



**Town of Aurora
General Committee Report No. FS18-013**

Subject: 2018 Water, Wastewater, Stormwater Budgets and Rates

Prepared by: Dan Elliott, Director Financial Services - Treasurer

Date: March 20, 2018

Recommendation

- 1. That Report No. FS18-013 be received; and**
- 2. That the 2018 combined Water, Wastewater and Stormwater budget of \$23,637,600 be approved; and**
- 3. That the 2018 retail water rate of \$2.01 per cubic metre and the retail wastewater rate of \$2.72 per cubic metre of water be approved; and**
- 4. That the 2018 flat rate stormwater charges of \$5.28 per unit per month for residential and condominium properties and \$67.07 per unit per month for metered non-residential commercial/industrial and multi-residential properties be approved; and**
- 5. That the new approved retail water, retail wastewater and stormwater charge rates become effective for all billings issued by the Town on or after May 1, 2018, and be retroactive for all consumption newly billed on such billings; and**
- 6. That the 2018 bulk water purchase rate of \$4.73 per cubic metre dispensed effective May 1, 2018 be approved; and**
- 7. That the Town's full time staff complement for all work areas except Library and Central York Fire be increased by 2 to 223 to reflect the operational requirements of the water, wastewater and stormwater areas; and**
- 8. That the necessary by-law be enacted to implement the 2018 retail water rate, retail wastewater rate, stormwater charge and bulk water purchase rate.**

Executive Summary

The purpose of this report is to present the budget for rate supported utility programs and to set the 2018 rates for the water, wastewater and stormwater services for billings issued on or after May 1, 2018.

- Budgets for water operations, wastewater operations and stormwater operations should be viewed as separate cost recovery budgets
- Water, Wastewater and Stormwater Rates Require Rebalancing
- 2017 Water and Wastewater budgets had errors in forecasting flows, and allocating retail revenues and wholesale costs.
- Corporate overhead charge was increased, and now allocated
- Additional staffing required to support the growing community demands for services
- Region wholesale rate increases add pressure to underlying costs
- Demand per household continues to decline
- Community growth continues, but rate increases are required
- Core operational budgets reduced for 2018
- Stormwater rate structure will be revisited in 2018
- Staff are developing a proposed 2018 capital project for future consideration
- 2018 budget summaries are attached
- Overall 2018 Water, Wastewater & Stormwater rate increases are moderate
- Upward retail rate pressure is expected to continue into the future

Background

Annually, the water, wastewater and stormwater utility budgets must be prepared on a balanced, cost recovery basis. In setting the water, wastewater and stormwater utility budgets, the following steps are required:

- Using the ten year capital plan, establish reserve contributions required for infrastructure
- Determine overhead charges for costs incurred within the tax budget, to be recovered from the utility budgets.
- Determine the operating costs directly related to operating the growing systems of infrastructure, maintaining water quality and testing requirements, and administration costs.

- Estimate total water volume to be purchased from the Region of York, and the related wholesale costs for water and wastewater services.
- Using an iterative process, set retail rates, to be applied to the wholesale volumes, which result in balanced budgets.

This year, the utilities budgets have been developed collaboratively with Operations staff, Billing Administration staff, and Financial Planning staff. The ten year capital requirements were known last year. Operating costs have been reduced, however new staff have been requested adding new costs. During the tax budget work, the allocation of corporate overhead to the utilities budgets was adjusted to reflect actual costs and time allocations of staff directly and indirectly involved in the utility operations.

The largest challenge in developing the utilities budgets is in estimating the expected water volumes to be purchased from the Region of York. It is the water volume purchased together with rates that determine wholesale water costs, wholesale wastewater costs, and the required retail water revenue and retail wastewater revenues. To do this, staff met with the Region and developed strong confidence in an estimate developed by them. This expected water flow to Aurora was used for the basis of setting wholesale cost estimates, and balancing the budgets by setting retail rates.

Analysis

Water, Wastewater and Stormwater Utility Budgets should be viewed as separate budgets for cost recovery

As provincial regulations require the water budget specifically to be full cost recovery, likewise the wastewater and stormwater utility budgets should also be viewed as distinct operating budgets, each balanced for full cost recovery. Except for corporate overhead allocation and administration and billing costs, the Town has been able to separate out the stormwater costs and revenues into a separate balanced budget.

