

2004 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:

- 1) That the following report and the 2004 Water and Wastewater Operating Budgets, Attachment 1, the Full & Part Time Complement Positions, Attachment 2, and the Water and Wastewater Municipal Rate Comparison, Attachment 3, be received;
- 2) That the following Water & Wastewater Full and Part Time Complement positions, Attachment 2a & 2b with a 2004 impact of \$55,530 be approved:
 - a) 1 Water & Wastewater Supervisor
 - b) 1 Water - Service Person I
 - c) 1 Wastewater – Service Person I
 - d) 1 Clerk Typist C – Part time
- 3) That the 2004 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's water rate be increased from 61.0 cents to 66.5 cents per cubic meter effective in July 2004, and
 - (b) The City wastewater rate be increased from 48.5 cents to 53.0 cents per cubic meter effective July 2004;
 - (c) That the service call out rates in Schedule "A" of By-law 12-74 and 167-73 for turning water on or off be increased effective July 2004 as follows:

During Working Hours
Turn Off Rate – from \$35.00 to \$46.00
Turn On Rate – from \$35.00 to \$46.00

After Working Hours
Turn Off Rate – from \$85.00 to \$110.00
Turn On Rate – from \$85.00 to \$110.00

Minimum Rate – Service Call Out
Increase from \$35.00 to \$85.00
- 4) That the recommendation from the Budget Committee be forwarded to the Council of June 28, 2004 for a public meeting on the proposed budgets and rates and that deputations be permitted and that the appropriate notification be provided in accordance with By-law 394-2002.

Purpose

To adopt the 2004 Water and Wastewater Operating Budgets and to set the Water and Wastewater Usage Rates and Service Call Out Rates effective July 2004 and approve the hiring of water and wastewater staff.

Relationship to Vaughan Vision 2007

This report is consistent with the priorities previously set by Council and the necessary resources have been allocated and approved.

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 from the Region. The revenues also provide funds so that the City can maintain the infrastructure, fund debt payments, fund renewal projects and administration.

Following is a synopsis of the proposed 2004 water and wastewater budgets including the audited 2003 Actuals, Attachment No. 1, Full Time Complement Requirements, Attachment 2 and the Municipal Rate Comparison, Attachment No. 3.

Annual Impact

The 2004 budget includes a water and wastewater rate increase of 9%. This recommended increase is comprised of 5% to cover the Regional increase effective January 1, 2004 and a 4% increase for City requirements as outlined below:

- Increase in the maintenance cost of the City's infrastructure.
- 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.

As a result of the recommended consumption rate increase, an average home's 2004 annual water and wastewater usage will now total \$430 based on 360 cubic meters compared to 2003 total of \$394. The average annual Water & Wastewater bill in 2004 will increase by 9% or \$3.00 per month.

The proposed water and wastewater budgets are attached including the audited 2003 actuals for information purposes. Water and wastewater reserves form part of the City's consolidated Financial Statements.

Service Call Out Rates

Service call outs are performed by water and wastewater staff for the purposes of shutting off water as a result of a request by the owner or as a result of a necessary repair on the owner's property. The service call out rates are based on full cost recovery which includes labour, benefits, equipment and overhead costs.

That the Service Call Out rates for turning water on or off be increased as follows:

During Working Hours

Turn Off Rate – from \$35.00 to \$46.00

Turn On Rate – from \$35.00 to \$46.00

After Working Hours

Turn Off Rate – from \$85.00 to \$110.00

Turn On Rate – from \$85.00 to \$110.00

Minimum Rate – Service Call Out

Increase from \$35.00 to \$85.00

Water and Wastewater Customer Billing – Ontario Energy Board Act

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 have proceeded to provide funds as a contingency in the 2004 Capital budget for a billing and collection system including the reading of water meters.

Staff will keep Council informed on this issue

2004 PROPOSED BUDGET - WATER HIGHLIGHTS

Water Usage Revenue

The budgeted water billings in 2004 are expected to be \$21.6 million with expected water purchases of \$16.9 million resulting in a gross margin of \$4.6 million or 21.4%.

The estimated 2004 water consumption for residential users will be 20.6 million cubic metres and 13.2 million cubic meters for commercial and industrial users. The estimated 2004 water billing includes a 9% rate increase effective in July and is based on a 5% residential, 1% commercial growth factor. The volumes are based on an average season in terms of weather.

Actual 2003 total Water billings of \$20.1 million are below budget by \$198,000 or 1% as a result of a net lower than expected demand by Commercial and Industrial users but was offset by an increase in residential usage. Commercial and Industrial actual billings totalled \$7.8 million compared to a budget of \$8.2 million down slightly by \$0.3 million. This is offset by a residential gain of \$215,000.

