

2003 WATER AND WASTEWATER OPERATING BUDGETS

Recommendation

The Director of Finance, in consultation with the Commissioner of Finance & Corporate Services and the Commissioner of Engineering and Public Works, recommends:

- That the following report and the 2003 Water and Wastewater Operating Budgets, Attachment 1, and the Water and Wastewater municipal rate comparison, Attachment 2, be received;
- 2) That the 2003 Water & Wastewater Budgets be adopted and the rates in Schedule "A" of By-Law 12-74 be amended for water and By-law 167-73 be amended for wastewater:
- (a) the City water rate be increased from 58.1 cents to **61.0 cents** per cubic meter effective in July 2003, and
- (b) the City wastewater rate be increased from 46.2 cents to **48.5 cents** per cubic meter effective July 2003.
- 3) That the recommendation from the Budget Committee be forwarded to the June 23rd Council for a public meeting on the proposed budgets and rates and deputations be permitted.

Purpose

To adopt the 2003 Water and Wastewater operating budgets and to set the 2003 Water and Wastewater usage rates.

Background - Analysis and Options

Water and wastewater usage rates and other revenues generate funds, which provide for the City's water purchases and treatment of wastewater by the Region. The revenues also provide funds so that the City can maintain the infrastructure, fund debt payments, fund capital projects and administration costs.

Following is a synopsis of the proposed 2003 water and wastewater budgets including the audited 2002 Actuals, Attachment No. 1 and the municipal rate comparison, Attachment No. 2.

Annual Impact

As a result of the recommended rate increase, an average home's 2003 annual water and wastewater usage will total \$394 based on 360 cubic meters compared to 2002 total of \$372. This average annual Water & Wastewater bill in 2003 will increase by \$1.83 per month or \$22 annually.

The 2003 budget includes a water and wastewater rate increase of 5%. The recommended increase is comprised of 3% to cover the Regional increase effective January 1, 2003 and a 2% increase for City requirements as outlined below:

- Significant increase in the maintenance cost of the City's infrastructure.
- Significant increase in the Capital infrastructure-funding requirements.
- To offset the impact of inflationary pressures.
To offset the timing difference in rate setting from the Regional increase.

The proposed water and wastewater budgets are attached including the audited 2002 actuals for information purposes. Water and wastewater reserves form part of the City's Financial Statements and Financial Information Return (FIR).

Water and Wastewater Customer Billing

Under Section 71 of the Ontario Energy Board Act, 1998, Hydro companies will not be permitted to carry on any business activity other than electricity distribution. As a result, Hydro Vaughan Distribution Inc. (HVDI) under the joint services agreement will no longer be able to bill and collect the City's water and wastewater activity.

The above legislation will not permit HVDI to administer the City's water and wastewater billing past December 31, 2004. Therefore the City will be required to set up a system to bill and collect water and wastewater. However, currently staff's understanding is that a further exemption will be granted past that date.

Staff however will proceed to develop a plan to put into place a billing and collection system including the reading of water meters.

Staff will also keep Council informed on this issue

2003 PROPOSED BUDGET - WATER HIGHLIGHTS

Water Usage Revenue

The budgeted water billings in 2003 are expected to be \$20.3 million with expected water purchases of \$16.2 million resulting in a gross margin of \$4.0 million or 20.1%.

The estimated 2003 sales volume for residential users will be 19.7 million and 13.9 million for commercial and industrial users. The estimated 2003 water billing includes a 5% rate increase effective in July, a 5% residential, 3% commercial growth factor and is based on an average season in terms of weather.

Actual 2002 total Water billings of \$18.9 million is slightly below budget by \$91,000 as a result of a net lower than expected demand by Commercial and Industrial users and was offset by an increase in residential usage. Commercial and Industrial actual billings totalled \$7.7 million compared to a budget of \$8.0 million down slightly by \$0.3 million. This is offset by a residential gain of \$168,000.

Water Loss - General

Water loss occurs from various sources including water main breaks, sprinkler system ruptures, natural water infrastructure leaks and water usage during fire call outs.

The Region of York, as part of the "Water for Tomorrow Program", continues to conduct various tests across the City and has found the water infrastructure to be sound. This is part of a Region-wide initiative to promote water conservation, which also includes retrofitting toilets, installing low flow showerheads and providing Industrial/Institutional training programs.

