



To: Finance Committee

Date: October 28, 2010

From: Andrew Nazareth
General Manager, Business and Financial
Services

File: 03-0970-01/2010-Vol 01

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

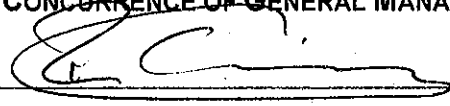


Re: 2011 Utility Budgets and Rates

Staff Recommendation

1. That the 2011 Utility Expenditure Budgets, as outlined under Option 1 for Water and Sewer; and Option 3 for Drainage & Diking and Solid Waste & Recycling, contained in the staff report dated October 27, 2010 from the General Managers of Business and Financial Services and Engineering & Public Works, be approved as the basis for establishing the 2011 Utility Rates; and
2. That staff be directed to report directly to Council with the necessary amendment bylaws to bring into effect the 2011 utility rates option recommended by Committee for the Drainage, Dike and Sanitary Sewer System Bylaw, Waterworks and Water Rates Bylaw, and Solid Waste and Recycling Regulation Bylaw.
3. That the amending bylaws presented per recommendation 2 above include a provision to increase the toilet rebate program from the current \$50 credit per toilet to \$100 credit per toilet, with the maximum allowable rebate of \$200 (or two toilets) per household for replacing a 13 litre per flush toilet with a 6 litre or lower per flush toilet.
4. That additional personnel complement control positions be approved for:
 - a) An additional level of service for a full-time litter attendant position for waste and litter removal along No. 3 Road in relation to the Canada Line,
 - b) A full-time program coordinator in relation to the organics recycling program,with the additional level funding as included under Option 3 within the Solid Waste & Recycling Utility Budget.

Andrew Nazareth
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General Manager, Engineering
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FOR ORIGINATING DEPARTMENT USE ONLY		
CONCURRENCE OF GENERAL MANAGER 		
REVIEWED BY TAG	YES  <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
REVIEWED BY CAO DEPUTY	YES  <input checked="" type="checkbox"/>	NO <input type="checkbox"/>

Staff Report

Origin

This report presents the recommended 2011 utility budgets and rates for Water, Sewer, Drainage and Solid Waste & Recycling. It is recommended that utility rates be established by December 31, 2010 in order to facilitate billing in early 2011.

Analysis

Key factors contributing to changes in the utility budgets in 2011 include:

- GVWD (Greater Vancouver Water District) regional water rates have increased by 14% due to the debt service and operating costs associated with the Seymour-Capilano filtration plant. While the regional rate is increased 14%, City water purchase costs are increasing by approximately 10% in light of reduced water consumption due to the City's water metering program and water conservation efforts.
- GVS&DD sewer operating and maintenance costs are increased by approximately 9.6% due principally to contracted increases on labour rates and increased costs associated with maintaining an aging infrastructure. Implementation of the funding mechanisms for the Iona and Lions Gate wastewater treatment plants are also contributing factors to the increase.
- Metro Vancouver solid waste disposal charges have increased from \$82 to \$97 per tonne or 18%.
- The introduction of the Green Can Program has resulted in increased costs associated with changes in the collection process. This program was approved by Council on November 23, 2009 and was implemented in April, 2010.
- Collective agreement negotiated wage increases for City staff of 4%.
- Management of municipal utility programs has offset some of these costs.

Long-term infrastructure planning to replace aging/deteriorating municipal infrastructure will continue to impact budgets and rates until we are able to sustain the necessary level of funding required to replace infrastructure in the future. These costs impact rates to a lesser extent than regional costs outside of the City's control and are separately itemized in this report. Council has adopted a staged program to increase water, sewer and drainage reserves to support infrastructure replacement. The 2011 budget figures presented represent options for infrastructure replacement increases in drainage only. While there is a need to increase the infrastructure replacement contribution for sewer reserves, none is proposed in 2011 in light of the significant increases in regional costs. The water reserve capital contribution has reached a sustainable level, therefore, the budget options presented in this report do not include any proposed increases in the annual reserve contribution for water.

Recognizing these competing challenges, staff have presented various budget and rate options for 2011, including discretionary and non-discretionary increases. The various options are presented for each of the utility areas in the following charts:

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

The concluding summary of proposed rates for 2011, including the 10% discount realized when residents pay within the specified timeframe, is shown on page 16.

Water Section Chart

2011 Water Budget - Options				
<i>Key Budget Areas</i>	<i>2010 Base Level Budget</i>	<i>2011: Option 1</i> <i>Non-Discretionary</i> <i>Increases with</i> <i>Reduced Allocation</i> <i>for Water Meter</i> <i>Program</i>	<i>2011: Option 2</i> <i>Non-Discretionary</i> <i>Increases with Partial</i> <i>Reduced Allocation</i> <i>for Water Meter</i> <i>Program</i>	<i>2011: Option 3</i> <i>Non-Discretionary,</i> <i>with No Reduction to</i> <i>Water Meter</i> <i>Program Allocation –</i> <i>Equal to that in 2010</i>
Operating Expenditures	\$7,075,100			
• Salary		\$170,337	\$170,337	\$170,337
• Equipment/Fuel/Power		\$9,600	\$9,600	\$9,600
• Monthly Vehicles		\$31,500	\$31,500	\$31,500
• Lease Vehicles		\$28,000	\$28,000	\$28,000
• Materials/Operating/Tools		\$13,700	\$13,700	\$13,700
• Postage		\$12,000	\$12,000	\$12,000
Toilet Rebate Program	\$100,000	(\$50,000)	(\$50,000)	(\$50,000)
GVRD Water Purchases (MV)	\$18,742,600	\$1,860,100	\$1,860,100	\$1,860,100
Capital Infrastructure Replacement Program	\$7,550,000	\$0	\$0	\$0
Firm Price/Receivable	\$1,704,400	\$43,800	\$43,800	\$43,800
Residential Water Metering Program/Appropriated Surplus	\$2,000,000	(\$400,000)	(\$200,000)	\$0
Overhead Allocation	\$864,900	\$0	\$0	\$0
Total 2010 Base Level Budget	\$38,037,000			
Total Incremental Increase		\$1,719,037	\$1,919,037	\$2,119,037
<i>Revenues:</i>				
<i>Apply Rate Stabilization Fund</i>	<i>(\$750,000)</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
<i>Investment Income</i>	<i>(\$450,000)</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
<i>Firm Price/Receivable Income</i>	<i>(\$1,704,400)</i>	<i>(\$43,800)</i>	<i>(\$43,800)</i>	<i>(\$43,800)</i>
<i>Meter Rental Income</i>	<i>(\$955,600)</i>	<i>(\$178,500)</i>	<i>(\$178,500)</i>	<i>(\$178,500)</i>
<i>Miscellaneous Revenue</i>	<i>(\$8,000)</i>	<i>(\$2,000)</i>	<i>(\$2,000)</i>	<i>(\$2,000)</i>
<i>Provision</i>	<i>(\$100,000)</i>	<i>\$50,000</i>	<i>\$50,000</i>	<i>\$50,000</i>
Net Budget	\$34,069,000			
Net Difference over 2010 Base Level Budget		\$1,544,737	\$1,744,737	\$1,944,737

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

Operating Expenditures

The principal increase in operating expenditures relates to non-discretionary salary cost increases of 4% as stipulated in collective agreements. Equipment costs are increased associated with water meter maintenance and plant growth, as well as fuel and power cost increases. Monthly vehicle costs are increased associated with fleet rate increases in relation to long-term replacement. Lease vehicle costs reflect lease units needed to support the water asset inventory collection function. Corresponding reductions in other operating budget areas were made to offset these added lease costs, i.e. the increases shown for operating costs would have been higher than that indicated.

