



## City of Richmond

## Report to Committee

**To:** Finance Committee  
**From:** Andrew Nazareth  
General Manager, Business and Financial Services


**Date:** October 28, 2010  
**File:** 03-0970-01/2010-Vol 01

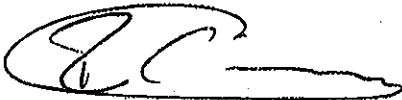
Robert Gonzalez, P. Eng., General Manager,  
Engineering & Public Works

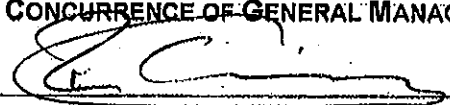


**Re:** 2011 Utility Budgets and Rates

### 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  
General Manager, Business and  
Financial Services  
(4365)

  
Robert Gonzalez, P. Eng.  
General Manager, Engineering  
& Public Works  
(4150)

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

<b>2011 Water Budget - Options</b>				
<i>Key Budget Areas</i>	<i>2010 Base Level Budget</i>	<i>2011: Option 1 Non-Discretionary Increases with Reduced Allocation for Water Meter Program</i>	<i>2011: Option 2 Non-Discretionary Increases with Partial Reduced Allocation for Water Meter Program</i>	<i>2011: Option 3 Non-Discretionary, with No Reduction to Water Meter Program Allocation-- 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
<b>Total 2010 Base Level Budget</b>	<b>\$38,037,000</b>			
<b>Total Incremental Increase</b>		<b>\$1,719,037</b>	<b>\$1,919,037</b>	<b>\$2,119,037</b>
<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>
<b>Net Budget</b>	<b>\$34,069,000</b>			
<b>Net Difference over 2010 Base Level Budget</b>		<b>\$1,544,737</b>	<b>\$1,744,737</b>	<b>\$1,944,737</b>

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/m<sup>3</sup> to \$.5648/m<sup>3</sup>).

*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 <sup>3</sup>	\$ .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.

<b>2011 Water Gross Rates Options</b>				
		<b>2011 Rate Options which Include Increase Identified Below in Italics</b>		
<b>Customer Class</b>	<b>2010 Rates</b>	<b>Recommended: 2011 Option 1 Rate</b>	<b>2011 Option 2 Rate</b>	<b>2011 Option 3 Rate</b>
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 <sup>3</sup> )	\$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

<b>2011 Sewer Budget – Options</b>				
<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
<b>Total 2010 Base Level Budget</b>	<b>\$28,443,800</b>			
<b>Total Incremental Increase</b>		<b>(\$118,563)</b>	<b>\$96,587</b>	<b>\$311,737</b>
<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&amp;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>
<b>Net Budget</b>	<b>\$22,852,600</b>			
<b>Net Difference Over 2010 Base Level Budget</b>		<b>\$1,024,437</b>	<b>\$1,239,587</b>	<b>\$1,454,737</b>

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.

<b><i>2011 Sewer Gross Rates Options</i></b>				
		<b><i>2011 Rate Options which Include Increase Identified Below in Italics</i></b>		
<b><i>Customer Class</i></b>	<b><i>2010 Rates</i></b>	<b><i>Recommended: 2011 Option 1 Rate</i></b>	<b><i>2011 Option 2 Rate</i></b>	<b><i>2011 Option 3 Rate</i></b>
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 <sup>3</sup> )	\$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 Options**

#### Option 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>Utility Area</i>	<i>2010 Rates</i>	<i>2011 Rate Options which Include Increase Identified Below in Italics</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>		\$0	\$5.55	\$11.15

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 &amp; Recycling Budget - Options</i>				
<i>Key Budget Areas</i>	<i>2010 Base Level Budget</i>	<i>Option 1<sup>1</sup> Non-Discretionary Increases</i>	<i>Option 2<sup>1</sup> Non-Discretionary Increases</i>	<i>Option 3 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)
<b>Total</b>	<b>\$9,106,300</b>			
Net Difference Over 2010 Base Level Budget		\$1,180,237	\$1,180,237	\$1,270,276

<sup>1</sup>There 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.

<b>2011 Solid Waste &amp; Recycling Gross Rates Options</b>				
		<b>2011 Rate Options which Include Increase Identified Below in Italics</b>		
<b>Customer Class</b>	<b>2010 Rates</b>	<b>2011 Option 1 Rate<sup>1</sup></b>	<b>2011 Option 2 Rate<sup>1</sup></b>	<b>Recommended: 2011 Option 3 Rate</b>
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>

<sup>1</sup> There 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.

<i>2011 Total Annual Utility – Recommended Rates (Gross and Net Rates)</i>				
<i>Customer Class</i>	<i>2010 Gross Rates</i>	<i>2011 Recommended Rate (Increase Identified Below in Italics)</i>		
		<i>Total 2011 Recommended Option – Gross Rates (Per Bylaw)</i>	<i>2010 Net Rates</i>	<i>Total 2011 Recommended Option – Net Rates</i>
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 <sup>3</sup> )	\$0.9277	\$1.0248 <i>\$0.0971</i>	\$0.8349	\$0.9223 <i>\$0.0874</i>
Metered Sewer (\$/m <sup>3</sup> )	\$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.