In addition, City staff have taken steps over the past number of years to detect unmetered properties or irregular water usage and to test large water meters. These initiatives have been successful and are ongoing.

Water Loss - 2003 Budget

The 2003 water loss is budgeted at a conservative level at 9% when compared to the City's normal water loss experience of 8%. The 2002 actual water loss is down from last years 9.6% coming in at 8.0% which is the City's normal historical level of loss. Water loss over the past number of years has been stable, excluding 2000, 2001, ranging from 7.5% to 8.0%. The budgeted water loss, given the increasing amount of the infrastructure, is reasonable when compared to the industry average range of up to 15%. As indicated above, Vaughan and the Region of York continue to take steps to minimize water loss.

Water Loss - Update 2000 Actual

As reported previously, the 2000 actual water loss was significantly higher than normal coming in at an adjusted 16.0%. The reason for the higher than expected water loss in 2000 has yet to be determined. City Engineering and Finance staff have met on several occasions with Regional Engineering staff, and in addition, have had a number of discussions and meetings with staff of the City of Toronto on potential metering issues. The water infrastructure system is large and the metering system is complex. In 2002 the Region hired a consultant with the cost being shared with the City, however the final report from the consultant is not available as yet. Staff will keep Council apprised of this issue.

Other Revenues

Area rates for water will generate additional revenue totalling \$82,000 due to growth and is estimated to be \$2.0 million for 2003. Rent and concession revenues are generated from temporary water usage and hydrant rentals and for 2003; these revenues are budgeted at \$171,000 compared to 2002 actual of \$179,000. 2002 has been a busy year as the number of water meter installations has exceeded budgeted expectations. However, the number of installations in 2003 is expected to be similar and is budgeted to come in at \$1.7 million compared to the 2002 actual of \$1.8 million slightly lower.

Expenditures

Maintenance and installation costs in 2002 totaling \$3.2 million were under budget by \$459,000. For 2003, maintenance and installation costs are budgeted significantly higher at \$4.4 million. This increased maintenance activity includes valve repairs, hydrant inspections, meter installations and water sampling.

For 2003 the estimated general administration expenditures, and administration overhead is expected to remain at the same level however joint services costs have risen to \$450,000. Insurance costs are budgeted to increase by \$7,000. Bad debt write offs totalling \$25,000 is budgeted slightly higher than 2002.

Water Reserve Balance

In 2002 through water operations, \$3.6 million (2001 - \$2.2 million) was transferred to the water reserve fund. The 2003-budgeted transfer from water operations to the water reserve is expected to be at \$2.4 million.

Transfers to the Capital Fund for water related infrastructure needs is expected to be \$9.1 million of which \$6.1 million has been committed in previous years and \$3.0 million budgeted for 2003. The total committed cost for water reserve fund projects may not be spent at the end of year 2003.

The water reserve fund over the past few years has been stable as a result of operational transfers and a consistent number of capital water projects. However, due to the increasing need to maintain the water infrastructure, the budgeted reserve now stands at \$8.3 million after all committed capital projects.

2003 PROPOSED BUDGET - WASTEWATER HIGHLIGHTS

Wastewater Usage Revenue

Wastewater billings are based on the cubic meters of water used for each property. The wastewater rate is then applied to the amount of water consumed. The volume of wastewater is not metered. The current wastewater rate is discounted by approximately 20% when compared to water so as to reflect that not all water is returned to the wastewater system.

The sanitary wastewater billings in 2003 are expected to reach \$15.6 million, up over 2002 actual by \$1.0 million. The 2003-budgeted wastewater increase is a reflection of the increase in water consumption as a result of growth, a normal season and a 5% rate increase. The cost of wastewater disposal service from the Region includes a 3% per cubic meter increase and the total treatment cost is estimated at \$14.8 million. The Region treatment cost for wastewater is based on water purchased by the City.

Other Revenues

The 2003 local improvement revenue is budgeted at \$23,000. Wastewater area taxes are expected to be \$3.6 million, an increase of \$98,000 over 2002 actual of \$3.5 million, as a result of growth. Installation and service fees are budgeted at \$162,000, reflecting the same level as 2002 budget.