Toilet Rebate Program

To date in 2010, approximately 260 toilet rebates have been issued, at a cost of approximately \$13,000. In light of the costs to date, staff are suggesting that the amount allocated for the rebate program be reduced to \$50,000 under all options. As this program is funded from the water provision account, there is no net impact to the water rate charged since there will be a corresponding reduction in the amount of money applied from the provision account to fund this program.

To encourage greater participation in the toilet rebate program and promote further water conservation, staff recommend that the amount of the rebate be increased from the current \$50 credit per toilet to \$100 credit per toilet. The maximum allowable would be \$200 (or two toilets) per household for replacing a 13 litre per flush toilet with a 6 litre or lower per flush toilet. This change can be accommodated within the funding levels contained in the proposed 2011 budget for this program. This change will be brought forward with the utility amending bylaws when they are presented to Council for approval.

GVRD Water Purchases – Metro Vancouver

Increases in regional charges for water purchases represent the most significant impact under all options at \$1.86 million or approximately 10% above 2010 costs. The Metro Vancouver rate per cubic meter is increased 14% (from \$.4955/m³ to \$.5648/m³).

Benefits of Water Metering & Conservation Initiatives: The net increase to Richmond is lower than the regional rate increase due to water conservation initiatives in Richmond. These initiatives have resulted in an overall reduction in total water consumption, thereby mitigating the full impact of the regional water rate increases. This is a testament to the initiatives and strategies which have led to reduced residential water consumption.

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 recommended levels -- \$7.55 million. Current assessments are that the long-term infrastructure replacement demands require an annual reserve contribution of \$7.6 million. Staff will undertake further assessments to determine infrastructure replacement requirements going forward and identify any recommended changes to the annual contribution, if required.

At this time, staff are undertaking System Water Loss review initiatives as well as the potential for off-peak system pressure reduction initiatives to prolong infrastructure life and reduce operating costs further. These will be the subject of future reports.

Firm Price/Receivable

Costs associated with receivable work are increased slightly as a result of the collective agreement salary increase. These cost increases are offset with a corresponding increase in revenues, which is recovered from those receiving these services.

Residential Water Metering Program

Currently, \$2 million is allocated annually to the residential water metering program. Expenses in 2009 were approximately \$1 million and to date in 2010 are approximately \$.5 million. Given current and projected expenditures associated with this program, and in light of the significant impact on rates of regional water purchase costs, Option 1 includes a \$400,000 reduction in the 2011 proposed allocation for a net budget of \$1.6 million. Option 2 includes an alternative of a \$200,000 reduction in the 2011

proposed allocation for a net budget of \$1.8 million. Under Option 3, the 2011 budget allocation would remain at the same level as in 2010, or \$2 million.

Staff are recommending Option 1 since current and future projected expenditures reflect that a higher level of funding is not required and the current water meter provision reserve levels are considered adequate at this time to meet costs associated with metering demand requirements.

Multi-Family Water Metering Program: The City’s multi-family water metering program has been very successful in helping to reduce water consumption. Through this program, there have been 43 mandatory multi-family meter installations (comprising 2,137 units) with an estimated 63% savings compared to the flat rate. In addition, the City has received formal interest in the voluntary metering program from 13 apartment and 54 townhouse complexes (comprising 4,263 multi-family dwelling units). Of these, two have been completed to date and eight are in the design or pre-mobilization phase. These voluntary installations will continue to be funded through the water metering program funding allocation.

Rate Stabilization Contribution

The 2011 base level budget under all options reflects a \$750,000 application offset from the water rate stabilization fund. This represents a stabilization fund draw-down to help reduce the overall impact to rate-payers. While this contribution assists in helping to reduce the rate increase, it cannot be continued indefinitely going forward since the water rate stabilization fund will eventually be depleted, leaving no funding to help stabilize rates in the future and an eventual increase in rates. In light of the considerable increase in the regional water rate in 2011, it is recommended to continue this level of offset. This contribution should be reduced over time, however, provided regional rates are on track with projections shown below. Unlike other cities, this fund was established a number of years ago to help build a provision account to offset the significant spikes in regional water purchase costs. These increases were anticipated due to Metro Vancouver infrastructure upgrades associated with water treatment and filtration requirements. Any future operating surplus funds will be deposited in the respective Provision accounts.

Regional Issues

The Regional District increases are for the drinking water treatment program. Metro rates relate to debt service and operating costs associated with the Seymour-Capilano Filtration Plant. These include increased tunnel contract costs, updated projections of declining water consumption and increases in system maintenance and costs associated with asset management planning. Costs associated with legal action being taken by Metro Vancouver to recover the additional tunnel costs are not reflected in Metro Vancouver’s projections at this time since a resolution is not anticipated for several years. Metro’s current 5-year projections for the regional water rate are:

	2011	2012	2013	2014	2015
Projected Water Rate/m ³	\$.5648	\$.6407	\$.7093	\$.7556	\$.8009
% Increase over Prior Year	14%	13.4%	10.7%	6.5%	6.0%

Impact on 2011 Water Rates

The impact of these various budget options on the water rates by customer class is as follows.

2011 Water Gross Rates Options				
		2011 Rate Options which Include Increase Identified Below in Italics		
Customer Class	2010 Rates	Recommended: 2011 Option 1 Rate	2011 Option 2 Rate	2011 Option 3 Rate
Single Family Dwelling	\$525.23	\$580.19 <i>\$54.96</i>	\$583.54 <i>\$58.31</i>	\$586.89 <i>\$61.66</i>
Townhouse	\$429.96	\$474.95 <i>\$44.99</i>	\$477.69 <i>\$47.73</i>	\$480.43 <i>\$50.47</i>
Apartment	\$277.06	\$306.05 <i>\$28.99</i>	\$307.82 <i>\$30.76</i>	\$309.58 <i>\$32.52</i>
Metered Rate (\$/m ³)	\$0.9277	\$1.0248 <i>\$0.0971</i>	\$1.0307 <i>\$0.1030</i>	\$1.0366 <i>\$0.1089</i>

The rates outlined in the foregoing table are gross rates. 10% savings off the noted rates can be realized by paying utility bills within the specified time frame.

Advantages/Disadvantages of Various Options

Option 1

- Represents the minimal increase necessary to sustain operations.
- Represents a \$400,000 reduction in the residential water metering program, reducing the annual funding for this program from the current budget level of \$2 million to \$1.6 million.
- Provides for a contribution from the rate stabilization fund in the amount of \$750,000 to partially offset the impact of regional water increases.
- Is the lowest cost option.

Option 2

- Represents a \$200,000 reduction in the residential water metering program, reducing the annual funding for this program from the current budget level of \$2 million to \$1.8 million.
- Provides for a contribution from the rate stabilization fund in the amount of \$750,000 to partially offset the impact of regional water increases.
- Represents a marginal increase, i.e. approximately 6%, over the Option 1 cost.
- Is the mid cost option.

Option 3

- Represents no reduction in the residential water metering program, maintaining the budget at current levels, or \$2 million.
- Provides for a contribution from the rate stabilization fund in the amount of \$750,000 to partially offset the impact of regional water increases.
- Represents an increase of approximately 12% over the Option 1 cost.
- Is the highest cost option.

Recommended Option

Staff recommend the budgets and rates as outlined under Option 1 for Water Services.

