



To: Finance Committee

Date: October 18, 2010

From: Jerry Chong
Director, Finance

File:

Re: Metro Vancouver Projection of Water, Liquid Waste and Solid Waste Costs

Staff Recommendation

That the update on Metro Vancouver projection of water, liquid waste and solid waste costs over the next 5 years (2011 to 2015) and over a period of 20 years be received for information.

Jerry Chong
Director, Finance
(604-276-4064)

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Staff Report

Origin

The City of Richmond pays Metro Vancouver for water purchase costs, liquid waste operations and maintenance costs, liquid waste debt management costs and solid waste tipping fees. These costs are the major components of the City's utility budgets.

This report outlines the cost projections of Metro Vancouver over the next 5 years and beyond that will have a significant impact on City's utility costs and corresponding utility rates.

Analysis

On July 15, 2010, in a report titled "Financial Projections for 2011 to 2015" Metro Vancouver presented to its Finance Committee, projections of average rate increases for the region. The water and solid waste rates apply to all municipalities in a uniform way while the liquid waste costs could vary for each municipality. However, the report does not provide a breakdown of liquid waste cost increases for each municipality. The percentage increase is as follows

Table 1

	2011	2012	2013	2014	2015	Compounded increase
Water Rates	17.8%*	9.7%**	10.7%	6.5%	6.0%	61.5%
Liquid waste	6.0%*	6.0%	5.5%	5.0%	5.0%	30.7%
Solid waste	17.0%	12.5%	12.0%	26.4%	19.0%	121.7%
Impact on Regional Household	\$55	\$39	\$45	\$51	\$47	\$237

* The rates have been revised in Metro Vancouver's draft 2011 budget to reflect a 14% increase in water rates and a 9.6% increase in liquid waste relating to the City of Richmond.

** Based on the revised rate in the draft 2011 budget (as noted above), the rate increase for 2012 works out to 13.4%.

The main reasons cited for these projected increases are:

Water Rates

- The debt service and operating costs associated with Seymour-Capilano Filtration Plant particularly, increased tunnel contract costs
- Declining water consumption and increases in system maintenance

Liquid Waste

- Increased costs associated with the maintenance of aging infrastructure
- Need for increased maintenance as a result of deferred maintenance in the past.

Solid Waste

- Reduced flow of waste as a result of aggressive reduction targets in the region, driving the rate higher
- This trend is projected to continue in the future years leading to larger rate increases

These projected cost escalations will have a significant upward impact on City's utility costs leading to higher rates. For example, taking 2010 as the base budget, the increases in City costs over the period of 5 years (2011 to 2015) is estimated as follows:

- At the 2009 water consumption level, an increase of 57% in the water purchase costs can be expected. However, if the water consumption is reduced to below 2009 levels as a result of the water metering program, we can expect lower increases in costs.
- Liquid waste costs is estimated to increase by 35%
- At the 2009 waste volume the solid waste costs is expected to increase by 111%.

Rate Stabilization

The City has been pre collecting and maintaining rate stabilization funds for all three utility budgets to mitigate the adverse effects of these rising costs on utility rates.

- The balance in the water rate stabilization fund is estimated to be \$7.3M at the end of the fiscal year 2010. The water utility budget allows for an annual contribution of \$0.75M from the rate stabilization fund towards reducing the rate increase. However, it does not contain an annual contribution into the fund. At the rate of the current annual contribution of \$0.75M the fund will be adequate to maintain the rate stabilization for approximately 10 years.
- The balance in the sanitary sewer rate stabilization fund is estimated to be \$3.75M at the end of the fiscal year 2010. However, the fund has not been used to lower the rate increase yet due to low fund balance.
- The balance in the sanitary recycling rate stabilization fund is estimated to be \$8.0M at the end of the fiscal year 2010. It has been used in the past to offset the cost impact of the organics program.

Council can make such decisions as necessary during utility budget deliberations, on the usage of the rate stabilization fund to mitigate cost impact. However, if the stabilization contribution is fully utilized, then the utility rates will increase.

Long Range Forecast

On July 31, 2009, Metro Vancouver presented a report titled "Financial Challenges Facing the Region" to its Board of Directors. The report outlines the projected impact on the average household in the region as a result of increases in utility costs over the next 20 years to 2030. These projections are based on a number of assumptions such as the level of water consumption, timing and level of capital expenditures, long-term financial rates, level of senior Government cost sharing etc.

The impact on the average regional household as a result of projected increases in costs is shown below. It does not identify the impact for each specific municipality. For comparison purpose 2010 is taken as the base.

Impact on Average Regional Household**Table 2**

	2010 (base)	2020	% Increase	2030	% Increase
Water Rates	\$190	\$466	145%	\$443	133%
Liquid waste	\$162	\$330	104%	\$455	181%
Solid waste	\$80	\$143	79%	\$95	19%

The impact is based on the "Moderate" scenario.

Based on these projections, the City of Richmond can expect between 6% to 10% increase in annual utility rates.

The major cost drivers as identified by Metro Vancouver are as follows.

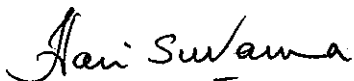
- Aging infrastructure – capital expenditure to replace the infrastructure and related borrowing costs
- Secondary treatment upgrades at Iona and Lions Gate – heavy capital expenditures, borrowing costs and increased operating costs
- Innovative technologies for resource and energy generation – capital expenditures and borrowing costs
- Organic waste management – new program costs
- Possible waste-to-energy plants – capital expenditures, borrowing costs and increased operating costs
- Increase in overall operating costs

Financial Impact

None

Conclusion

As outlined in this report, Metro Vancouver is projecting substantial escalation in their Water, Liquid Waste and Solid Waste costs over the next 5 years (2011 to 2015) and also over a 20-year period to 2030. This will have a significant impact on City's Utility Budgets and corresponding utility rates. The City can make use of the rate stabilization funds previously built up to mitigate some of the effects of the projected cost increases.



Hari Suvarna
Manager, Budgets & Accounting
(604-276-4365)

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