

COMMITTEE OF THE WHOLE JUNE 3, 2002

2002 WATER AND WASTEWATER BUDGET (ITEM 3, BUDGET SUB-COMMITTEE MEETING OF MAY 27, 2002)

Recommendation

The Budget Sub-Committee recommends:

- 1) That the recommendation contained in the following report of the Director of Finance, dated May 27, 2002, be approved; and
- 2) That staff provide an additional report to the next Council meeting.

Report of the Director of Finance

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

- 1) That the following 2002 Water and Wastewater Operating Budget report be received; and
- 2) That the 2002 Water & Wastewater Budget 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 55.9 ¢ to **58.1 cents** per cubic meter effective in July 2002, and
 - (b) the City wastewater rate be increased from 44.4 ¢ to **46.2 cents** per cubic meter effective July 2002.

Purpose

To adopt the 2002 Water and Wastewater operating budgets and to set the 2002 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 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 2002 water and wastewater budgets and 2001 Actuals. The 2002 budget includes a water and wastewater rate increase of 4%. The City's Water rate has not changed since 1994, and the wastewater rate increased last year by 1.5 cents effective July 2001 and 1.5 cents effective July 2002.

The recommended increase is comprised of 2% to cover the Regional increase and a 2% increase for City requirements as outlined below:

- Significant increase in the amount of infrastructure to repair and replace.
- Significant increase in annual infrastructure-funding requirements.
- To offset the impact of inflationary pressures.
- To offset the Regional increase of 2% for both Water & Wastewater.

Impact

Currently an average home's annual water and wastewater usage totals \$356 based on 360 cubic meters. This average annual Water & Wastewater bill in 2002 will increase by \$1.65 per month or \$19.80 as a result of the recommended 2002 rate increases and the approved 2001 wastewater increase of 1.5 cents effective in July 2002.

The proposed water and wastewater budgets are attached including the 2001 actuals for information purposes. Water and wastewater reserves form part of the City's Financial Statements and Financial Information Return (FIR).

2002 PROPOSED BUDGET - WATER HIGHLIGHTS

Water Usage Revenue

The budgeted water billings in 2002 are expected to be \$19.0 million with expected water purchases of \$15.2 million resulting in a gross margin of \$3.8 million or 19.8%.

The estimated 2002 sales volume for residential users will be 17.2 million M³ and 16.3 million M³ for commercial and industrial users. The estimated 2002 water billing includes a 4% rate increase, a 4.5% residential, 3% commercial growth factor and is based on an average season in terms of weather.

Actual 2001 total Water billings of \$17.7 million are below budget by \$1.6 million as a result of a lower than expected demand by Commercial and Industrial users. Commercial and Industrial billings totalled \$7.6 million compared to a budget of \$9.1 million down by \$1.5 million.

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 - 2002 Budget

The 2002 water loss is budgeted at a slightly higher level at 10% when compared to the City's normal water loss experience of 8%. The 2001 water loss was slightly higher at 9.6% over our average. 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 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 last year, 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 internal meetings and with staff of the City of Toronto on potential metering issues. The water infrastructure system is large and the metering system is complex.

As the reason for the higher than average water loss has not been determined, an engineering firm, RV Anderson Associates, will be contracted to review the 2000 water loss issue. The cost for this review has been estimated at \$20,000 and will be shared equally between Vaughan and the Region. Due to the complexity of the metering system and the infrastructure, this firm will be focusing on the engineering and technical side of the water system. Staff will report back to Council.

Other Revenues

Area rates for water will generate additional revenue totalling \$87,000 due to growth and is estimated to be \$1.9 million for 2002. Local improvement revenue is forecasted at \$25,000 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 2002; these revenues are budgeted at \$163,000 compared to 2001 actual of \$162,724. 2001 has been a busy year as the number of water meter installations has significantly exceeded budgeted expectations. However, the number of installations in 2002 is expected to be similar and is budgeted to come in at \$1.7 million compared to the 2001 actual of \$1.7 million.

Expenditures

Maintenance and installation costs in 2001 totaling \$2.9 million were under budget by \$792,000. For 2002, maintenance and installation costs are budgeted at the same level \$3.7 million. The maintenance activity includes valve repairs, hydrant inspections, meter installations and sampling.

For 2002 the estimated general administration expenditures, joint service costs, and administration overhead is expected to remain at the same level. Debenture debt has now expired. Insurance costs are budgeted to increase by \$7,000. Bad debt write offs totalling \$20,000 is budgeted at a lower level than 2001.