Sewer Section Chart

2011 Sewer Budget – Options				
<i>Key Budget Areas</i>	<i>2010 Base Level Budget</i>	<i>2011: Option 1 Non-Discretionary Increases with No Contribution to Rate Stabilization</i>	<i>2011: Option 2 Non-Discretionary with Partial Contribution to Rate Stabilization</i>	<i>2011: Option 3 Non-Discretionary with Rate Stabilization Contribution Equal to 2010 Amount</i>
Operating Expenditures	\$4,308,000			
• Power Costs		\$16,900	\$16,900	\$16,900
• Salary		\$110,337	\$110,337	\$110,337
• Equipment/Fuel/Materials		\$13,300	\$13,300	\$13,300
• General Operating		\$4,300	\$4,300	\$4,300
• Monthly Vehicles		\$26,500	\$26,500	\$26,500
GVS&DD O&M (MV)	\$13,368,900	\$1,283,400	\$1,283,400	\$1,283,400
GVS&DD Debt (MV)	\$3,252,000	(\$594,300)	(\$594,300)	(\$594,300)
GVS&DD BOD/TSS (MV)	\$565,200	(\$565,200)	(\$565,200)	(\$565,200)
GVS&DD Sewer DCC's (MV)	\$1,000,000	\$0	\$0	\$0
Rate Stabilization Contribution	\$430,300	(\$430,300)	(\$215,150)	\$0
Capital Infrastructure Replacement Program	\$4,306,400	\$0	\$0	\$0
Firm Price/Receivable	\$563,200	\$13,200	\$13,200	\$13,200
Overhead Allocation	\$498,800	\$0	\$0	\$0
Operating Debt	\$151,000	\$3,300	\$3,300	\$3,300
Total 2010 Base Level Budget	\$28,443,800			
Total Incremental Increase		(\$118,563)	\$96,587	\$311,737
<i>Revenues:</i>				
<i>Debt Funding</i>	<i>(\$35,800)</i>	<i>(\$3,300)</i>	<i>(\$3,300)</i>	<i>(\$3,300)</i>
<i>Investment Income</i>	<i>(\$175,000)</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
<i>Firm Price/Receivable Income</i>	<i>(\$563,200)</i>	<i>(\$13,200)</i>	<i>(\$13,200)</i>	<i>(\$13,200)</i>
<i>Property Tax for DD Debt (MV)</i>	<i>(\$3,252,000)</i>	<i>\$594,300</i>	<i>\$594,300</i>	<i>\$594,300</i>
<i>GVS&DD Sewer DCC Levy to Developers (MV)</i>	<i>(\$1,000,000)</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
<i>Direct Levy for BOD/ TSS (MV)</i>	<i>(\$565,200)</i>	<i>\$565,200</i>	<i>\$565,200</i>	<i>\$565,200</i>
Net Budget	\$22,852,600			
Net Difference Over 2010 Base Level Budget		\$1,024,437	\$1,239,587	\$1,454,737

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

Operating Expenditures

Increases in power costs are due to hydro increases to operate pump stations, and are outside of the City's control. Salary costs increases are due to non-discretionary salary increases stipulated in collective agreements of 4%. Equipment, material and general operating expenditures are increased associated with

plant growth. Monthly vehicle costs are increased associated with fleet rate increases in relation to long-term replacement.

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 \$1.3 million, or 9.6%. This is higher than the Metro Vancouver projected increase of 4.6% due to the cost apportionment methodology applied in relation to liquid waste costs. These costs relate principally to the operation of the Lulu Island Water Treatment Plant, since these costs are borne entirely by Richmond.

Gilbert Road Trunk Line: As a result of discussions with Metro Vancouver, they have reduced their operating budget by \$.6 million in 2011 associated with the Gilbert Road trunk maintenance project for cleaning grease accumulations. This project was suspended in 2009 as a result of the high costs and operational challenges associated with managing the cleaning project. This reduction is reflected in the operations and maintenance charges noted in the sewer budget options table. In 2010, Metro Vancouver completed a business case analysis to weigh the benefits of twinning the Gilbert Road trunk vs. continuing with the cleaning program. Preliminary findings of that business case indicate that twinning the Gilbert trunk is the preferred option. Metro Vancouver has issued a request for proposals for consulting services to complete preliminary design of the twin Gilbert trunk. We expect design and construction of a new/twin line along Gilbert Road will take place between 2012 through 2018. This new line will represent the needed additional capacity for sewer treatment, as the existing line will be cleaned and refurbished once the new line is constructed.

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

GVS&DD debt costs are reduced per Metro Vancouver in association with debt reduction. These costs are recovered from property taxes and, therefore, do not impact the sewer rates charged. There will, however, be a corresponding reduction in the amount recovered from property taxes for regional sewer debt.

GVS&DD BOD/TSS (Greater Vancouver Sewerage and Drainage District Biological Oxygen Demand/Total Suspended Solids) Charges

BOD/TSS costs have been eliminated in 2011. In accordance with recent amendments to the regional Sewer Use Bylaw No. 299 2007, BOD/TSS industry fees are no longer included as part of the annual sewer levies. Beginning in 2011, these fees will be administered and collected directly by Metro Vancouver's Regulation & Enforcement division from permit holders. This change has no net budget impact as there is a corresponding offset between revenues and expenditures for this item.

Rate Stabilization Contribution

The current/2010 budget and rates charged for sewer include an amount of \$430,300 collected to contribute toward rate stabilization contribution. Given the significant impact of the regional rate increase on operating and maintenance costs, Option 1 includes a proposal to completely eliminate the collection of funds toward rate stabilization contribution in 2011. Option 2 includes an alternative to reduce the amount collected toward rate stabilization by one-half of 2010 levels, or an amount of \$215,150. The alternative in Option 3 is to maintain the same level of contribution to rate stabilization, or \$430,300 in 2011.

Given the significance of regional rate increases, staff recommend that we are no longer in a position to collect a contribution toward rate stabilization, hence Option 1 is recommended. Any future operating surplus funds will be deposited in the respective Provision accounts.

Capital Infrastructure Replacement Program

Under all options outlined above, there is no increase proposed in the sewer infrastructure capital replacement program. While the long-range infrastructure funding required to sustain the current infrastructure is \$6.1 million annually and the current funding level is \$4.3 million annually, staff do not recommend increases to capital replacement for 2011 given the significant external non-discretionary costs driven by Metro Vancouver's regional programs.

Firm Price/Receivable

As is the case with water, receivable expenses and corresponding income is increased marginally due to negotiated labour cost increases associated with collective bargaining. As this is a cost/revenue offset, there is no net impact on the rates charged to residents.

Operating Debt

Operating debt relates to the sewer debt sinking fund and is based on costs provided by the Municipal Finance Authority. There is a small increase in 2011, but this has no impact on the rates charged since the amount is offset by a corresponding increase in revenues.

Regional Issues

The main budget drivers impacting the projected increase in Metro Vancouver costs include the impacts of inflation on labour rates, and the increased costs associated with the maintenance of aging infrastructure. Additional cost increases associated with the approved Liquid Waste Management Plan are estimated to be 8% per year through 2020 for regional costs.

Impact on 2011 Sewer Rates

The impact of these various budget options on the sewer rates by customer class is provided in the table which follows.

<i>2011 Sewer Gross Rates Options</i>				
		<i>2011 Rate Options which Include Increase Identified Below in Italics</i>		
<i>Customer Class</i>	<i>2010 Rates</i>	<i>Recommended: 2011 Option 1 Rate</i>	<i>2011 Option 2 Rate</i>	<i>2011 Option 3 Rate</i>
Single Family Dwelling	\$340.78	\$373.24 <i>\$32.46</i>	\$376.60 <i>\$35.82</i>	\$379.96 <i>\$39.18</i>
Townhouse	\$311.81	\$341.51 <i>\$29.70</i>	\$344.58 <i>\$32.77</i>	\$347.66 <i>\$35.85</i>
Apartment	\$259.69	\$284.42 <i>\$24.73</i>	\$286.99 <i>\$27.30</i>	\$289.55 <i>\$29.86</i>
Metered Rate (\$/m ³)	\$0.7729	\$0.8465 <i>\$0.0736</i>	\$0.8541 <i>\$0.0812</i>	\$0.8618 <i>\$0.0889</i>

The rates outlined in the foregoing table are gross rates. 10% savings can be realized by paying utility bills within the specified timeframe.

