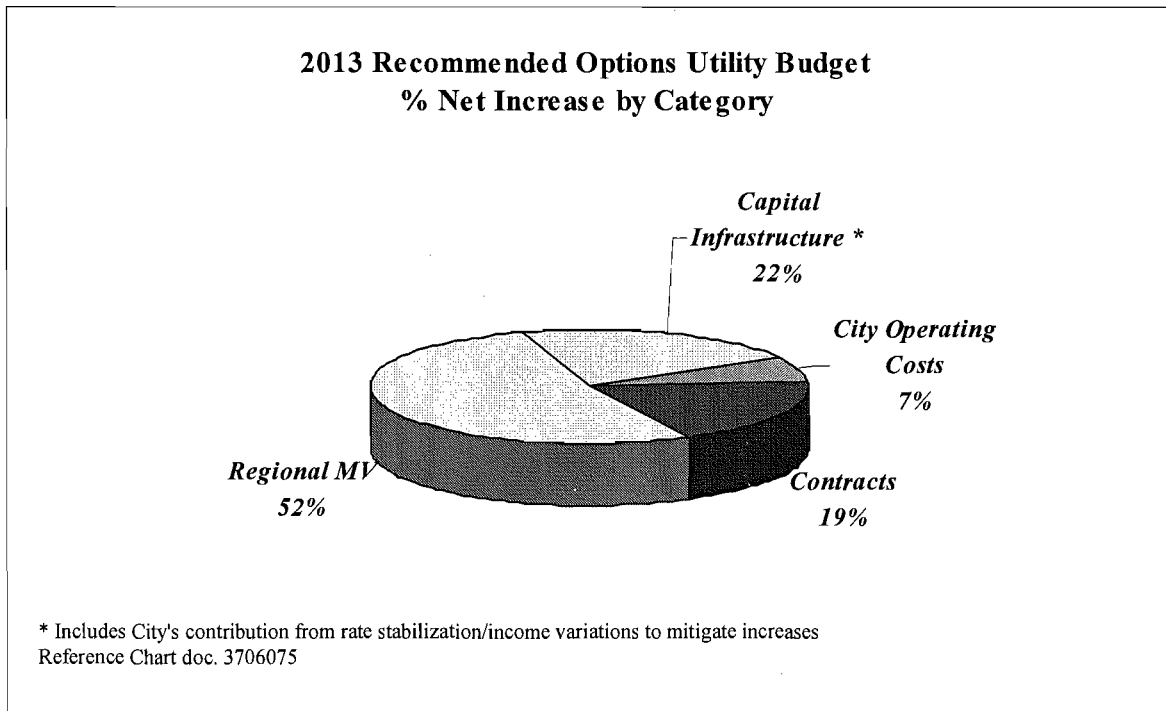
Chart REDMS Ref. 3054483

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 respective area.

The key impacts to the recommended 2013 utility budgets and rates stem from the need to reallocate fixed water/sewer system costs over a smaller volume base due to increased residential metering, increases in regional water purchases and sewer treatment costs, and proposed increased levels of service for recycling and solid waste management. Option 3 is recommended for Water, Sewer and Drainage. Option 2 is recommended for Solid Waste/Recycling.

Considerable effort has been made to minimize City costs and other costs within our ability to influence in order to minimize the impact to property owners. The following graph demonstrates the principal factors in the 2013 budget in the area of regional costs, contract costs, net capital infrastructure contribution (drainage) and other City operating costs.



Conclusion

This report presents the 2013 proposed utility budgets and rates for City services relating to the provision of water, sewer treatment, infrastructure maintenance and replacement (including water, sewer and drainage) as well as the provision of solid waste and recycling services. Considerable measures are taken to reduce costs where possible in order to minimize the impact of increased costs. A significant portion of the City's costs relate to impacts from influences outside of our direct control, such as regional cost impacts, power and fuel cost increases, etc. Regional costs are expected to continue increasing as part of meeting demands for ensuring high quality drinking water and managing sewer treatment. This budget also presents an enhanced level of service for expanding food scraps/organics collection services as part of meeting new regional waste diversion goals, i.e. 70% by 2015.

