

## **COMMITTEE OF THE WHOLE, JUNE 4, 2001**

### **2001 WATER AND WASTEWATER BUDGET (BUDGET SUB-COMMITTEE MEETING OF MAY 23, 2001)**

#### **Recommendation**

The Budget Sub-Committee recommends:

That the recommendation contained in the following report of the Director of Finance, dated May 23, 2001, be approved, subject to referring Clause (b) of the recommendation to the Committee of the Whole meeting of June 4, 2001.

#### **Report of the Director of Finance**

The Director of Finance, in consultation with the Director of Engineering and the Director of Public Works recommends:

That the following 2001 Water and Wastewater Reserve Budget report be received; and

That the 2001 Water & Wastewater Budget be adopted and the rates in Schedule "A" of By-Law 12-74 remain the same for water and By-law 167-73 be amended for wastewater:

- (a) the City water rate will remain at **55.9 ¢** per cubic meter, and
- (b) the City wastewater rate will be increased from 41.4 ¢ to **44.4 ¢** per cubic meter effective July 2001.

#### **Purpose**

To adopt the 2001 Water and Wastewater budget and to set the 2001 Water and Wastewater rates.

#### **Background - Analysis and Options**

Water and wastewater usage rates and other revenues generate funds which provide for the City's water purchase 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 2001 water and wastewater budgets, which includes no water usage rate increase and a 3¢ per cubic metre increase in the wastewater usage rate. For 2001, the Region has not increased the rate for water however a 1¢ per cubic metre increase for wastewater has been approved. The City's Water and Wastewater rates have not changed since 1994.

The recommended increase of 3 ¢ per cubic meter in the wastewater rate is the result of a:

- 1) Regional increase of 1¢ per cubic meter for treatment costs due to inflation, and
- 2) A 2¢ increase in the Wastewater rate to partially offset the transfer of storm sewer expenditures from the operating budget.

#### **Impact**

Based on an approximate water consumption of 360 cubic meters per year, the average home will experience an annual increase in their Water & Wastewater bill of \$10.80 or 3.0%.

Both the water and wastewater proposed budgets are attached including the 2000 audited actuals for information purposes. Water and wastewater reserves form part of the City's Financial Statements and Financial Information Return (FIR). As previously indicated to Council the Province has extended the deadline for the FIR to June 30, 2001.

## 2001 PROPOSED BUDGET - WATER HIGHLIGHTS

### Water Usage Revenue

The water billings in 2001 are expected to be \$19.3 million with expected water purchases of \$15.0 million. During the 2000 spring/summer time frame, the amount of precipitation was significant. This increase in rainfall reduced the demand for water and as a result 2000 billings were down by \$2.2 million over 2000 budget. The gross margin was therefore also impacted coming in at \$2.1 million or 13.2 % compared to a budget \$4.0 million or 21.6 %.

The estimated 2001 sales volume for residential users will be 17.2 million M<sup>3</sup> and 16.3 million M<sup>3</sup> for commercial and industrial users. The resulting budgeted gross margin is expected to be \$4.2 million or 22.1%. Estimated 2001 water billings will include an overall growth factor of 5% and is based on an average season in terms of weather.

### Water Loss

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", has conducted various tests across the City and found the water infrastructure to be sound, no leaks were detected. This is part of a Region wide initiative to promote water conservation, which also includes retrofitting toilets, low flow showerheads and 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 continuing.

#### 2001 Budget – Water Loss

The 2001 water loss is budgeted to be comparable to the City's normal water loss experience. The budgeted 2001 water loss is estimated at \$1.2 million or 8.0% of water purchases. Water loss over the past number of years has been stable excluding 2000 ranging from 7.5% to 7.9%. The budgeted water loss, given the increasing size of the infrastructure, is reasonable when compared to the industry average range of up to 15%. As shown above Vaughan and the Region of York are taking steps to minimize water loss.