Advantages/Disadvantages of Various OptionsOption 1

- Represents the minimal increase necessary to sustain operations.
- There is no collection of funds to contribute toward rate stabilization for future increases, i.e. the rate stabilization contribution is reduced to \$0 from the 2010 level of \$430,300.
- Does not meet City's long-term infrastructure plan to increase the capital program for replacement of aging infrastructure. Capital replacement remains fixed at \$4.3 million for 2011. The objective is to build the annual infrastructure replacement for sewer to \$6.1 million.
- Is the lowest cost option.

Option 2

- Higher impact on the budget and rates charged to property owners.
- Represents a reduction in the amount collected toward rate stabilization by one-half or a reduction to \$215,150 from \$430,300.
- Does not meet City's long-term infrastructure plan to increase the capital program for replacement of aging infrastructure. Capital replacement remains fixed at \$4.3 million for 2011. The objective is to build the annual infrastructure replacement for sewer to \$6.1 million.
- Is the mid cost option.

Option 3

- Represents no reduction in the amount collected toward rate stabilization. The contribution remains at 2010 levels or at \$430,300 as part of building a fund to offset future rate increases via partial draw down.
- Does not meet City's long-term infrastructure plan to increase the capital program for replacement of aging infrastructure. Capital replacement remains fixed at \$4.3 million for 2011. The objective is to build the annual infrastructure replacement for sewer to \$6.1 million.
- Is the highest cost option.

Recommended Option

Staff recommend the budgets and rates as outlined under Option 1 for Sewer Services.

Drainage and Diking Section Chart

<i>2011 Drainage and Diking Gross Rate Options</i>				
		<i>2011 Rate Options which Include Increase Identified Below in Italics</i>		
<i>Utility Area</i>	<i>2010 Rates</i>	<i>2011 Option 1 Rate</i>	<i>2011 Option 2 Rate</i>	<i>Recommended: 2011 Option 3 Rate</i>
Drainage	\$89.20	\$89.20	\$94.75	\$100.35
Diking	\$11.11	\$11.11	\$11.11	\$11.11
Total Drainage & Diking	\$100.31	\$100.31	\$105.86	\$111.46
<i>Increase Over 2010</i>		<i>\$0</i>	<i>\$5.55</i>	<i>\$11.15</i>

The rates outlined in the foregoing table are gross rates. 10% savings can be realized by paying utility bills within the specified timeframe.

Background

Drainage - In 2003, a drainage utility was created to begin developing a reserve fund for drainage infrastructure replacement costs. The objective is to build the fund to an anticipated annual contribution of approximately \$12 million, subject to ongoing review of the drainage infrastructure replacement requirements.

As adopted by Council in 2003, the rate started at \$11.15 and is increased an additional \$11.15 each year until such time as the \$12 million annual reserve requirement is reached -- expected to take approximately 8 more years. The rate in 2010 was \$89.20 resulting in approximately \$5.6M 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 \$11.15 under Option 3 per prior Council approvals. The recommended increase under Option 3 will result in \$6.4 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 \$600,000 was established in 2006 to undertake structural upgrades at key locations along the dike, which equated to an \$11.11 charge. Continued annual funding is required to facilitate continued studies and upgrades as identified through further seismic assessments of the dikes. No increase in the \$11.11 rate is proposed for 2011. This will result in revenues of approximately \$670,000 in 2011, 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

<i>2011 Solid Waste & Recycling Budget - Options</i>				
<i>Key Budget Areas</i>	<i>2010 Base Level Budget</i>	<i>Option 1¹</i> <i>Non-Discretionary Increases</i>	<i>Option 2¹</i> <i>Non-Discretionary Increases</i>	<i>Option 3</i> <i>Non-Discretionary Increases Plus Discretionary Increases for Canada Line</i>
Salaries	\$1,696,100	\$182,100	\$182,100	\$261,615
Contracts	\$3,285,600	\$1,270,300	\$1,270,300	\$1,270,300
Equipment/Materials/Vehicles	\$323,600	\$20,300	\$20,300	\$30,824
Metro Disposal Costs (MV)	\$1,562,300	\$193,900	\$193,900	\$193,900
Recycling Materials Processing	\$1,178,800	(\$62,400)	(\$62,400)	(\$62,400)
Container Rental/Collection	\$143,300	\$15,000	\$15,000	\$15,000
Operating Expenditures	\$119,900	\$11,900	\$11,900	\$11,900
Program Costs	\$165,200	\$17,437	\$17,437	\$17,437
Agreements	\$160,000	\$3,200	\$3,200	\$3,200
Rate Stabilization	\$471,500	(\$471,500)	(\$471,500)	(\$471,500)
Total	\$9,106,300			
Net Difference Over 2010 Base Level Budget		\$1,180,237	\$1,180,237	\$1,270,276

¹There is no difference between Options 1 and 2. It is shown for consistency with the other utility areas.

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

Salaries

Salary costs are increased associated with negotiated wage increases of 4%. Salary costs also include additional part-time labour costs for assistance at the Recycling Depot associated with program demand/growth. The salary costs presented also include a new position associated with the organics recycling program for program administration. This position was identified as a component requirement of the new organics program when it was approved by Council on November 23, 2009 (reference Attachment 1).

Salary costs in Option 3 also include a proposed additional litter attendant position to undertake waste and litter removal along No. 3 Road, associated with the Canada Line stations. The need for a dedicated position to help maintain overall cleanliness of the stations and adjacent areas became evident this year and is therefore proposed for Council's consideration in 2011.

Contracts

Collection contract costs are reflective of the increased costs associated with the new organics recycling program approved by Council on November 23, 2009, and represents a very important initiative in further reducing waste as we work toward achieving 70% reduction by 2015, in accordance with the new Integrated Solid Waste and Resource Management Plan objectives. Collection contracts also includes contractual increases for the City's various tendered services, growth in the number of units serviced, and the impact from the new HST.

Equipment/Materials/Vehicles

Material, equipment and vehicle costs are increased associated with plant growth and increased monthly vehicle charges. Costs are further increased under Option 3 to include annual operating costs associated with a new vehicle to support the proposal additional level litter attendant position as discussed in the 'salaries' section.

Metro Vancouver Disposal Costs (MV)

Disposal costs are increased significantly associated with the regional tipping fee increase from \$82 to \$97 per tonne. Had the new organics program not been introduced to divert more waste from garbage, the metro disposal costs noted above would have been approximately \$150,000 higher.

Recycling Materials Processing

Recycling materials processing costs are reduced associated with the preferential processing fee the City achieved by introducing the new organics recycling program.

Container Rental/Collection & Operating Expenditures

Container rental and operating expenditures are increased associated with higher recycling material volumes at the Recycling Depot.

Program Costs & Agreements

Program cost increases under Option 1 relate to increased use by residents of the City's spring clean up program (garbage disposal voucher program). 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.

Rate Stabilization

Due to the impacts of program enhancements and regional rate increases, the collection of funds toward rate stabilization has been eliminated under all options. Staff recommend that no monies be collected to contribute toward the rate stabilization fund in 2011. Any future operating surplus funds will be deposited in the respective Provision accounts.

Impact on 2011 Rates

The impact of the budget options to ratepayers is provided in the table which follows. The increase to the average single-family dwelling is approximately \$30 associated principally with the introduction of the new organics recycling program. This is consistent with the costs identified in the staff report presented at the November 23, 2009 Council meeting on the introduction of this new program, included as Attachment 1.