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.

Suzanne Bycraft
Manager, Fleet & Environmental Programs
(3338)



City of Richmond

Report to Committee

To: Public Works and Transportation Committee **Date:** September 4, 2012
From: Tom Stewart, ASCT. **File:** 10-6370-10-05/2012-
Director, Public Works Operations Vol 01
Re: Food Scraps/Organics Recycling Program Expansion

Staff Recommendation

That

1. the new and enhanced recycling program service levels, effective June, 2013, outlined in Option 2 of the staff report from the Manager, Fleet and Environmental Programs be referred for consideration as part of the 2013 utility and capital budget processes to:
 - i) add a new level of service for food scraps and organics collection services using City-provided wheeled carts for all multi-family townhome residents currently receiving the City's blue box collection services;
 - ii) provide wheeled carts to all residents in single-family households for the storage and weekly collection of food scraps and organic materials;
 - iii) provide kitchen containers for the temporary storage of food scraps/organics to all residents in single-family and townhome units who currently receive the City's blue box collection services.

2. a large item pickup program, limited to four items per household per year, as outlined in Option 2a) of the staff report from the Manager, Fleet and Environmental Programs, be considered as part of the 2013 utility budget process for implementation in June, 2013 for all single-family and townhome residents in conjunction with the proposed expanded food scraps/organics recycling program.




3. staff review and report on potential options for food scraps and organics collection services for residents in multi-family dwellings and commercial businesses.

Tom Stewart, ASCT.
Director, Public Works Operations
(604-233-3301)

3396009

September 4, 2012

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REPORT CONCURRENCE			
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER	
Finance Division	<input checked="" type="checkbox"/>		
REVIEWED BY SMT SUBCOMMITTEE	INITIALS: 	REVIEWED BY CAO	INITIALS: 

3596009

September 4, 2012

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Staff Report

Origin

At their May 28, 2012 meeting, Council received a report on "Green Cart Pilot Program Results" and approved the following resolution:

1. That based on the successful results of the Green Cart Pilot Program, staff report back on costs and options for an expanded cart-based collection program for a food scraps and organics recycling program for all townhome units in conjunction with the introduction of a similar program for residents in single-family homes; and
2. That the Green Cart Pilot program be continued pending a determination by Council on actions relating to a permanent food scraps/organics recycling program for townhomes.

This report responds to this resolution.

Analysis

Background

A principal strategy and action outlined in the regional Integrated Solid Waste and Resource Management Plan (ISWRMP) is to divert organic waste, including food scraps, from the single-family, multi-family and commercial sectors. Food waste comprises 21% of waste disposed and can be composted along with yard and garden waste to produce a beneficial and marketable compost product. The ISWRMP also establishes an action to ban all compostable organics from the waste disposal stream by 2015. In light of this pending disposal ban, expansion of food scraps and organics programs to multi-family residents is a key next step in order to ensure residents have reasonable alternatives for recycling this aspect of their waste.

Further, on November 14, 2011, Council established the Solid Waste Strategic Program as a component of the City's Sustainability Framework and as part of working toward our target to achieve community-wide waste diversion of 70% by 2015. Given that food scraps represent the largest remaining component of the waste disposal stream, food scraps and organics recycling is an important initiative in advancing overall community waste diversion.

Actions to Date

Single-Family Homes: Richmond was one of the first municipalities in the region to implement food scraps collection starting in April, 2010 for single-family homes. Through this program, labelled as the "Green Can" program, an estimated additional 1,000 – 1,500 tonnes of material is being diverted from disposal annually. The total amount of waste disposed by residents in single-family homes has also reduced substantially, i.e. between 2,000-3,000 tonnes since the introduction of food scraps recycling.

Townhomes: A pilot program commenced in April, 2011 involving approximately 3,200 townhome units as part of next steps in introducing food scraps recycling for multi-family residents. This program provided valuable information to help guide potential future expansion

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to this portion of the multi-family residential sector (outlined in the May 9, 2012 staff report – “Green Cart Pilot Program Results”).