Unmetered Consumption/Loss - General

Water is consumed or lost from various sources which includes water main breaks, sprinkler system ruptures, natural water infrastructure leaks and water usage during fire training and fire emergency 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 with no significant leakage. 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.

Unmetered Consumption/Loss - 2004 Budget

The 2004 water loss is budgeted at 8.5% when compared to the City's normal water loss experience of 8%. The 2003 actual water loss is down from last years 8.0% coming in at 7.6% which is close to the City's normal historical level of loss. The unmetered water/loss over the past number of years has been stable, excluding 2000, 2001, ranging from 7.5% to 8.0%. The budgeted unmetered water/loss includes internal use i.e. soccer fields, watermain flushing, Parks water features. Given the increasing amount of infrastructure; 8.5% 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

Rent and concession revenues are generated from temporary water usage and hydrant rentals and for 2004; these revenues are budgeted at \$127,000 compared to 2003 actual of \$119,000. In 2003 the number of water meter installations was significantly below budgeted expectations of \$1.2 million vs. budget of \$1.7 million. The number of installations in 2004 is expected to be higher compared to actual and is budgeted to come in at \$1.4 million compared to the 2003 actual of \$1.2 million.

Expenditures

Maintenance and installation costs in 2003 totaling \$3.1 million were under budget by \$1.3 million. For 2004, maintenance and installation costs are budgeted higher at \$4.5 million. This increased maintenance activity includes valve repairs, hydrant inspections, meter installations and water sampling.

For 2004 the estimated general administration expenditures, and administration overhead is expected to remain at the same level however joint services costs have risen to \$597,000 as a result of a proposed increase in service costs from Hydro Vaughan Distribution Inc. Insurance costs are budgeted to increase by \$4,000 as a result of premium increases. Bad debt write offs totalling \$30,000 is budgeted slightly higher based on experience.

Water Reserve Balance

In 2003 through water operations, \$3.9 million (2002 - \$3.6 million) was transferred to the water reserve fund. The 2004-budgeted transfer from water operations to the water reserve is expected to be at \$2.4 million.

Transfers to the Capital Fund in 2004 for water related infrastructure needs are expected to be \$7.4 million of which \$4.0 million has been committed in previous years and \$3.4 million budgeted for 2004. The total committed cost for water reserve fund projects may not be spent at the end of year 2004.

The water reserve fund including commitments has been decreasing over the past few years due to the increasing need to maintain the water infrastructure, the budgeted reserve now stands at \$9.3 million after all committed capital projects.

2004 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 2004 are expected to reach \$16.8 million, up over 2003 actual by \$1.1 million. The 2004-budgeted wastewater increase is a reflection of the increase in water consumption as a result of growth, a normal season and a 9% rate increase. The cost of wastewater disposal service from the Region includes a 5% per cubic meter increase and the total 2004 treatment cost is estimated at \$15.5 million. The Region treatment cost for wastewater is based on portable water purchased by the City.

Other Revenues

The 2004 local improvement revenue is budgeted at \$23,000. Wastewater area taxes are expected to be \$4.1 million, an increase of \$98,000 over 2003 actual of \$3.7 million, as a result of growth. Installation and service fees are budgeted at \$170,000, reflecting almost the same level as 2003, \$171,000.

Expenditures

Maintenance and installation costs for 2004 are budgeted to increase significantly by \$728,000 from 2003 actual of \$1.6 million. This is 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 years actual by \$702,000 reflecting increased maintenance. Joint service costs are estimated to be \$597,000 due to a new proposed service agreement with Hydro Vaughan Distribution Inc. Administration costs have increased \$137,000 due to an increase in complement due to Bill 175.

Sanitary Wastewater Reserves

In 2003, through the operation of the sanitary wastewater operations, \$1.9 million was contributed to the reserve. However, for 2004 a forecasted contribution of \$248,000 to the reserve is expected.

Transfers to Capital Fund for wastewater infrastructure needs is forecasted to be \$1.9 million, of which \$1.0 million has been committed in previous years and \$872,000 budgeted for 2004. The total committed cost for wastewater reserve fund projects may not be spent at the end of year 2004. Transfers to the revenue fund will remain the same as last year, at \$850,000.