Water, Wastewater and Stormwater Rates Require Rebalancing

The 2018 budget has been reviewed interdepartmentally. Due to two key drivers, the 2018 utilities budget will reallocate costs as between the three components; water, wastewater and stormwater budgets. After correcting cost allocations between the components, all rates will be rebalanced for full cost recovery for each component.

The two key drivers are:

March 20, 2018

Page 4 of 11

Report No. FS18-013

- Errors in cost allocation and budgets between water and wastewater occurred during 2017 budget process and prior. Too much wholesale cost was allocated to water, requiring a shift to wastewater.
- In the past, all corporate overhead, and the Billing & Administration costs of the budget were allocated only to the water component, with minimal allocation to wastewater and stormwater components.

The 2018 budget will correct the cost allocation issues above, and will result in significant shifts in the separate rates for water and wastewater in particular, but with some added pressure to the stormwater rates. Overall, the rate increase and impact to the average homeowner is within the expected range.

During 2018, staff are working to confirm the operational cost allocations as between the three components. No significant variations are expected at this time.

2017 Water and Wastewater budgets had errors in forecasting flows, and allocating retail revenues and wholesale costs.

The 2017 budget had errors in forecasting the wholesale flows, and resultant retail revenues. The wholesale costs for water appear to have been overstated by more than \$1million, while wholesale costs for wastewater were understated by more than \$1million. These issues contributed directly to the \$1.4million surplus in water operations for 2017 preliminary results, with \$890,000 deficit in wastewater results. Without significant curtailment of operating costs, the combined results would have been a deficit due to the above noted budget errors.

The 2018 budgets will correct these budget errors. However, this will result in significant reduction in costs in water, with significant budget cost increases in wastewater. The retail rates will require rebalancing, as these adjustments will reduce retail rate pressures in water, with significant rate pressures in wastewater.

Corporate overhead charge was increased, and now allocated

During the preparation of the Town's main 2018 Operating Budget, the cost recovery charge to the three utility budgets for corporate overhead allocations was reviewed. The methodology was made consistent with the approach used for allocating corporate overhead charges to the Building Services budget. For 2018, the corporate charge made to the utilities budget was nearly doubled. This amount cannot be amended at this time, as the Operating Budget has been approved.

March 20, 2018

Page 5 of 11

Report No. FS18-013

In addition to a corporate charge for overhead, the utilities budgets also are budgeted direct costs for Billing & Administration functions performed by Financial Services staff. Both the overhead and the billing administration costs have all been charged only to the water component, with very little directed to the wastewater or stormwater budgets. Administrative costs such as these should be appropriately shared between the three utility budget components for more accurate cost recovery pricing of the services.

For 2018, the corporate overhead, and the billing and administration charges which are budgeted directly have been allocated between the three components. The allocation was a proration of these charges in the same allocation as the direct operational costs charged to each area by the Operational Services Department.

The result of this new allocation is a reduction in costs attributed to water operations, with an increase in costs attributed to wastewater and stormwater.

Additional staffing required to support the growing community demands for services

During 2017, a contract position was added to the Financial Services Department specifically to support the growth demands of the water billing administration. The water billing administration to that point was substantially run by a single staff position, with the support of the divisional manager. With the increase in growth, a booming real estate market causing additional sales and ownership changes, together with addition of a meter change out program, additional support was added. Despite the additional staff, two positions are still unable to keep up to all administrative functions necessary, including efforts for the collection of arrears accounts. Staff are requesting the permanent status conversion of the current contract position. An additional resource will be hired on a one year contract basis. This new position will assure sufficient resources are in place to maintain all necessary functions for the water administration section, including meter changes, meter reading, move-in/move-outs final billings, ownership/tenant changes, collections and monitoring for low or high consumption patterns. This position will also support the activities of the pending new capital project to bring radio reading to all meters in the Town.

In addition, the fleet group within Operational Services, has been struggling to maintain the demands of a larger and growing fleet, both of licensed and unlicensed vehicles, and other powered equipment. They are requesting an additional mechanic to keep the fleet of vehicles and equipment operational for the growing activities. While some fleet charge is currently allocated to the three utility budgets, it is minimal and does not

March 20, 2018

Page 6 of 11

Report No. FS18-013

reflect the work or costs required to maintain the fleet which supports the utility operations.