#### 2000 Actual – Water Loss

The 2000 actual water loss is significantly higher than normal coming in at 15.1%. This higher than expected water loss in 2000 is the result of a possible defective metering chamber owned and operated by the City of Toronto. City and Regional Engineering staff are currently in discussions with staff of the City of Toronto to resolve this metering issue. This meter has caused problems in the past and it is expected that a credit from the Region will be received. However this issue has not been resolved at the time of writing this report. Once resolved, staff will report back to Council.

### Other Revenues

Water area taxes will increase due to growth by \$87,000 and is estimated at \$1.8 million for 2001. Local improvement revenue is forecasted at \$28,000 lower than previous years due to the expiration of the local improvement charge. Rent and concession revenues are generated from temporary water usage and hydrant rentals and for 2001, these revenues are budgeted at \$201,000 compared to 2000 actual of \$215,000. 2000 has been a busy year as the number of water meter installations has significantly exceeded budgeted expectations. However, the number of installations in 2001 is expected to be less and is budgeted to come in at \$1.5 million compared 2000 actual of \$2.0 million.

### Expenditures

Maintenance and installation costs in 2000 were slightly under budget by \$104,000. For 2001, maintenance and installation costs are expected to significantly increase by \$710,000 over 2000 actual. This increase is due to an anticipated increase in activity including valve repairs, hydrant inspections, meter installations and sampling.

2001 estimated general administration expenditures is estimated at \$134,000. Joint service costs are expected to be slightly higher at \$385,000. Debenture payments are budgeted to be close to 2000 actual. Insurance costs are budgeted to increase by \$3,000, which represents 5% increase over 2000. Administration overhead is expected to remain the same level as 2000 actual. Bad debt write offs are budgeted at the same level as last year.

### Water Reserve Balance

In 2000 through water operations, \$2.1 million (1999 - \$3.5 million) was transferred to the reserve fund. The 2001 budgeted transfer from water operators to the water reserve is expected to be significantly higher than 2000 at \$3.0 million.

Transfers to the Capital Fund for water related infrastructure needs is expected to be \$5.4 million of which \$2.5 million has been committed in previous years and \$2.9 million budgeted for 2001. The total committed cost for water reserve fund projects may not be spent at the end of year 2001.

Water reserve fund growth over the past few years has been strong as a result of operational transfers. The water reserve balance at \$11.1 million reflects all current and previous committed projects. The water reserve will continue to provide the necessary funding for the City's water infrastructure as it ages.

## 2001 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 26% when compared to water so as to reflect that not all water is returned to the Wastewater system. With the rate increase the discount will be 21%.

The sanitary wastewater billings in 2001 are expected to reach \$14.7 million, up over 2000 actual by \$2.8 million. The 2000 actual wastewater revenue and gross margin was significantly impacted as the result of a decrease in water billed due to the seasonal increase in precipitation as indicated in the water reserve figures. The 2001 budgeted wastewater increase is a reflection of the increase in water consumption as a result of growth, a normal season and a rate increase of

3 ¢ per cubic meter. The cost of wastewater disposal service from the Region includes a 1¢ per cubic meter increase and the total treatment cost is estimated at \$13.8 million. The additional 2 ¢ is to offset the cost of transferring storm sewer to wastewater. The Region treatment cost for wastewater is based on water purchased.

Other Revenues

The 2001 local improvement revenue is budgeted at \$614,000 lower than 2000 actual due to the expiration of the local improvement charges. Wastewater area taxes are expected to be \$3.1 million, an increase of \$150,000 over 2000 actual of \$2.9 million, as a result of growth. Installation and service fees are budgeted at \$162,000, which reflects a slightly lower demand for installation services over 2000 at \$177,000.