Water Reserve Balance

In 2001 through water operations, \$2.2 million (2000 - \$2.8 million) was transferred to the reserve fund. The 2002 budgeted transfer from water operations to the water reserve is expected to be higher than 2001 at \$2.9 million.

Transfers to the Capital Fund for water related infrastructure needs is expected to be \$9.1 million of which \$3.6 million has been committed in previous years and \$5.5 million budgeted for 2002. The total committed cost for water reserve fund projects may not be spent at the end of year 2002.

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 \$8.4 million after all committed capital projects. The water reserve based on this proposed budget will continue to provide the necessary funding for the City's water infrastructure as it ages.

2002 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 2002 are expected to reach \$14.5 million, up over 2001 actual by \$1.4 million. The 2002 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 4% or 1.8 ¢ per cubic meter. The cost of wastewater disposal service from the Region includes a 0.7 ¢ per cubic meter increase and the total treatment cost is estimated at \$13.9 million. The Region treatment cost for wastewater is based on water purchased.

Other Revenues

The 2002 local improvement revenue is budgeted at \$25,000 significantly lower than 2001 actual due to the expiration of the local improvement charges. Wastewater area taxes are expected to be \$3.4 million, an increase of \$264,000 over 2001 actual of \$3.1 million, as a result of growth. Installation and service fees are budgeted at \$162,000, which reflects a lower demand for installation services over 2001 at \$221,000.

Expenditures

Maintenance and installation costs for 2002 are budgeted to increase by \$140,000 from 2001 actual of \$1.5 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 \$386,000. Debenture payments have expired. Administration costs are expected to remain approximately at the same level as 2001.

Sanitary Wastewater Reserves

In 2001, through the operation of the sanitary wastewater operations, a \$370,000 draw down occurred. However, for 2002 a forecasted transfer of \$726,000 to the reserve is expected.

Transfers to Capital Fund for wastewater infrastructure needs is forecasted to be \$1.6 million, of which \$1,045,000 has been committed in previous years and \$625,000 budgeted for 2002. 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 2002 is forecasted to be almost \$10.0 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.

BILL 155 – SUSTAINABLE WATER AND SEWAGE SYSTEM ACT

This legislation is in its first reading and when enacted it will require municipalities to include a full accounting of all operating /capital costs and revenues for water and wastewater systems.

This will require a detailed plan as stipulated by regulations to be submitted to the Ministry of Municipal Affairs and Housing (MMAH) for approval. The plan will include an approach to move towards full cost recovery. Details of this legislation will be provided through regulation once enacted.

In terms of Bill 155, the City currently accounts separately for both water and wastewater +`+administration, operating and capital costs. Separate reserves are maintained and budgets and financial reports are prepared.

The legislation is in its first reading only and regulations detailing the legislation are not available. Staff will inform Council when further information becomes available.

Conclusion

Both the Water and Wastewater reserves are expected to decline even with the recommended rate increases. The revenues generated from the Water and Wastewater operations will continue to provide funds for the future operations and infrastructure needs.

It is therefore recommended that the City's water rate be increased to 58.10 ¢ per cubic meter and that the wastewater rate be increased to 46.20 ¢ per cubic meter both effective July 2002 as outlined below:

	Regional Rate ¢ / M³	Increase ¢ / M³	City Rate ¢ / M³	Increase ¢ / M³	
<u>WATER</u>					
2002	42.17 cents	0.83 cents	58.10 cents	2.2 cents	effective July 2002
2001	41.34	0.00	55.90	0.0	
2000	41.34	0.00	55.90	0.0	
<u>WASTEWATER</u>					
2002	38.65 cents	0.76 cents	46.20 cents	1.8 cents	effective July 2002
2001	37.89	1.00	44.40	1.5	effective July 2002
			42.90	1.5	effective July 2001
2000	36.89	0.00	41.40	0.0	

Attachments

The 2002 Water and Wastewater budgets including 2001 Water and Wastewater actuals.