The budget business documents for the contract conversion and the new mechanic are included as Attachments # 5 and #6.

Region wholesale rate increases add pressure to underlying costs

For 2018, as part of their long range financial plan, the Region of York imposed an 11.3% rate increase for water, and 7.5% rate increase for wastewater services. Similar increases are expected to continue for the next several years as the Region increases its contributions to reserves for infrastructure sustainability for the related utility assets.

Demand per household continues to decline

There are three key contributors to households using less water each year on average:

- New construction and renovation has seen reductions in family water use through the implementation of better water saving and water efficient devices and fixtures in the home. Businesses seek water saving processes in their operations as well.
- With water rates increasing and the resultant increases in the household water billings, families are becoming even more wise and sensitive in how they use and conserve water use within their homes. Water demand is seemingly fairly elastic to price increases.
- The restriction on outdoor pesticide and herbicide use has resulted in significant infestation of dandelions and other weeds. With the increasingly difficult fight against these weeds, together with price sensitivity to increasing rates, many families have simply stopped watering or significantly reduced watering their lawns, further reducing demand per household.

Community growth continues, but rate increases are required

The increasing demand for water from new residents is being substantially offset by falling average demand as noted above. With increases in the overhead allocations, and the Region's wholesale cost rate increase, the retail rate for combined water and sewer must increase. With the rebalancing discussed above, the 2018 water rate is being reduced, while the sewer rate is bearing all of the upward pressure.

March 20, 2018

Page 7 of 11

Report No. FS18-013

Stormwater revenue is charged per property, and accordingly community growth results in higher revenues initially. With the planned increase in reserve contributions for stormwater infrastructure, and the first introduction of an allocation of Administration & Billing and Corporate Overhead charges, the stormwater rates require a 5.4% rate increase for 2018 to balance this budget. Stormwater rates have not increased May 1, 2016.

Core operational budgets reduced for 2018

During staff review of the budgets, every line item was closely examined and reset to reflect planned activities to maintain and service the growing utility systems, and meet legislative requirements for delivery of safe, clean drinking water. Several line items saw reductions, with overall base operating costs charged directly to the utility budgets reduced.

Stormwater rate structure will be revisited in 2018

During 2018, a report from our Engineering group will be proposing alternative approaches to allocating stormwater revenues amongst various properties. Any approved changes in billing approaches for stormwater rates will be implemented for 2019.

Staff are developing a proposed 2018 capital project for future consideration

The Town's water meters all have a remote reading device on the outside of the property. Traditionally the contracted meter reader touches the outside device with a reading device to capture the meter reading. With the meter change out program, all changed meters are also having a smart-point device attached to the outside device, allowing the meter reads to be read remotely by radio signal. Staff are currently researching the feasibility of converting all existing meters to the radio reading device and installing collection antennae into the community to improve client service, billing accuracy and completeness. The new device has the ability to track recent water consumption history between regular billings. For homes with the newer style water meter, it will also report any alerts or alarms from that meter for tampering, or high or low flows. A separate report will be presented to Council to outline the planned program and seek approval of capital funding for the conversion project.

2018 budget summaries are attached

Attachments #1 through #4 outline the budget details for each of water operations, wastewater operations, and stormwater operations, together with a similar format showing all three combined into one schedule.

Overall 2018 Water, Wastewater & Stormwater rate increases are moderate

The following rates have been calculated to recover the estimated required revenues based on the estimated volumes of water flow.

Rate	2017 Rate Per cu.m	2018 Proposed Per cu.m.	Change (%)
Retail Water Rate	\$2.29	\$2.01	-12.2%
Retail Wastewater Rate	\$2.04	\$2.72	33.3%
Combined Water & Wastewater Rate/Bulk Water	\$4.33	\$4.73	9.2%
Stormwater Flat Rate			
Residential/year	\$60.14	\$63.36	5.4%
Residential/month	\$5.01	\$5.28	
Non-Residential/year	\$763.57	\$804.84	5.4%
Non-Residential/month	\$63.63	\$67.07	

The average residential household uses approximately 62 cubic metres of water per quarter. The impact of these rate changes on their quarterly bill are summarized below:

	Current rates billing	Proposed rates billing*	Dollar Increase (Decrease)	% Increase (Decrease)
Water services	\$141.98	\$124.62	(\$17.36)	(12.2%)
Wastewater	126.48	168.64	42.16	33.3%
Stormwater	15.03	15.84	0.81	5.4%
Total Billing	\$283.49	\$309.10	\$25.61	9.0%

- Effective for billings issued after May 1, including all newly billed consumption thereon.