<i>2011 Solid Waste & Recycling Gross Rates Options</i>				
		<i>2011 Rate Options which Include Increase Identified Below in Italics</i>		
<i>Customer Class</i>	<i>2010 Rates</i>	<i>2011 Option 1 Rate¹</i>	<i>2011 Option 2 Rate¹</i>	<i>Recommended: 2011 Option 3 Rate</i>
Single Family Dwelling	\$229.44	\$259.14 <i>\$29.70</i>	\$259.14 <i>\$29.70</i>	\$260.90 <i>\$31.46</i>
Townhouse	\$187.10	\$186.80 <i>(\$.30)</i>	\$186.80 <i>(\$.30)</i>	\$188.29 <i>\$1.19</i>
Apartment	\$54.16	\$56.53 <i>\$2.37</i>	\$56.53 <i>\$2.37</i>	\$57.93 <i>\$3.77</i>
Business Metered Rate	\$27.04	\$27.67 <i>\$0.63</i>	\$27.67 <i>\$0.63</i>	\$29.07 <i>\$2.03</i>

¹There is no difference in the rates in Options 1 and 2. It is shown for consistency with the other utility areas.

The rates outlined in the foregoing table are gross rates. 10% savings can be realized by paying utility bills within the specified timeframe.

Regional Issues

The regional tipping fee has increased to \$97/tonne (from current \$82 per tonne). This is \$10/tonne higher than regional projections due principally to prior year revenue shortfalls and declining waste flows from poorer economic conditions. Costs for regional initiatives identified in the Integrated Solid Waste and Resource Management Plan are also factors driving the tipping fee increase. In addition to the impacts of the tipping fee increases, Richmond will also incur costs to implement the local government actions identified in the Integrated Solid Waste and Resource Management Plan. These costs could amount to an additional \$4 million annually, depending on the level to which the municipal actions are pursued. These added programs will be brought to Council for approval in advance of incurring any additional expenditures.

Recommended Option

Staff recommend the budgets and rates as outlined under Option 3 for Solid Waste and Recycling as it meets the funding requirements necessary to maintain existing programs, while allowing for an improved level of service via a dedicated additional level position for litter collection along No. 3 Road for the Canada Line stations.

Total Recommended 2011 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 1 is recommended for Water
- Option 1 is recommended for Sewer
- Option 3 is recommended for Drainage & Diking
- Option 3 is recommended for Solid Waste & Recycling

This results in the following 2011 recommended utility rates as summarized in the following table. It is noted that property owners who pay their annual utility bill by the established deadline receive a 10% discount. Therefore, for information purposes, staff have also provided the net rates in order to provide a truer reflection of the costs charged to property owners when payment is received by the due date.

2011 Total Annual Utility – Recommended Rates (Gross and Net Rates)				
<i>Customer Class</i>	2010 Gross Rates	2011 Recommended Rate (Increase Identified Below in Italics)		
		Total 2011 Recommended Option – Gross Rates (Per Bylaw)	2010 Net Rates	Total 2011 Recommended Option – Net Rates
Single-Family Dwelling	\$1,195.76	\$1,325.79 <i>\$130.03</i>	\$1,076.19	\$1,193.22 <i>\$117.03</i>
Townhouse (on City garbage service)	\$1,029.18	\$1,116.21 <i>\$87.03</i>	\$926.27	\$1,004.60 <i>\$78.33</i>
Townhouse (not on City garbage service)	\$917.24	\$994.91 <i>\$77.67</i>	\$825.52	\$895.43 <i>\$69.91</i>
Apartment	\$691.22	\$759.86 <i>\$68.64</i>	\$622.10	\$683.88 <i>\$61.78</i>
Metered Water (\$/m ³)	\$0.9277	\$1.0248 <i>\$0.0971</i>	\$0.8349	\$0.9223 <i>\$0.0874</i>
Metered Sewer (\$/m ³)	\$0.7729	\$0.8465 <i>\$0.0736</i>	\$0.6956	\$0.7619 <i>\$0.0663</i>
Business: Garbage	\$27.04	\$29.07 <i>\$2.03</i>	\$24.34	\$26.16 <i>\$1.82</i>
Business: Drainage & Diking	\$100.31	\$111.46 <i>\$11.15</i>	\$90.28	\$100.32 <i>\$10.04</i>

By selecting various options within each utility area, the budget and rate impact has been minimized. A summary of the total of the various utility options as per that outlined in this report is presented in Attachment 2 for information purposes.

Comparison of Recommended 2011 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.