Respectfully submitted,

Councillor Bernie Di Vona, Chair

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

Description	2002	%	2001	%	2001	%
	Annual Budget	of Sales	Annual Budget	of Sales	Year End Actual	of Sales
REVENUE						
Water Revenue - Residential	\$10,667,000		\$9,896,000		\$9,907,833	
- General Service	8,827,000		5,180,000		7,833,842	
- Other	103,000		271,000		162,724	
Total	\$19,597,000		\$15,347,000		\$17,904,399	
PURCHASES						
Water Purchases	\$13,734,000		\$13,800,000		\$14,303,144	
Actual Water Loss	1,827,000	9%	1,221,000	8%	1,368,875	8.8%
Total	\$15,561,000		\$15,021,000		\$15,672,019	
GROSS MARGIN	\$4,036,000	20.6%	\$3,286,000	21.4%	\$2,232,380	12.5%
OTHER REVENUES						
Local Improvements	\$2,000		\$20,000		\$27,728	
Water Area Taxes	1,890,000		1,807,000		1,894,744	
Installation and Service Fees	1,700,000		1,880,000		1,833,812	
Total	\$3,592,000	18.3%	\$3,424,000	22.3%	\$3,546,384	19.8%
EXPENDITURES						
Maintenance & Installation Cost	\$3,724,000		\$3,699,000		\$2,907,249	
General Administration	129,000		134,000		75,399	
Joint Service Costs	386,000		385,000		368,849	
Debt Service Payments	0		61,000		52,707	
Administration Overhead	220,000		220,000		200,000	
Insurance Allocation	73,000		66,000		66,300	
Water Oils	20,000		45,000		15,307	
Total	\$4,552,000	23.2%	\$4,626,000	30.4%	\$3,796,101	21.1%
CONTRIBUTION TO RESERVE	\$2,802,000	14.3%	\$2,694,000	17.6%	\$2,213,277	12.3%

Statement Of Continuity of Water Reserve

Description	2002 Annual Budget	2001 Annual Budget	2001 Year End Actual
Reserve Balance - Beginning - Actual	\$14,838,841	\$14,256,153	\$14,898,155
Contribution from Water Operations	2,932,000	3,004,000	2,213,277
Capital Fund Transfer - Previous Year Committed / Actual	(3,525,000)	(3,546,800)	(338,303)
Capital Fund Transfer - Budget / Actual	(3,999,000)	(3,802,000)	(1,481,948)
Reserve Balance - Ending - Committed / Actual	\$10,247,841	\$11,871,223	\$13,661,181

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

Description	2002	%	2001	%	2001	%
	Annual Budget	of Sales	Annual Budget	of Sales	Year End Actual	of Sales
REVENUE						
Waste Water Billings - Residential	\$8,392,000		\$7,679,000		\$7,404,638	
- General	6,170,000		7,036,000		5,760,156	
- Other	27,000		41,000		27,334	
Total	\$14,589,000		\$14,756,000		\$13,192,127	
PURCHASES						
Regional Waste Water Treatment Charges	13,914,000	96.4%	13,807,000	93.6%	13,931,973	105.6%
GROSS MARGIN	\$675,000	4.6%	\$949,000	6.4%	(\$739,846)	-5.6%
OTHER REVENUES						
Local Improvements	\$25,000		\$614,000		\$602,583	
Waste Water Area Taxes	3,456,000		3,144,000		3,192,949	
Installation and Service Fees	162,000		162,000		221,121	
Total	\$3,643,000	25.0%	\$3,920,000	26.6%	\$4,016,653	30.4%
EXPENDITURES						
Maintenance & Installation Cost	\$1,675,000		\$1,898,000		\$1,535,604	
General Administration	135,000		125,000		73,167	
Storm Sewer Maintenance	1,071,000		829,000		545,394	
Joint Service Costs	386,000		385,000		385,949	
Debt Service Payments	0		961,000		865,903	
Administration Overhead	150,000		150,000		150,000	
Insurance Allocation	76,000		69,000		69,000	
Write Offs	20,000		25,000		22,588	
Total	\$3,513,000	24.1%	\$4,242,000	28.7%	\$3,647,605	27.6%
CONTRIBUTION TO RESERVE	\$805,000	5.5%	\$627,000	4.2%	(\$370,798)	-2.8%

Statement Of Continuity of Waste Water Reserve

Description	2002 Annual Budget	2001 Annual Budget	2001 Year End Actual
Reserve Balance - Beginning - Actual	\$11,846,941	\$13,160,457	\$13,160,457
Contribution from Sewer Operations	805,000	627,000	(370,798)
Capital Fund Transfer - Previous Year Committed / Actual	(1,045,642)	(513,483)	(83,372)
Capital Fund Transfer - Budget / Actual	(825,000)	(155,000)	(9,347)
Revenue Fund Transfer - Budget / Actual	(850,000)	(850,000)	(850,000)
Reserve Balance - Ending - Committed / Actual	\$10,131,299	\$12,268,964	\$11,846,941