Expenditures

Maintenance and installation costs for 2003 are budgeted to increase significantly by \$452,000 from 2002 actual of \$1.8 million. This is mainly due to increased costs associated with lateral repairs, sanitary lateral installations, flushing/cleaning and other general repairs and maintenance. Storm sewer expenditures are budgeted to increase over last year by \$378,000 reflecting increased maintenance. Joint service costs are expected to be \$450,000 reflecting growth. Administration costs have increased \$33,000 due to an increase in Part-time staff due to Bill 175.

Sanitary Wastewater Reserves

In 2002, through the operation of the sanitary wastewater operations, \$1.8 million was contributed to the reserve. However, for 2003 a forecasted draw down of \$147,000 to the reserve is expected.

Transfers to Capital Fund for wastewater infrastructure needs is forecasted to be \$3.8 million, of which \$1.1 million has been committed in previous years and \$2.7 million budgeted for 2003. The total committed cost for wastewater reserve fund projects may not be spent at the end of year 2003. Transfers to the revenue fund will remain the same as last year, at \$850,000.

The sanitary wastewater reserve ending balance for 2003 is forecasted to be \$7.4 million, and reflects all current and previous committed projects.

Conclusion

Both the Water and Wastewater reserves are expected to decline despite the recommended rate increases. Finance and Engineering staff will undertake the necessary studies over the coming year to ensure that future water/wastewater rates provide adequate reserves for future infrastructure maintenance and renewals.

It is therefore recommended that the City's water rate be increased to 61.0 ¢ per cubic meter and that the wastewater rate be increased to 48.5 ¢ per cubic meter both effective July 2003 as outlined below:

	Regional Rate ¢ / M³	Increase ¢ / M³	City Rate ¢ / M³	Increase ¢ / M³	
<u>WATER</u>					
	43.43 cents	1.26 cents	61.0 cents	2.9 cents	effective July 2003
	42.17 cents	0.83 cents	58.10 cents	2.2 cents	effective July 2002
	41.34 cents	0.00	55.90 cents	0.0	
	41.34 cents	0.00	55.90 cents	0.0	
<u>WASTEWATER</u>					
	39.81 cents	1.16 cents	48.50 cents	2.3 cents	effective July 2003
	38.65 cents	0.76 cents	46.20 cents	1.8 cents	effective July 2002
2001	37.89 cents	1.00 cents	44.40 cents	1.5 cents	effective July 2002
			42.90 cents	1.5 cents	effective July 2001
	36.89 cents	0.00	41.40 cents	0.0	effective July 2001

Attachments

- Attachment No. 1: The 2003 Water and Wastewater Budgets including 2002 Water and Wastewater Actuals.
- Attachment No. 2: 2003 Water and Wastewater Comparison with selected Municipalities.

Respectfully submitted,

Barry E. Jackson, CGA
Director of Finance

The Corporation of the City of Vaughan
WATER RESERVE FUND
Statement Of Operations
For The Year Ending December 31, 2002

Description	2003 Annual Budget	% of Sales	2002 Annual Budget	% of Sales	2002 Year End Actual	% of Sales
REVENUE						
Water Revenue						
- Residential	\$11,952,000		\$10,867,000		\$11,035,173	
- General Service	8,214,000		8,027,000		7,752,546	
- Other	171,000		163,000		179,201	
Total	\$20,337,000		\$19,057,000		\$18,966,921	
PURCHASES						
Water Purchases	\$14,790,000		\$13,724,000		\$13,784,941	
Timing Adjustments	0		0		0	
Actual Water Loss	1,454,000	9.0%	1,527,000	10.0%	1,190,617	8.0%
Total	\$16,244,000		\$15,251,000		\$14,975,558	
GROSS MARGIN	\$4,093,000	20.1%	\$3,806,000	20.0%	\$3,991,362	21.0%
OTHER REVENUES						
Local Improvements	0		\$2,000		2,144	
Water Area Taxes	2,068,000		1,986,000		2,007,538	
Installation and Service Fees	1,700,000		1,700,000		1,833,681	
Total	\$3,768,000	18.5%	\$3,688,000	19.4%	\$3,843,363	20.3%
EXPENDITURES						
Maintenance & Installation Cost	\$4,396,000		\$3,724,000		\$3,298,674	
General Administration	238,000		129,000		124,806	
Joint Service Costs	450,000		386,000		470,625	
Debenture Payments	0		0		0	
Administration Overhead	230,000		230,000		230,000	
Insurance Allocation	80,000		73,000		73,000	
Writes Off	25,000		20,000		37,070	
Total	\$5,419,000	26.8%	\$4,562,000	23.9%	\$4,234,175	22.3%
CONTRIBUTION TO RESERVE	\$2,442,000	12.0%	\$2,932,000	15.4%	\$3,600,551	19.0%