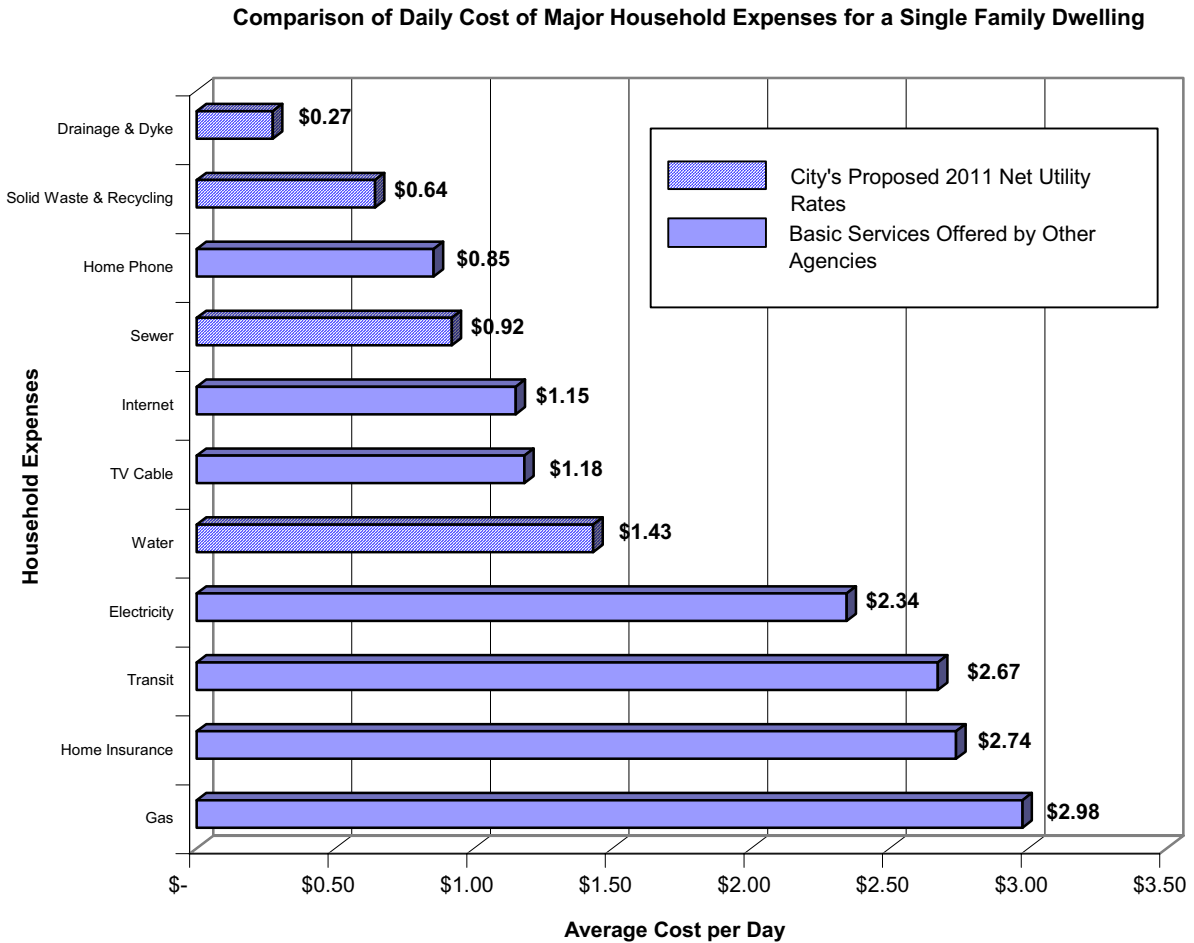


Chart REDMS Ref.. 3054483

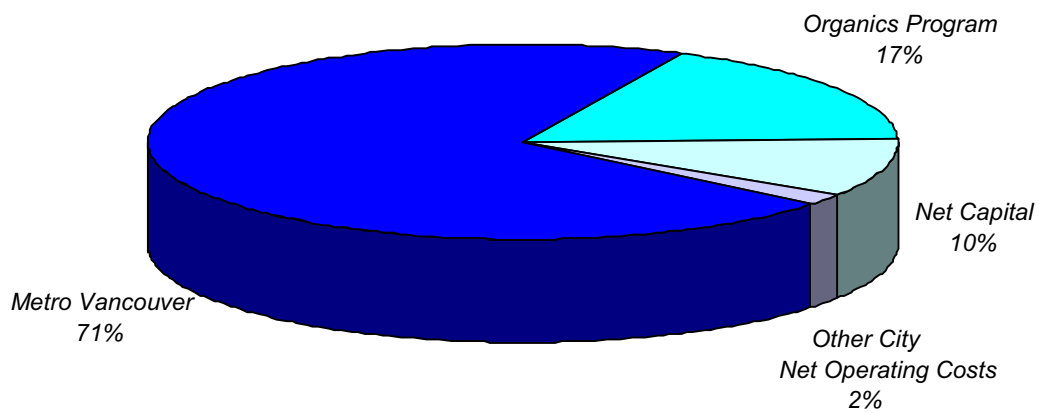
Financial Impact

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 2011 utility budgets and rates stem from significant increases in regional water purchases, sewer treatment and waste disposal costs. The new organics program, designed to reduce waste sent to the landfill in order to advance the 70% waste reduction target of the Integrated Solid Waste and Resource Management Plan, is also a factor reflected in the 2011 budget and rates.

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 2011 budget in the area of regional costs, the organics recycling program, net capital infrastructure contribution (drainage) and other City operating costs.

**2011 Recommended Options Utility Budget
% Increase by Category**



Conclusion

The utility rate strategy represents a comprehensive approach to addressing current increases in regional charges for water purchases, water filtration, sewer treatment and disposal costs. In light of the significant impact of regional rate increases, reductions have been identified and recommended where possible in City-related cost centres to offset these increases. Regional increases continue to represent a significant portion of the increases in utility rates. This trend will continue for the foreseeable future as the challenges associated with addressing growth and new demands for water and sewer treatment are managed.

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

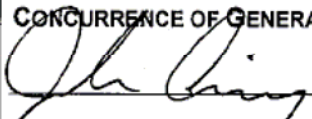
Report to Committee

To: Public Works and Transportation Committee **Date:** November 4, 2009
From: Suzanne Bycraft
 Manager, Fleet & Environmental Programs **File:** 10-6370-10-01/2009-Vol 01
Re: **Organics Collection Program**

Staff Recommendation

1. That food waste organics be added to the City of Richmond's recycling program as outlined in Option 1 of the staff report from the Manager, Fleet & Environmental Programs.
2. That the additional estimated 2010 cost of \$640,000 be funded from the sanitation and recycling provision account.
3. That the annual cost be included in the 2011 base level budget submission.
4. That the General Manager, Engineering & Public Works be authorized to execute an amendment to Contract T.2988, Residential Garbage and Recycling Collection Services, effective April 1, 2010 to:
 - a. add food waste organics collection to the scope of work,
 - b. extend the term of the contract to December 31, 2014,
 - c. include an annual inflation rate of 3%,
 - d. change the collection starting time to 7:30 a.m.,
 - e. eliminate the yard waste processing components of the contract.
5. That the City of Richmond participate in the Greater Vancouver Sewerage and Drainage District service agreement for food waste organics and yard waste processing.


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

FOR ORIGINATING DEPARTMENT USE ONLY		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Budgets	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	 P&R: RG.

October 28, 2010

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Attachment 1 (Cont'd)

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REVIEWED BY TAG	YES	NO	REVIEWED BY CAO	YES	NO
	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>

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Staff Report

Origin

Food waste organics collection is a significant waste diversion action item outlined in Goal 2 of the Zero Waste Challenge, an integral component of the new draft regional solid waste management plan. The Zero Waste Challenge, which establishes a new waste diversion target of 70%, was presented to Council at their May 11, 2009 meeting. As part of that report, staff advised that specific actions would be brought forward for consideration as part of implementing various aspects of the Zero Waste Challenge. This report responds to that and presents options for adding food waste organics to the City's comprehensive recycling program.

Analysis

The City currently provides weekly collection of yard and garden trimmings from single-family homes and a limited number of townhomes. Items collected include grass clippings, hedge prunings, tree trimmings, etc., collected in clear plastic bags or secured bundles. Between 9,000-10,000 tonnes is collected annually through this program, or approximately 15% of total residential waste in Richmond. These materials are collected under contract and delivered to Fraser Richmond Biocycle, located on No. 8 Road in Richmond, for composting as a soil amendment.

Metro Vancouver entered into a contract with Fraser Richmond Biocycle in July, 2009 to accept food waste organics at a preferred rate from those member municipalities who opt into the program during 2009/2010. The contract is for a 10-year term, with two 5-year renewal options. This presents the opportunity for the City to expand its yard and garden trimmings program to include food waste organics. The additional items which could be added with food waste organics collection include:

- Fruit and vegetable trimmings
- Dairy products
- Meat, poultry, fish, bones
- Table scraps
- Bread products
- Coffee grounds, tea bags
- Paper towels, paper napkins, paper plates
- Food contaminated paper

Under the terms of the contract with Metro Vancouver, Fraser Richmond Biocycle will not accept organics in plastic bags, including any purported to be biodegradable. Only unbagged or materials in paper yard trimmings bags are accepted to minimize contamination and odour concerns, as well as for efficiency and worker health and safety purposes.

The elimination of plastic bags results in the need to change our current collection method to either resident-provided containers and paper bags or City-provided carts. Either option results in additional collection costs due to the increased collection time/lost productivity associated with handling multiple containers/heavier-type paper bags or carts vs. plastic bags. There are some

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savings in per tonne composting/processing fees when plastic bags are not used, but these only minimally offset the increased collection costs. With this in mind, staff have developed 4 different collection options for Council's consideration. In each of these options, food waste organics would be mixed and collected with yard and garden trimmings using our current service provider (Sierra Waste Services). Service would be available to those residents who currently receive yard and garden trimmings curbside collection or single-family homes. Multi-family and commercial food waste organics are not targeted at this time since they are not currently included in the City's yard trimmings service program. In addition, studies have shown that contamination is beyond acceptable levels in the multi-family and commercial sectors in regard to food waste. Further review and strategy development is required before advancing food waste opportunities to these sectors.

Collection Options:

Option 1 – Food Waste Organics and Yard Trimmings Collected Weekly in Cans, Paper Bags, or Bundles

Under this option, plastic bags are eliminated. Residents would use and provide their own reusable garbage cans for organics/trimmings marked with labels made available by the City to distinguish the material as organics/yard trimmings. Alternatively, residents could use paper bags designed for yard and garden trimmings waste. Weekly collection service would be provided.

Under this option, it is estimated that an additional 1,500 tonnes of waste would be collected annually, or an additional 2.5%.