Expenditures

Maintenance and installation costs for 2001 are budgeted to increase significantly by \$648,000 from 2000 actual of \$1.0 million. This is mainly due to increased costs associated with lateral repairs, sanitary lateral installations, flushing/cleaning and other general repairs and maintenance. Joint service costs are expected to remain stable at \$385,000. Debenture payments are budgeted at the same level as 2000. Administration costs is expected to remain approximately at the same level as 2000 actual. Bad debt write offs are budgeted at the same level.

Sanitary Wastewater Reserves

In 2000 through the operation of the sanitary wastewater operations, \$627,000 was transferred to the reserve. The 2001 forecasted transfer to the reserve is down slightly compared to 2000 actuals.

Transfers to Capital Fund for wastewater infrastructure needs is forecasted to be \$686,000 of which \$513,000 has been committed in previous years and \$155,000 budgeted for 2001. The total committed cost for wastewater reserve fund projects may not be spent at the end of year 2001. Transfers to the revenue fund will remain the same as last year, at \$850,000.

The sanitary wastewater reserve for 2001 is forecasted to be almost \$11.5 million, and reflects all current and previous committed projects. The wastewater reserve will continue to provide the necessary funding for the City's wastewater infrastructure as it ages.

Conclusion

With the adoption of the Water and Wastewater budgets and the Wastewater rate increase, the revenues generated from the Water and Wastewater operations will provide funds for the future infrastructure needs.

It is recommended that the City's water rate is to remain unchanged at 55.90 ¢ per cubic meter and that the wastewater rate be increased by 3 ¢ to 44.40 ¢ per cubic meter as outlined below:

	<b>Regional Rate ¢ / M<sup>3</sup></b>	<b>City Rate ¢ / M<sup>3</sup></b>
<b><u>WATER</u></b>		
2001	41.34	55.90

2000	41.34	55.90
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WASTEWATER

2001	37.89	44.40
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2000	36.89	41.40
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**Attachments**

The 2001 Water and Wastewater budget including 2000 Water and Wastewater audited actuals.

**Report prepared by:**

Barry Jackson, Director of Finance, ext. 8272

Respectfully submitted,

Councillor Di Vona  
Chair  
Budget Sub-Committee

**The Corporation of the City of Vaughan**  
**WATER RESERVE FUND**  
**Statement Of Operations**  
**For The Budget Year Ending December 31, 2001**

Description	2001		2000		2000	
	Approved Budget	% of 2000	Actual Budget	% of 2000	Year End Actual	% of 2000
<b>REVENUE</b>						
Transfers From	\$0.00		\$0.00		\$0.00	
- From Other	\$0.00		\$0.00		\$0.00	
- General Services	\$0.00		\$0.00		\$0.00	
- Other	\$0.00		\$0.00		\$0.00	
<b>Total</b>	<u>\$0.00</u>		<u>\$0.00</u>		<u>\$0.00</u>	
<b>EXPENSES</b>						
Water Purchase from Supplier	\$0.00		\$0.00		\$0.00	
- Other	\$0.00		\$0.00		\$0.00	
<b>Total</b>	<u>\$0.00</u>		<u>\$0.00</u>		<u>\$0.00</u>	
<b>NET REVENUE</b>	<u>\$0.00</u>		<u>\$0.00</u>		<u>\$0.00</u>	
<b>FINANCIAL STATEMENT</b>						
LOAN PROVISIONS	\$0.00		\$0.00		\$0.00	
- Other	\$0.00		\$0.00		\$0.00	
- Other	\$0.00		\$0.00		\$0.00	
- Other	\$0.00		\$0.00		\$0.00	
<b>Total</b>	<u>\$0.00</u>		<u>\$0.00</u>		<u>\$0.00</u>	
<b>CONTRIBUTIONS TO RESERVE FUND</b>	<u>\$0.00</u>		<u>\$0.00</u>		<u>\$0.00</u>	