Statement Of Continuity of Water Reserve

Description	2003 Annual Budget	2002 Annual Budget	2002 Year End Actual
Reserve Balance - Beginning - Actual	\$15,060,860	\$14,638,661	\$14,638,661
Contribution from Water Operations	2,442,000	2,932,000	3,600,551
Capital Fund Transfer - Previous Year Committed / Actual	(6,144,645)	(5,529,996)	(1,631,230)
Capital Fund Transfer - Budget / Actual	(2,986,000)	(3,593,000)	(1,547,121)
Reserve Balance - Ending - Committed / Actual	\$8,372,215	\$8,447,665	\$15,060,860

The Corporation of the City of Vaughan

WASTE WATER RESERVE FUND

Statement Of Operations

For The Year Ending December 31, 2002

Description	2003 Annual Budget	% of Sales	2002 Annual Budget	% of Sales	2002 Year End Actual	% of Sales
REVENUE						
Waste Water Billings						
Residential	\$9,160,000		\$8,392,000		\$8,464,165	
General	6,408,000		6,170,000		6,045,243	
Other	33,000		27,000		35,456	
Total	<u>\$15,601,000</u>		<u>\$14,589,000</u>		<u>\$14,544,864</u>	
PURCHASES						
Regional Waste Water Treatment Charges	14,883,000	95.4%	13,914,000	95.4%	13,332,226	91.7%
GROSS MARGIN						
	\$718,000	4.6%	\$675,000	4.6%	\$1,212,638	8.3%
OTHER REVENUES						
Local Improvements	23,000		\$25,000		\$25,142	
Waste Water Area Taxes	3,618,000		3,456,000		3,512,379	
Installation and Service Fees	162,000		162,000		516,295	
Total	<u>\$3,803,000</u>	24.4%	<u>\$3,643,000</u>	25.0%	<u>\$4,053,816</u>	27.9%
EXPENDITURES						
Maintenance & Installation Cost	\$2,315,000		\$1,675,000		\$1,755,675	
General Administration	168,000		135,000		106,215	
Storm Sewer Maintenance	1,449,000		1,071,000		769,632	
Joint Service Costs	450,000		386,000		470,625	
Debt Service Payments	27,000		0		0	
Administration Overhead	150,000		150,000		150,000	
Insurance Allocation	84,000		76,000		76,000	
Writes Off	25,000		20,000		60,693	
Total	<u>\$4,668,000</u>	29.9%	<u>\$3,513,000</u>	24.1%	<u>\$3,388,841</u>	23.3%
CONTRIBUTION TO RESERVE						
	(\$147,000)	-0.9%	\$805,000	5.5%	\$1,877,613	12.9%

Statement Of Continuity of Waste Water Reserve

Description	2003 Annual Budget	2002 Annual Budget	2002 Year End Actual
Reserve Balance - Beginning - Actual	\$12,310,504	\$11,846,941	\$11,846,941
Contribution from Sewer Operations	(147,000)	805,000	1,877,613
Capital Fund Transfer - Previous Year Committed / Actual	(1,184,420)	(1,045,642)	(371,104)
Capital Fund Transfer - Budget / Actual	(2,660,000)	(625,000)	(192,946)
Revenue Fund Transfer - Budget / Actual	(850,000)	(850,000)	(850,000)
Reserve Balance - Ending - Committed / Actual	\$7,469,084	\$10,131,299	\$12,310,504

**Water and Wastewater Rate Comparison
Based on Average Consumption - 360 cubic meter**

Region of Peel (2002) ¹	\$295
Town of Markham	\$439
Town of Aurora	\$451
City of Vaughan *	\$455
Town of Richmond Hill	\$479
Town of Newmarket	\$497

* Includes area rate charge and 2003 usage rate increase of 5%

¹ All rates current as of 2003 except Region of Peel