The main advantages of this option are that organics can be added to the program and plastic bags are eliminated. Disadvantages include increased costs to residents associated with providing additional containers for the organics/trimmings and/or the paper bags (\$0.89 for a paper bag compared with \$0.48 for a clear plastic bag). There is also reduced convenience for residents to use cans/paper bags vs. the current system of clear plastic bags.

The annual additional operating cost for this program is approximately \$815,000, plus one time costs of \$25,000 for labels/promotion. This cost includes additional collection vehicles, costs for processing the additional organics, and a staff resource to administer the program. Optional kitchen catchers could also be provided for an additional one time cost of \$165,000. Contract provisions would require a 2 year extension (to 2014) and 3% inflation rate.

Option 2 – Same as Option 1 with Bi-Weekly (Every Two Weeks) Collection of Garbage

Organics/trimmings collection under Option 2 is identical to Option 1. Garbage, however, would be collected every other week under Option 2 as opposed to weekly. This is expected to encourage greater organics recycling, or a total additional 1,900 tonnes annually equal to 3% diversion.

Advantages and disadvantages are similar to Option 1. Additionally, the reduced convenience for garbage collection is expected to encourage greater organics recycling. There would be additional

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administration associated with addressing enquiries and communicating the bi-weekly aspect of garbage collection.

The annual additional cost for this program is approximately \$600,000, plus one time costs of \$25,000 for labels/promotion. This cost includes additional collection vehicles, costs for processing the additional organics, and two staff resource positions to administer the program. Optional kitchen catchers could also be provided for an additional one time cost of \$165,000. Contract provisions would require a 2 year extension (to 2014) and 3% inflation rate.

Option 3 – Food Waste Organics Collected in Carts (Semi-Automated) with Bi-Weekly Collection of Garbage

Under Option 3, residents are provided with a large cart to recycle their trimmings and organics. Plastic bags are not used. Paper bags could be used for any excess items that would not fit into the cart, if required. Organics/trimmings are collected weekly using semi-automated collection trucks. Garbage would be collected bi-weekly in resident-provided cans or bags.

This option is expected to generate an additional 2,500 tonnes of additional organics collected annually, or a 4% increase in waste diverted.

The advantages of this option include reduced cost to residents to provide their own containers/bags for trimmings/organics, since the City would provide the cart. It would also be more convenient to use the cart than multiple cans/bags. The cart is also on wheels for easier movement. Some disadvantages could include storage requirements for housing the carts, odour accumulation, and additional administration for new/replacement carts.

The annual additional cost for this program is approximately \$2 million, plus one time costs of approximately \$3.5 million for the carts/delivery, etc. This cost includes additional collection vehicles equipped with lifting apparatus, retrofit of existing vehicles (to incorporate lifting apparatus), costs for processing the additional organics, and two staff resource positions to administer the program. The capital cost for the carts is based on current costs, which could potentially be reduced with a large-volume purchase. Optional kitchen catchers could also be provided for an additional one time cost of \$165,000. Contract provisions would require an 8 year contract term (to 2017) and 3% inflation rate.

Option 4 - Organics and Garbage Collected in Carts (Fully Automated) with Bi-Weekly Collection of Garbage

Under Option 4, residents are provided with 1 cart for trimmings/organics and 1 cart for garbage. No additional receptacles are permitted due to the fully automated nature of the collection service. Organics and trimmings would be collected weekly, and garbage would be collected bi-weekly. This option is expected to generate an additional 2,500 tonnes of additional organics collected annually, or a 4% increase in waste diverted.

The advantages of this option include reduced costs to residents to provide their own containers/bags for trimmings/organics and garbage since the City would provide the carts for both. Carts may

Attachment 1 (Cont'd)

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be more convenient to use than multiple cans/bags. The carts are also on wheels for easier movement. Some disadvantages could include storage requirements for housing the carts, odour accumulation, and additional administration for new/replacement carts. As this option is for fully-automated collection, there is no avenue to address occasional additional volumes of garbage or trimmings/organics. To address this, the City could offer varying container sizes.

The annual additional cost for this program is approximately \$3 million, plus one time costs of approximately \$7.5 million for the carts/delivery, etc. This cost includes a new fleet of automated collection vehicles, costs for processing the additional organics, and two staff resource positions to administer the program. The capital cost for the carts is based on current costs, which could potentially be reduced with large-volume purchases. Optional kitchen catchers could also be provided for an additional one time cost of \$165,000. Contract provisions would require an 8 year contract term (to 2017) and 3% inflation rate.

Attachment 1 provides an overview of the options, including advantages/disadvantages.

Advisory Committee on the Environment Comments:

These options were discussed with the Advisory Committee on the Environment (ACE) at their October 21, 2009 meeting. ACE was supportive of eliminating plastic bags. ACE recommended Option 1, suggesting that this is a good first step toward expanding the City's program. Concerns around space to store carts and the need for a graduated approach to change were cited as reasons for supporting Option 1.

Collection starting time was also discussed with ACE. The City's solid waste and recycling service provider has requested an earlier start time to help address challenges with servicing in light of increasing density and traffic conditions. They have requested consideration to change from 8 a.m. to 7 a.m. or 7:30 a.m. as the collection starting/required set out time. ACE comments were that a 7:30 a.m. starting time is reasonable. As this will help support collection efficiency, this change is recommended.

Other Options

1. Take No Action – Incorporate Food Waste Organics into New 2013-2017 Contract

Under this option, no action would be taken to add food waste through the current contract term (December 31, 2012). Food waste organics would be incorporated into a subsequent service contract for addition to the City's collection program commencing January 1, 2013. This would allow the City to test the market for competitive bids.

Richmond's current annual contract value is approximately \$3.6 million (after recycling revenues). Two other recent Lower Mainland garbage/recycling service contracts with approximately 40% less serviceable units than Richmond were awarded at a value of approximately \$5 million annually. Based on current pricing structures, Richmond could expect an annual contract cost of \$6.5 million under a new service contract.

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The addition of organics outlined under Collection Option 1 would increase Richmond's annual contract value to approximately \$4.5 million annually, or approximately \$2 million less per year than what could be expected with re-tendering. Therefore, this option is not recommended.

2. *Issue a Separate Contract for Food Waste Organics Collection*

A separate tender could be issued for food waste organics collection as a separate item to obtain competitive bids. This option is not recommended for several reasons. From a cost perspective, it is extremely unlikely that an alternative bidder could provide the service at a lower cost than the City's current service provider. From an operations perspective, if an alternate service provider was selected, residents would have to keep food waste separate from yard trimmings in order that it be collected in separate trucks. This presents communication challenges with residents and is completely undesirable from the receiving facility's perspective since they require that food waste be mixed with trimmings in order that odour and moisture can be more readily absorbed.

Recommended Option

The Zero Waste Challenge targets 70% waste diversion. Richmond is currently diverting approximately 50% of total residential waste through a variety of programs and initiatives. A combination of expanded recycling opportunities, waste disincentives, expanded social marketing and other strategies will be required to meet this new diversion target.

Food waste organics represents approximately 9% of the waste stream. As such, it represents the next most significant portion of the waste stream to target for diversion to move beyond 50%. The collection methodology outlined under Option 1 is consistent with that used in other jurisdictions and is effective in eliminating the use of plastic bags. It is desirable to eliminate plastic bags from an environmental perspective. While debugging takes place at Fraser Richmond Biocycle, they are unable to remove all the plastic and this results in contamination challenges with the finished compost product. Richmond is one of the few, if not the only City where plastic bags are still used.

A 6-month pilot program to measure food waste recycling with this collection system is currently being undertaken by Metro Vancouver in partnership with West Vancouver, the Township of Langley, Coquitlam, and Delta. The pilot started in October and will run until the end of March, 2010. Participation is somewhat low (25%-40%) at the early stage of the program.