Based on the above, the impact of the proposed rate increase for a residential property is approximately \$102.44 per year (\$25.61 times four billings)

Upward rate pressure expected to continue

The Region of York is forecasting continuing significant annual wholesale rate increases as they continue to ramp up their reserve fund contributions for infrastructure sustainability. In past years, the Town of Aurora was able to ramp up its contributions related to water and wastewater infrastructure, and they are currently not under further pressure to increase. This will result in the Town needing to continue water and wastewater rate increases to offset the Region's rate increases.

The Town's stormwater infrastructure contributions require continued annual increases as the cost of rehabilitation of ponds and underground infrastructure continues to escalate. The stormwater rate will experience upward pressures in the coming years as the Town continues to ramp up its contributions for these assets and their sustainability. Due to its relatively small budget size, the calculated rates are very sensitive to relatively small budgetary increases.

Advisory Committee Review

Not applicable

Legal Considerations

The budgets and rates for water, wastewater and stormwater utilities operations must be approved by Council. The proposed budgets provide sufficient resources for the Town staff to meet all statutory responsibilities of the Town as an owner and operator of systems for water distribution, wastewater collection and stormwater collection and management.

Financial Implications

The water, wastewater and stormwater budgets are all full cost recovery driven. In developing the budgets, water flow estimates are made, wholesale costs then determined, operating and administrative costs developed, internal charges confirmed, and contribution requirements for reserves established. Ultimately, the full costs of these services are then recovered by establishing rates required to do so for the forecast volumes.

This year's budget sees the internal charge for corporate overhead allocation increased, as was detailed during the tax budget discussions. In addition, costs have been redistributed among the water, wastewater and stormwater budgets, resulting in required rate rebalancing. Also, this budget seeks conversion of a contract position to full time, and the addition of two other full time positions to support the operational demands of the growing community.

Communications Considerations

Staff will work with Communications in preparing a press release regarding the adoption of the utilities budgets and the impacts to be expected.

Link to Strategic Plan

Strategic Plan Goal of Supporting an Exceptional Quality of Life for All Objective 2: Invest in Sustainable Infrastructure

Both legislation and fiscal management lead to creating sustainable water, wastewater and stormwater infrastructure. Providing the appropriate rates ensures that sufficient revenues are generated to create financial sustainability and maintain the assets accordingly.

Alternative(s) to the Recommendation

The rates for the various services are established each year based on coming into effect May 1st of the current year and are applied to all consumption, regardless of reading interval, on all billings prepared and issued on or after May 1st. Approval of the recommendations in advance of May 1st will allow the revised rates to be charged at the appropriate time to meet budget projections.

Conclusions

The water, wastewater and stormwater programs are all funded through a rate structure based on consumption and full cost recovery. This year's budget rebalances retail rates between water, wastewater and stormwater charges, as costs have been reallocated across them. Overall, the proposed rate changes result in an increase of \$102.44 annually for the average residential household. On a combined basis, the rates outlined

in the recommendations are in line with previous year's increases and represent a prudent approach to achieving full cost recovery for future years. All new rates are to become effective for all billings issued by the Town on or after May 1, 2018, and be retroactive for all consumption newly billed on such billings. This approach is consistent with past years, and ensures all properties receive four quarterly bills at the old rates and four quarterly bills at the new rates each year.