The sanitary wastewater reserve ending balance for 2004 is forecasted to be \$8.3 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 66.5 ¢ per cubic meter and that the wastewater rate be increased to 53.0 ¢ per cubic meter both effective July 2004 as outlined below:

	Regional Rate ¢ / M³	Increase ¢ / M³	City Rate ¢ / M³	Increase ¢ / M³	
<u>WATER</u>					
2004	45.60 cents	2.17 cents	66.50 cents	5.5 cents	effective July 2004
	43.43 cents	1.26 cents	61.00 cents	2.9 cents	effective July 2003
2002	42.17 cents	0.83 cents	58.10 cents	2.2 cents	effective July 2002
<u>WASTEWATER</u>					
2004	41.80 cents	1.99 cents	53.00 cents	4.5 cents	effective July 2004
	39.81 cents	1.16 cents	48.50 cents	2.3 cents	effective July 2003
	38.65 cents	0.76 cents	46.20 cents	.8 cents	effective July 2002

Attachments

- Attachment No. 1 The 2004 Water and Wastewater Budgets including 2003 Water and
Wastewater Actuals
Attachment No. 2: Full Time and Part Time Complement Requests
Attachment No. 3: 2004 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, 2003

Description	2004 Annual Budget	% of Sales	2003 Annual Budget	% of Sales	2003 Year End Actual	% of Sales
REVENUE						
Water Revenue - Residential	\$13,144,000		\$11,952,000		\$12,167,247	
- General Service	8,331,000		8,214,000		7,851,065	
- Other	127,000		171,000		119,785	
Total	\$21,602,000		\$20,337,000		\$20,138,097	
PURCHASES						
Water Purchases	\$15,528,040		\$14,790,000		\$14,307,674	
Unmetered Consumption/Loss	1,442,960	8.5%	1,454,000	9.0%	1,174,801	7.59%
Total	\$16,971,000		\$16,244,000		\$15,482,475	
GROSS MARGIN	\$4,631,000	21.4%	\$4,093,000	20.1%	\$4,655,622	23.1%
OTHER REVENUES						
Local Improvements	0		0		0	
Water Area Taxes	2,210,000		2,068,000		2,148,554	
Installation and Service Fees	1,490,000		1,700,000		1,240,887	
Total	\$3,700,000	17.1%	\$3,768,000	18.5%	\$3,389,441	16.83%
EXPENDITURES						
Maintenance & Installation Cost	\$4,598,000		\$4,472,000		\$3,153,134	
General Administration	335,000		238,000		158,438	
Joint Service Costs	597,000		450,000		484,490	
Administration Overhead	230,000		230,000		230,000	
Insurance Allocation	84,000		80,000		80,000	
Write Offs	30,000		25,000		33,764	
Total	\$5,874,000	27.2%	\$5,495,000	27.0%	\$4,139,826	20.56%
CONTRIBUTION TO RESERVE	\$2,457,000	11.4%	\$2,366,000	11.6%	\$3,905,237	19.4%

Statement Of Continuity of Water Reserve

Description	2004 Annual Budget	2003 Annual Budget	2003 Year End Actual
Reserve Balance - Beginning - Actual	\$14,501,995	\$15,060,860	\$15,060,860
Contribution from Water Operations	2,457,000	2,366,000	3,905,237
Capital Fund Transfer - Previous Year Committed / Actual	(4,083,470)	(6,144,645)	(1,550,938)
Capital Fund Transfer - Budget / Actual	(3,480,000)	(2,986,000)	(2,913,164)
Reserve Balance - Ending - Committed / Actual	\$9,395,525	\$8,296,215	\$14,501,995

The Corporation of the City of Vaughan
WASTE WATER RESERVE FUND
Statement Of Operations
For The Year Ending December 31, 2003

Description	2004 Annual Budget	% of Sales	2003 Annual Budget	% of Sales	2003 Year End Actual	% of Sales
REVENUE						
Waste Water Billings - Residential	\$10,226,000		\$9,160,000		\$9,503,951	
- General Service	6,625,000		6,408,000		6,233,406	
- Other	34,000		33,000		25,879	
Total	\$16,885,000		\$15,601,000		\$15,763,235	
PURCHASES						
Regional Waste Water Treatment Charges	15,556,000	92.1%	14,883,000	95.4%	14,038,214	89.1%
GROSS MARGIN	\$1,329,000	7.9%	\$718,000	4.6%	\$1,725,022	10.9%
OTHER REVENUES						
Local Improvements	23,000		23,000		24,626	
Waste Water Area Taxes	4,102,000		3,618,000		3,762,868	
Installation and Service Fees	170,000		162,000		171,434	
Total	\$4,295,000	25.4%	\$3,803,000	24.4%	\$3,958,928	25.1%
EXPENDITURES						
Maintenance & Installation Cost	\$2,415,000		\$2,330,000		\$1,687,011	
General Administration	253,000		168,000		115,540	
Storm Sewer Maintenance	1,823,000		1,466,000		1,121,806	
Joint Service Costs	597,000		450,000		484,490	
Debt Service Payments	0		27,000		26,938	
Administration Overhead	150,000		150,000		150,000	
Insurance Allocation	88,000		84,000		84,000	
Write Offs	50,000		25,000		56,018	
Total	\$5,376,000	31.8%	\$4,700,000	30.1%	\$3,725,802	23.6%
CONTRIBUTION TO RESERVE	\$248,000	1.5%	(\$179,000)	-1.1%	\$1,958,148	12.4%