Kitchen catchers can be provided to residents as a visual reminder of the program and for convenience. It is too early in the Metro Vancouver pilot program to determine if this aspect of the pilot contributes to increased participation. Comments from administrators of Seattle's organics program were that there was no marked difference in participation where kitchen catchers were provided. Staff do not recommend that kitchen catchers be provided in conjunction with the introduction of this program. They can be incorporated at a later time, either on a request basis or through broad scale distribution if it is considered necessary to promote further participation.

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Staff have negotiated the collection pricing information with our current service provider to reflect additional costs only, with no added profit. A minimum three month lead time is required to implement the program to allow for acquiring the necessary vehicles, etc. and to undertake communication activities. Therefore, it is recommended that the program commence April 1, 2010.

Large Item Pick Up Program

At their option, Council could also offer a large item pick up program. This service would permit residents the opportunity to dispose of up to 4 large items per year, where the items are collected at curbside any time throughout the calendar year. Service would be to all residents who currently receive City garbage collection service. Items could be collected all at the same time or on different occasions, as desired, anytime within the calendar year (only). The contractor would undertake all administration of the program. The cost to provide this service is approximately \$200,000 under Options 1 – 3, and approximately \$600,000 under Option 4.

Staff do not recommend a large item collection program. Currently, residents can purchase a garbage voucher for \$5.00 from City facilities. This voucher can be used to dispose of items at the Vancouver Landfill up to approximately \$20.00 in value. Residents also have the option to hire private haulers to dispose of large items.

Attachment 2 provides a summary of the various options and associated costs.

Financial Impact

Costs to provide organics collection under Option 1 is \$815,000 annually, or approximately \$30 per household. This includes additional contract/collection fees, additional organics processing fees, and salary costs for one additional position for program administration. One time costs include approximately \$25,000 for labelling/promotion. Operating costs in 2010 would be approximately \$615,000, given an April 1st start date.

Funding has not been provided in the annual budget for this program, however, could initially be accommodated from the sanitation and recycling provision account. Future funding requirements would be reflected in the annual operating budget and rates (2011 and beyond).






Conclusion

Richmond currently has a very successful recycling program, where over 50% of residential waste is recycled. The new contract that Metro Vancouver has entered into with Fraser Richmond Biocycle presents an opportunity for Richmond to participate by adding food waste to our yard trimmings program, and increase our diversion by an estimated additional 2.5%. Expansion of Richmond's program will be necessary to achieve meaningful gains toward the new diversion target of 70% as outlined in Metro Vancouver's Zero Waste Challenge.

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

**City of Richmond
Residential Waste Collection
Yard Trimmings with Food Waste (Organics) Options**

Garbage of 2 can limit in cans or bags \$2 tag for extra cans or bags	Yard Trimmings in clear plastic bags or bundle of 2 feet x 3 feet	Multi Material Recycling in Blue Box with Blue and Yellow Bags
 		

New Collection System Options					
Type of Materials	How it is collected	Option 1	Option 2	Option 3	Option 4
Organics - yard trimmings - food waste <ul style="list-style-type: none"> • meat • poultry • fish • shellfish • bones • egg • dairy products • table scraps • plate scrapings • vegetables • salad (with dressing) • fruit • bread • dough • pasta • grains • coffee grounds • filters • tea bags • paper towels • paper napkins • paper plates • pizza delivery boxes 	 Cans, "Kraft" paper bags or bundle	Weekly	Weekly		
	 Cart			Weekly	Weekly
Garbage	 2 Cans or bags and \$2 tag for extra	Weekly	Biweekly (every other week)	Biweekly (every other week)	
	 Cart				Biweekly (every other week)
Multi Material Recycling - Containers - Newsprint - Paper Products	 Blue Box with Blue and Yellow Bags	Weekly	Weekly	Weekly	Weekly

Attachment 1 (Cont'd)

October 30, 2009

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Attachment 2

Summary of Organic Collection Options							
<i>Option</i>	<i>Level of Service (Single-Family Homes)</i>	<i>Diversion</i>	<i>Annual Operating Cost</i>	<i>One Time/Capital Costs</i>	<i>Additional Resources Required</i>	<i>Added Contract Provisions</i>	<i>Optional Large Item Collection</i>
1	Weekly organics collection in labelled cans/paper bags	~ 1,500 tonnes (2.5%)	\$815,000	\$25,000 (labels) \$165,000 (optional kitchen catchers)	1 FTE	2 year extension 3% annual escalation	\$200,000
2	Weekly organics collection in labelled cans/paper bags; Bi-Weekly garbage collection in resident provided cans/bags	~ 1,900 tonnes (3%)	\$600,000	\$25,000 (labels) \$165,000 (optional kitchen catchers)	2 FTE	2 year extension 3% annual escalation	\$200,000
3	Weekly organics collection in City-provided carts; Bi-Weekly garbage collection in resident provided cans/bags	~ 2,500 tonnes (4%)	\$2,000,000	\$3.5 million (carts) ¹ \$165,000 (optional kitchen catchers)	2 FTE	8 year term 3% annual escalation	\$200,000
4	Weekly organics collection in City-provided carts; Bi-Weekly garbage collection in City-provided carts	~ 2,500 tonnes (4%)	\$3,000,000	\$7.5 million (carts) ¹ \$165,000 (optional kitchen catchers)	2 FTE	8 year term 3% annual escalation	\$600,000

¹Capital costs for carts are based on current costs. Costs could be reduced with a negotiated purchase for larger quantity purchases.

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Total 2011 Utility Rate Options

The total 2011 utility rate options, including the four major utility areas, is detailed in the following table. These options do not reflect the rates recommended by staff, since various options are proposed. The recommended rates are shown on page 16. The summary below is presented for Council’s information only relative to the total of all the rate options detailed in this report. A comparison to 2010 rates and the increases for each option are shown in bracketed italics beneath the rate amount.

2011 Total Annual Utility – Gross Rate Options				
		2011 Rate Options which Include Increase Identified Below in Italics		
		Total Option 1 Rate	Total Option 2 Rate	Total Option 3 Rate
<i>Customer Class</i>	<i>2010 Rates</i>	<i>Non-Discretionary Increases</i>	<i>Non-Discretionary Increases Plus Variations Noted in Each Option</i>	<i>Non-Discretionary Increases Plus Variations Noted in Each Option</i>
Single-Family Dwelling	\$1,195.76	\$1,312.88 <i>\$117.12</i>	\$1,325.14 <i>\$129.38</i>	\$1,339.21 <i>\$143.45</i>
Townhouse (on City garbage service)	\$1,029.18	\$1,103.57 <i>\$74.39</i>	\$1,114.93 <i>\$85.75</i>	\$1,127.84 <i>\$98.66</i>
Townhouse (not on City garbage service)	\$917.24	\$982.36 <i>\$65.12</i>	\$993.72 <i>\$76.48</i>	\$1,006.54 <i>\$89.30</i>
Apartment	\$691.22	\$747.31 <i>\$56.09</i>	\$757.20 <i>\$65.98</i>	\$768.52 <i>\$77.30</i>
Metered Water (\$/m ³)	\$0.9277	\$1.0248 <i>\$0.0971</i>	\$1.0307 <i>\$0.1030</i>	\$1.0366 <i>\$0.1089</i>
Metered Sewer (\$/m ³)	\$0.7729	\$0.8465 <i>\$0.0736</i>	\$0.8541 <i>\$0.0812</i>	\$0.8618 <i>\$0.0889</i>
Business: Garbage	\$27.04	\$27.67 <i>\$0.63</i>	\$27.67 <i>\$0.63</i>	\$29.07 <i>\$2.03</i>
Business: Drainage & Diking	\$100.31	\$100.31 <i>\$0</i>	\$105.86 <i>\$5.55</i>	\$111.46 <i>\$11.15</i>