This program resulted in estimated diversion of approximately 22% of total estimated waste generated by townhomes involved in the pilot program, or approximately 140 kg. per unit per year. Based on expanding this program to all 11,217 townhome units currently serviced under the City’s recycling program for blue box service, it is estimated that an additional 1,500 tonnes could be diverted from the waste disposal stream annually, increasing our overall diversion rate by 2.5%.

The pilot program is continuing to maintain services to residents involved in the pilot program pending a decision on options for potential program expansion. Due to the nature of the program being a pilot, the associated costs have been funded via the sanitation and recycling provision. This means that no fees have been charged to these townhome residents, nor has the cost of this program impacted the solid waste and recycling rates charged to residents.

Options for Program Expansion

In the May 9, 2012 staff report on the “Green Cart Pilot Program Results”, staff were requested to report back on two options:

1. *Townhomes only Food Scraps/Organics Collection Program Expansion (Not Recommended)*: Amend the City’s existing waste management services contract (current expiry date December 31, 2014) to include food scraps/organics recycling to all townhomes (those currently receiving City blue box recycling collection service – or approximately 11,217 units). Key elements of this program would include:
 - Wheeled carts provided by the City, where residents choose between a 46.5 L or 80 L cart (one cart per townhome unit). Residents may use paper yard waste bags for any additional garden trimmings which may not fit into the cart.
 - A kitchen container provided by the City as a one-time issue for temporary food scraps storage inside the home to promote ongoing participation.
 - Weekly service, with collection provided door-to-door on the same day as City blue box collection service.

This option is not recommended due to the short-term nature of the contract (to December 31, 2014), which will result in higher annual operating costs to townhome residents than that identified under Option 2, which follows.

2. *Townhomes Food Scraps/Organics Collection Program Expansion in Conjunction with Introducing a Cart-Based Collection Program for Single-Family Homes (Recommended)*: Expand food scraps/recycling collection to all townhomes currently receiving City blue box recycling collection service (11,217 units), *in conjunction with* a cart-based collection program for residents in single-family homes. Under this option, the existing waste management services contract is extended to December 31, 2017 to achieve economies of scale for optimal pricing. Key elements of this program would include:

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- As per Option 1 (above) - all townhomes currently receiving City blue box collection services are serviced with food scraps/organics recycling using wheeled carts provided by the City.
- Wheeled carts provided by the City to single-family households, where residents choose between one 80L, 120L, 240L or 360L cart (one cart per single-family household). Residents may continue to use paper yard waste bags for any additional garden trimmings which may not fit into the cart on an on-going basis. Residents may also continue to use their existing Green Cans as part of the program phase-in process, with the intent of phasing out the use of Green Cans after the end of 2013.
- A kitchen container provided by the City as a one-time issue per household for temporary food scraps storage inside the home to promote ongoing participation.
- Weekly service, with collection provided door-to-door on the same day as City blue box collection service for single-family and townhome residents on City blue box service.
- Contract T.2988, Residential Garbage and Recycling Collection Services, is extended to December 31, 2017 for all garbage and recycling services.

This option is recommended as it results in the least annual cost option for townhome residents and provides for cart-based collection for single-family households at minimal increased operating cost. This approach:

- ensures a consistent level of service for townhome residents and single-family residents,
- allows for reductions in waste disposed by residents in townhomes, which can translate into reduced costs for garbage collection servicing arrangements for those townhomes. This is particularly important in light of planned Metro Vancouver tipping/disposal fee increases, i.e. currently \$107/tonne and projected to increase to \$205/tonne by 2016,
- is expected to increase the volume of food scraps collected from single-family homes due to switching to wheeled carts since the carts offer greater animal/rodent-resistance (encouraging greater participation in food scraps recycling),
- will eliminate weight concerns since the carts will be serviced using automated tippers,
- will reduce missed pick-ups due to lack of the Green Can labels being visible to collectors (with the phasing out of Green Cans).