Attachments

- Attachment #1: Summary Water Operations Budget
- Attachment #2: Summary Wastewater Operations Budget
- Attachment #3: Summary Stormwater Operations Budget
- Attachment #4: Summary Combined Utility Operations Budgets
- Attachment #5: New Staffing Request – Contract Conversion Water Administration
- Attachment #6: New Staffing Request - Mechanic

Previous Reports

None

Pre-submission Review

Agenda Management Team review on March 1, 2018

Departmental Approval



Dan Elliott
Director - Treasurer
Financial Services

Approved for Agenda



Doug Nadorozny
Chief Administrative Officer

Water

	2017 Actuals	2017 Budget	2017 Budget/Actual variance fav(unfav)	2018 Budget	% Change Budget
Required rate revenues	(10,898,159)	(11,139,829)	(241,670)	(9,764,000)	-12.4%
Less: Region Wholesale Charges	5,712,217	6,795,950	1,083,733	5,865,500	-13.7%
Gross Contribution to Fixed Costs	(5,185,942)	(4,343,879)	842,063	(3,898,500)	-10.3%
<u>Town Operational, Administrative and Fiscal Costs</u>					
Town Operations and Maintenance	1,557,886	1,753,086	195,200	1,571,435	-10.4%
additional mechanic			-	42,500	
Administration and Billing	647,247	740,468	93,221	365,465	-50.6%
contract conversion and additional FTE			-	36,000	
Corporate Overhead Allocation	578,840	560,325	(18,515)	668,100	19.2%
Infrastructure Sustainability Reserve Contributions	1,700,000	1,700,000	-	1,700,000	0.0%
Less: Misc Revenue and direct cost recoveries	(698,474)	(410,000)	288,474	(485,000)	18.3%
Total Fixed Town Costs	3,785,499	4,343,879	558,380	3,898,500	-10.3%
Net Budget - (surplus)deficit	(1,400,443)	-	1,400,443	-	
Total Expenditures: Region Wholesale Charges plus Town Costs	9,497,716	11,139,829	1,642,113	9,764,000	-12.4%

Wastewater

	2017 Actuals	2017 Budget	2017 Budget/Actual variance fav(unfav)	2018 Budget	% Change Budget
Required rate revenues	(9,560,191)	(9,929,503)	(369,312)	(12,121,200)	22.1%
Less: Region Wholesale Charges	8,900,202	7,699,412	(1,200,790)	9,039,000	17.4%
Gross Contribution to Fixed Costs	(659,989)	(2,230,091)	(1,570,102)	(3,082,200)	38.2%
<u>Town Operational, Administrative and Fiscal Costs</u>					
Town Operations and Maintenance	380,194	1,146,191	765,997	1,125,800	-1.8%
additional mechanic			-	30,300	
Administration and Billing			-	261,400	
contract conversion and additional FTE			-	25,800	
Corporate Overhead Allocation	10,725	42,900	32,175	477,900	
Infrastructure Sustainability Reserve Contributions	1,250,000	1,250,000	-	1,250,000	0.0%
Less: Misc Revenue and direct cost recoveries	(88,476)	(209,000)	(120,524)	(89,000)	
Total Fixed Town Costs	1,552,443	2,230,091	677,648	3,082,200	38.2%
Net Budget - (surplus)deficit	892,454	-	(892,454)	-	
			-		
Total Expenditures: Region Wholesale Charges plus Town Costs	10,452,645	9,929,503	(523,142)	12,121,200	22.1%

Stormwater

	2017 Actuals	2017 Budget	2017 Budget/Actual variance fav(unfav)	2018 Budget	% Change Budget
Required rate revenues	(1,470,415)	(1,351,637)	118,778	(1,752,400)	29.7%
Less: Region Wholesale Charges			-		
Gross Contribution to Fixed Costs	(1,470,415)	(1,351,637)	118,778	(1,752,400)	29.7%
<u>Town Operational, Administrative and Fiscal Costs</u>					
Town Operations and Maintenance	381,889	451,637	69,748	453,400	0.4%
additional mechanic			-	12,300	
Administration and Billing			-	105,400	
contract conversion and additional FTE			-	10,400	
Corporate Overhead Allocation			-	20,900	
Infrastructure Sustainability Reserve Contributions	1,000,000	1,000,000	-	1,150,000	15.0%
Less: Misc Revenue and direct cost recoveries		(100,000)	(100,000)	-	
Total Fixed Town Costs	1,381,889	1,351,637	(30,252)	1,752,400	29.7%
Net Budget - (surplus)deficit	(88,526)	-	88,526	-	
-					
Total Expenditures: Region Wholesale Charges plus Town Costs	1,381,889	1,351,637	(30,252)	1,752,400	29.7%