Statement Of Continuity of Waste Water Reserve

Description	2004 Annual Budget	2003 Annual Budget	2003 Year End Actual
Reserve Balance - Beginning - Actual	\$10,866,953	\$11,925,217	\$11,925,217
Contribution from Sewer Operations	248,000	(179,000)	1,958,148
Capital Fund Transfer - Previous Year Committed / Actual	(1,052,704)	(1,184,420)	(311,811)
Capital Fund Transfer - Budget / Actual	(872,000)	(2,660,000)	(2,245,129)
Revenue Fund Transfer - Budget / Actual	0	0	390,527
Revenue Fund Transfer - Budget / Actual	(850,000)	(850,000)	(850,000)
Reserve Balance - Ending - Committed / Actual	\$8,340,249	\$7,051,797	\$10,866,953

**CITY OF VAUGHAN
2004 DRAFT WATER & WASTEWATER BUDGET**

NEW COMPLEMENT REQUESTS REQUIRING COUNCIL APPROVAL

Department	Position Description	Status	Complement	2004 FTE	Salary	Benefits	Annual Impact	2004 Other	2004 Budget Impact
<u>New complement requests by department per Schedule F submission</u>									
Water Division	Water Operations Supervisor	F/T	1.0	0.2	\$60,610	\$15,155	\$75,765	\$7,000	\$19,630
Water Division	Service Person I	F/T	1.0	0.2	\$40,785	\$10,195	\$50,980	\$5,000	\$13,500
Wastewater Division	Service Person I	F/T	1.0	0.2	\$40,785	\$10,195	\$50,980	\$5,000	\$13,500
Water Division	Clerk Typist C	P/T	0.7	0.1	24,465	\$2,365	\$26,830	Ø	\$8,900
Total requiring Individual Council approval			3.7	0.7	\$166,645	\$37,910	\$204,555	\$17,000	\$55,530

Summary Full Time & Part Time Complement Requests

1 Water & Wastewater Supervisor

The Provincial regulations governing water and wastewater operations have dramatically changed demanding more and more supervisory time. This demand has been primarily in water operations with increased testing and reporting and changes in operating procedures. The legislation is evolving so rapidly that the supervisor must check the Provincial web site on a weekly basis for change and be prepared to respond to those changes. Now that the water regulations have been overhauled, the Province is expected to introduce new regulations governing wastewater. It is anticipated that these changes will be as onerous as the water regulations have become.

1 Water-Service Person

The water sector is a provincially regulated industry. As such the City has a mandate to meet the Provincial standards for water distribution. Growth, additional testing and operating requirements and complexities of a larger distribution system have created this need. With staff focusing primarily on the regulations, some of the lesser-regulated but important operations are not being effectively addressed. Areas in need of higher levels of attention are watermain swabbing to maintain quality, exercising valves to assure their operation, booster pump maintenance and some hydrant maintenance procedures

1 Wastewater-Service Person I

A higher level of activity is required to keep up with the maintenance demand of storm water management ponds. Areas in need of regular continued effort are activities such as grate repair and replacement, concrete repair, water quality, erosion repairs and inspections. The storm sewer component of the wastewater activities is routinely sacrificed in favour of the MOE mandated sanitary sewer maintenance. As such the demand for maintenance has been identified but there is not sufficient staff to undertake the work. The obvious consequence is that this infrastructure will continue to deteriorate exposing the City to higher maintenance costs in the future and there will be environmental implications if the facilities are not properly maintained.

1 Part Time Clerk Typist C

To follow-up on water meter installation problems with builders and residents in regards to meter reading issues, missing or duplicate meter serial numbers and other customer or builder related issues.

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

		2003
Region of Peel	\$319	\$295
Town of Markham	\$461	\$439
Town of Aurora	\$479	\$451
City of Vaughan *	\$492	\$455
Town of Richmond Hill	\$502	\$479
Town of Newmarket	\$521	\$497

* Includes area rate charge and 2004 consumption rate increase of 9%