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a) ***Large Item Pick-Up Program***

The provision of a new service to residents for collection of large items is opportune associated with the potential extension of the existing service contract T.2988 through December 31, 2017. Under this new service, residents in single-family homes and those townhomes with blue box collection (and food scraps/organics collection – if approved) would also be eligible to have up to four large items collected per year. This could include items such as a mattress, couch, stove, refrigerator, household furniture (table, chair, etc.).

Under this program, residents would contact the service provider and arrange for collection of up to four items at one time, or one item on four different occasions, or two items on two different occasions, etc. The additional collection and disposal costs would be paid by the City as part of the Solid Waste and Recycling utility.

It is recommended that Item a) be included as part of an enhanced level of service associated with the introduction of the expanded food scraps/organics recycling program.

A summary of the costs of the options described above is provided in the table below:

Option	Service Description	Capital Cost (One-Time)	Annual Operating Cost	2013 Operating Cost Portion
1.	Townhome Food Scraps/ Organics Recycling (to December 31, 2014)	\$535,000	\$742,500	\$433,100
2.	Townhome Food Scraps/ Organics Recycling PLUS cart- based collection for single-family homes (to December 31, 2017)	\$3,250,000	\$700,000	\$408,400
a)	Optional Large Item Pickup Program (townhomes and single- family)		\$250,000	\$145,800
	Total – Option 2 a) (Recommended)	\$3,250,000	\$950,000	\$554,200

The total cost of the recommended option, (Option 2 a), is \$4.2 million, which includes \$3.25 million one-time capital costs and \$950,000 annual operating. The 2013 portion would be slightly lower (\$3,804,200) based on costs prorated to a June 1, 2013 start date.

3. ***Status Quo – No Expansion of Programs (Not Recommended)***: Existing service levels for food scraps/organics recycling can be maintained, where residents in single-family homes continue to use the Green Can program. The existing pilot program for townhome organics recycling would need to be discontinued, and residents in townhomes would then be required to make independent arrangements for their food scraps/organics

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recycling requirements to comply with the pending organics disposal ban. Under this Option, a large item collection service would not be offered, however, residents could continue to take advantage of the City's Garbage Disposal Voucher program. Under this program, residents purchase a voucher for \$5 from any City facility and can use the voucher to dispose of up to \$20 worth of garbage items at the Vancouver Landfill.

This option is not recommended as it does not encourage greater recycling of food scraps from single-family homes through the use of a designated, secure container. It is also expected to result in higher costs to townhomes associated with needing to make independent recycling arrangements for food scraps/organics recycling. Further, by not managing the program/service for townhomes, the City would not get the recycling tonnage data in order to be able to measure recycling rates as part of tracking our diversion progress. Finally, the lack of a City-coordinated collection program for large items contributes to illegal dumping and is inconvenient to residents who do not have vehicles large enough to take advantage of the Garbage Disposal Voucher program.

Multi-Family and Commercial Properties

The suggested Option 2 a) provides for a comprehensive and full service food scraps/organics recycling program for those residents in townhomes (who currently receiving blue box collection services) as well as residents in single-family homes. However, it does not address food scraps/organics collection service for residents in multi-family complexes or commercial properties. In light of the pending regional disposal ban for organics in 2015, program options for multi-family food scraps/organics recycling should also be evaluated to provide recycling services for these residents. Staff suggest a review of options be undertaken and reported back to Council for consideration. To assist businesses, staff can also evaluate whether there might be opportunities to frame a potential multi-family program expansion to include optional servicing to interested commercial properties. It is suggested that staff include this in their review and report back with findings and a suggested approach.

Financial Analysis

Capital: Funding for the capital cost (carts, containers and related items of \$3.25 m) is proposed from the sanitation and recycling provision, hence there would be no direct financial impact reflected in the rates charged to residents for sanitation and recycling services. This reserve funding has been established with this type of program expansion/change envisioned. Staff will submit a 2013 capital budget request for consideration of the capital costs associated with this proposed program implementation.