**Statement Of Continuity of Water Reserve**

Particulars	2001 Approved Budget	2000 Approved Budget	2000 Year End Actual
Balance Forward (opening balance)	\$1,000,000	\$1,000,000	\$1,000,000
LOAN PROVISIONS	\$0.00	\$0.00	\$0.00
Operating Expenses - Payment to Community Group	\$0.00	\$0.00	\$0.00
LOAN PROVISIONS - OTHER	\$0.00	\$0.00	\$0.00
<b>Balance Forward - Ending - Consolidated Balance</b>	<b>\$1,000,000</b>	<b>\$1,000,000</b>	<b>\$1,000,000</b>

**NOTES**

1. The actual amount of the Water Reserve for the year ending December 31, 2001 is \$1,000,000.

The Corporation of the City of Vaughan  
WASTE WATER RESERVE FUND  
Statement Of Operations  
For The Budget Year Ending December 31, 2009

Description	2009		2008		2007	
	Actual	% of Budget	Actual	% of Budget	Actual	% of Budget
<b>REVENUE</b>						
Water Sewer Charge - Residential	17,875,000		17,284,888		16,128,400	
Water Sewer Charge - Commercial	1,088,000		1,040,888		978,400	
Other	0		0		0	
<b>Total</b>	<b>18,963,000</b>		<b>18,325,776</b>		<b>17,106,800</b>	
<b>EXPENSES</b>						
Wastewater Treatment Plant	12,400,000	65%	12,468,000	68%	12,880,000	75%
<b>Total</b>	<b>12,400,000</b>	<b>65%</b>	<b>12,468,000</b>	<b>68%</b>	<b>12,880,000</b>	<b>75%</b>
<b>OPERATING SURPLUS</b>	<b>6,563,000</b>	<b>35%</b>	<b>5,857,776</b>	<b>32%</b>	<b>4,226,800</b>	<b>25%</b>
<b>OPERATIONAL EXPENSES</b>						
Local Public Works	811,200		816,800		819,400	
Multi-Purpose Area Fees	1,000,000		1,000,000		2,800,000	
Engineering Services	96,000		96,000		172,000	
<b>Total</b>	<b>1,907,200</b>	<b>10%</b>	<b>1,912,800</b>	<b>10%</b>	<b>3,791,400</b>	<b>22%</b>
<b>OPERATIONAL SURPLUS</b>	<b>4,655,800</b>	<b>25%</b>	<b>3,944,976</b>	<b>22%</b>	<b>445,400</b>	<b>3%</b>
<b>CONSTRUCTION EXPENSES</b>						
Engineering & Inspection Fees	21,800,000		21,800,000		21,800,000	
Construction Services	22,000,000		22,000,000		22,000,000	
Water Sewer Materials	1,000,000		1,000,000		1,000,000	
Land Services	200,000		200,000		200,000	
Professional Fees	800,000		800,000		800,000	
Construction Insurance	1,000,000		1,000,000		1,000,000	
Other	1,000,000		1,000,000		1,000,000	
<b>Total</b>	<b>28,800,000</b>	<b>150%</b>	<b>28,800,000</b>	<b>150%</b>	<b>28,800,000</b>	<b>150%</b>
<b>CONSTRUCTION SURPLUS</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>

Statement Of Continuity of Waste Water Reserve

Description	2009	2008	2007
	Actual	Actual	Actual
Reserve Opening - Operating Budget	1,200,000	1,200,000	1,100,000
CONSTRUCTION SURPLUS	0	0	0
Operating Budget - 2009	1,200,000	1,200,000	1,100,000
Operating Budget - 2008	1,200,000	1,200,000	1,100,000
Operating Budget - 2007	1,200,000	1,200,000	1,100,000
<b>Reserve Balance - Operating Budget - 2009</b>	<b>1,200,000</b>	<b>1,200,000</b>	<b>1,100,000</b>

Notes

1. The 2009 Actual Budget, the 2008 Actual, and the 2007 Actual Reserve Fund opening are as reported in the 2009, 2008, and 2007 Financial Statements.