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

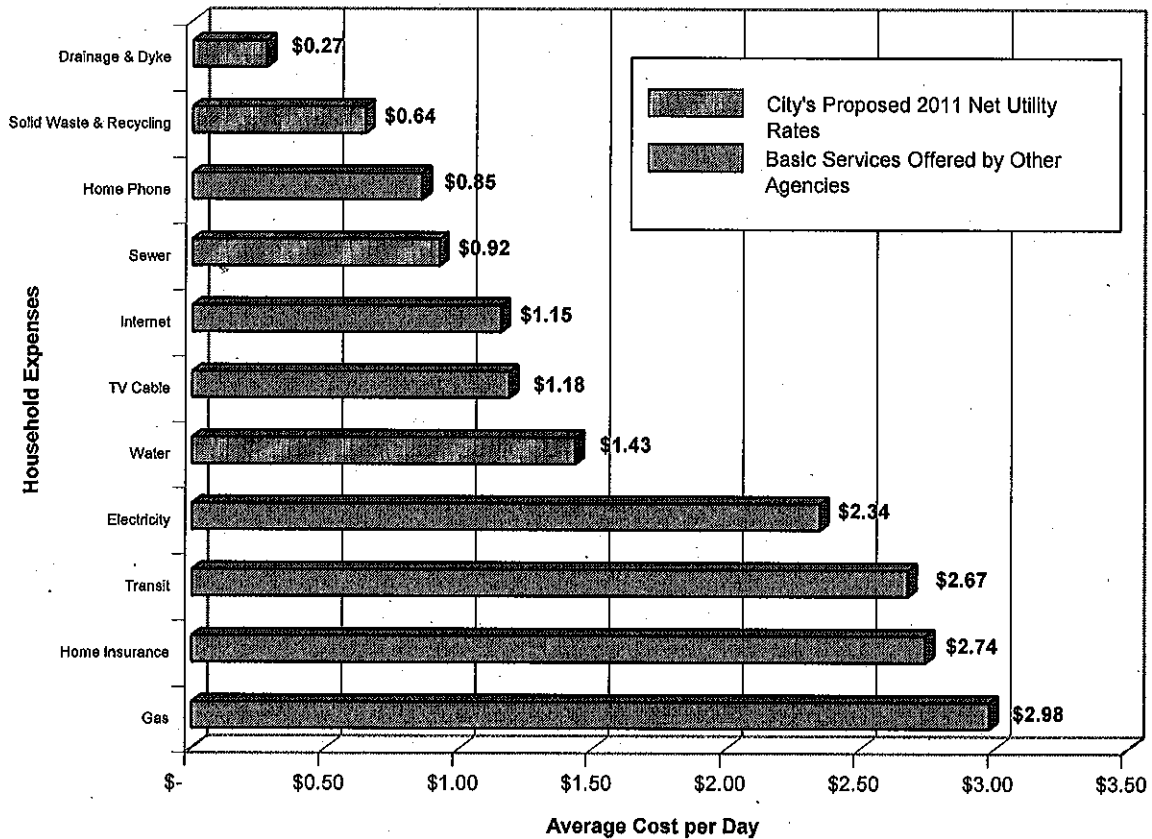


Chart REDMS Ref. 3054483

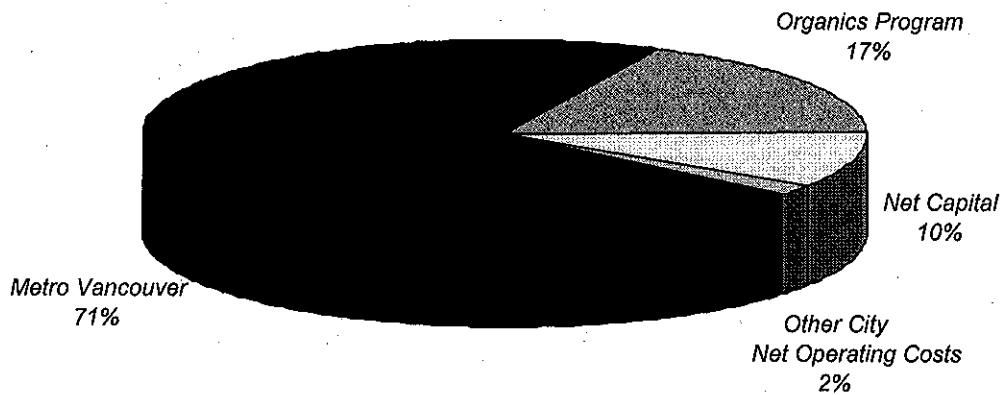
**Financial Impact**

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 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)