Operating: The annual operating cost is proposed to be funded from the sanitation and recycling utility rates, and therefore, reflected in the rates charged to residents who are eligible for the services. This would represent a *new charge* to townhome residents who received City blue box service of approximately \$49/unit/year and an increased charge to residents in single-family homes of approximately \$15.50/unit/year. These charges are summarized in the following table. Note that residents in multi-family/apartment developments would not be assessed any charges for the organics services associated with the new and enhanced recycling programs outlined in this report since the service is not available to them at this time. Future charges for multi-family

developments would be applied if and when a food scraps/organics program is introduced for these residents.

Anticipated Annual Utility Rate Increase					
<i>Resident Type</i>	<i>Current ~Net Organics Service Charge¹</i>	<i>Anticipated Increase for Organics per Option 2</i>	<i>Anticipated Increase for Large Item Pick Up Program (Item a of Option 2)</i>	<i>Total Anticipated Increase</i>	<i>Total Annual Estimated Organics Charge</i>
Townhomes on Blue Box	\$0.00	\$42.00	\$7.00	\$49.00	\$49.00
Single-Family Residents	\$68.50	\$6.50	\$7.00	\$15.50	\$84.00

¹ Organics charge only, not including recycling or garbage service charges, etc.

The rate impact in 2013 would be pro-rated based on the June 1st implementation date, or approximately one-half. The above rates are approximate and would be formalized upon completion of the sanitation and recycling utility budget and rates.

Financial Impact

This report has no direct financial impact as the related costs will be considered as part of the 2013 capital and 2013 and future utility budget processes.

Conclusion

Expansion of food scraps and organics recycling to residents in multi-family residences is a priority in light of pending disposal bans for this material in 2015. The success of the pilot program undertaken during 2011 demonstrated that 22% of the waste generated in townhomes (or approximately 1,500 tonnes) can be diverted by expanding food scraps/organics recycling to all townhomes.

The provision of wheeled carts will make it easy and convenient for residents to participate in the program. For consistency in levels of service and to encourage greater participation in food scraps recycling by residents in single-family homes, this report recommends transitioning the existing Green Can program to cart based collection. In-home kitchen containers are also suggested to be provided as part of improving convenience for residents and serving as a regular reminder to encourage ongoing participation.

The contract expansion presents the opportunity to also offer a large item collection service for residents, which provides a convenient alternative to dispose of up to four large items annually at minimal increased cost. This would enhance the City's level of service by assisting residents who do not have the ability to transport large items to disposal/recycling facilities.

It is recommended that these new and enhanced recycling program service levels be referred for consideration as part of the 2013 capital and utility budget processes. It is further recommended that staff review and report back on options to provide food scraps/organics collection services to multi-family and potentially commercial businesses.

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Suzanne Bycraft
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SJB:

2013 Total Annual Utility – Recommended Gross Rates per Bylaw Estimated Meter & Actual Flat Rates					
	<i>Water</i>	<i>Sewer</i>	<i>Drainage/ Diking</i>	<i>Garbage/ Recycling</i>	<i>Total</i>
Meter (Based on Estimated Consumption–Water & Sewer Rates will Vary According to Actual Consumption)					
Single-Family Dwelling	\$323.35	\$278.61	\$133.68	\$279.34	\$1,014.98
Townhouse (on City garbage)	\$192.81	\$166.14	\$133.68	\$219.89	\$712.52
Townhouse (no City garbage)	\$192.81	\$166.14	\$133.68	\$102.12	\$594.75
Apartment	\$158.08	\$136.21	\$133.68	\$57.17	\$485.14
Flat Rate (Actual)					
Single-Family Dwelling	\$642.16	\$428.20	\$133.68	\$279.34	\$1,483.38
Townhouse (on City garbage)	\$525.68	\$391.79	\$133.68	\$219.89	\$1,271.04
Townhouse (no City garbage)	\$525.68	\$391.79	\$133.68	\$102.12	\$1,153.27
Apartment	\$338.74	\$326.31	\$133.68	\$57.17	\$855.90
General – Other/Business					
Metered Water (\$/m ³)	\$1.1976				
Metered Sewer (\$/m ³)		\$1.0319			
Business: Garbage				\$28.62	
Business: Drainage & Diking			\$133.68		