Total

	2017 Actuals	2017 Budget	2017 Budget/Actual variance fav(unfav)	2018 Budget	% Change Budget
Required rate revenues	(21,928,765)	(22,420,969)	(492,204)	(23,637,600)	5.4%
Less: Region Wholesale Charges	14,612,419	14,495,362	(117,057)	14,904,500	2.8%
Gross Contribution to Fixed Costs	(7,316,346)	(7,925,607)	(609,261)	(8,733,100)	10.2%
<u>Town Operational, Administrative and Fiscal Costs</u>					
Town Operations and Maintenance	2,319,969	3,350,914	1,030,945	3,150,635	-6.0%
additional mechanic	-	-	-	85,100	
Administration and Billing	647,247	740,468	93,221	732,265	-1.1%
contract conversion and additional FTE	-	-	-	72,200	
Corporate Overhead Allocation	589,565	603,225	13,660	1,166,900	93.4%
Infrastructure Sustainability Reserve Contributions	3,950,000	3,950,000	-	4,100,000	3.8%
Less: Misc Revenue and direct cost recoveries	(786,950)	(719,000)	67,950	(574,000)	
Total Fixed Town Costs	6,719,831	7,925,607	1,205,776	8,733,100	10.2%
Net Budget - (surplus)deficit	(596,515)	-	596,515	-	
	-	-	-	-	
Total Expenditures: Region Wholesale Charges plus Town Costs	21,332,250	22,420,969	1,088,719	23,637,600	5.4%

Decision Unit: #2	Year: 2018
New Staffing	
Category: Full-time	
Department: Operational Services	Division: Fleet Division
Request: Additional funding for one Class A Mechanic in Fleet Services complement	
Description/Impact: Currently there are 3 fulltime mechanics in the fleet division who are responsible for the entire corporate fleet consisting of over 300 vehicles and equipment. More than 30 pieces of equipment and vehicles are dedicated to the Water and Sewer division, with many others shared with the other functions. With the restructuring of the Parks and Roads Operations, the Fleet Division now falls under the responsibility of Operational Services. Parks and Roads staff have had a close relationship with the Fleet Division over the years and they have always strived to meet the needs of both Roads and Parks. Over the past few years, both Roads and Parks have seen an incremental yet progressive decline in the ability of fleet staff to keep up with the demands of the operation on a number of fronts. There are a number of improvements that have been identified that will greatly improve how fleet functions. Among the current issues, staff are finding that equipment is taking longer to repair, down time periods are more lengthy and highly sensitive seasonal time frames for fleet preparedness for example plows, sanders and turf equipment are not being met in a timely manner. This is a troubling situation in that key operational equipment is often unavailable to the operators during peak seasonal periods in both Roads and Parks. Management has sufficient familiarity of the operation and the employees charged with the responsibility of maintaining the fleet and can confidently state that the fleet mechanics are well organized and extremely diligent in their day to day efforts to keep up with demand. Due to the nature of the Town's operational business needs, there is little that can be done to stream line or reduce the work load given the growth that has occurred and the need to maintain municipal service level standards in both Roads and Parks. Based on the current situation and the pressures we are facing, we must supplement the work force or risk falling further behind and compromising the Towns operations. The proportionate salary expenses must be recovered from the rate based revenue generating accounts in order to properly address and reflect the true cost and overhead of maintaining the Water and Sewer fleet to reduce the financial burden on the tax based fleet funding. Based on the current division of fleet responsibilities, staff recommend that the costs associated with 1.0 FTE be funded through the Water and Sewer budget. As a result, there will be no impact to the tax base fleet funding in any future year.	

Summary:

Value	FTE +/-	Council Priority										Budget Impact		
		Communications	Park Service Levels	Road Service Levels	By-law & Building Process	Economic Development	Cultural Services	Succession Planning	Capital Project Delivery	Animal Control on Town's Trails	Other Strategic Plan Driven	Existing Funding	Non Levy Funding	Levy Impact
85,100	+1										√	-	√	-

Annualization	2018	-
	2019	-