

HALDIMAND COUNTY 2018 Rate Supported Water and Wastewater Capital Forecast and Operating Budget

Committee of the Whole December 7, 2017

Council Review of 2018 Draft Budgets

<u>Budget</u>	Review Dates
Water and Wastewater: Draft Capital Forecast and Operating Budget Review	December 7, 2017
Tax Supported Capital Budget and Forecast	February 8, 2018 (February 9 th if necessary)
Tax Supported Operating Budget Review	March 6, 2018 (March 7 th and 8 th if necessary)



Rate Supported Framework/Principles

Legislative Framework

- Full cost recovery from users of system(s)
 - •Water users fund 100% of water capital and operating costs
 - •Wastewater users fund 100% of wastewater capital and operating costs
- Highly legislated/regulated
 - Full cost recovery principles
 - Water conservation principles
 - •Economies of scale (significant number of systems in Province (>800 systems) and number of small systems (approx. 600 systems have <10,000 users)
 - Province is advocating use of technology to improve efficiencies of systems



Rate Supported Framework/Principles

- •Full cost recovery from users of the system(s) (no support from tax levy)
 - •Relative small number of users (est. approx. 9,400) and large number of systems to operate (4 wastewater treatment plants, 4 wastewater lagoons, 2 water treatment facilities, 7 water distribution systems and 8 wastewater distribution systems)
 - Large portion of costs fixed (50%)
- Budget Guidelines (consistent with 2013 Rate Study cost allocation/recovery principles see Appendix M):
 - Full cost recovery of all operating and capital costs;
 - ➤ 50%/50% fixed to variable recovery mode (eliminated of Block 2 rate in 2016);
 - ➤ Industry standard Fire Protection allocation methodology;
 - ➤ Monthly Administration fees for bulk water and hauled waste customers (only in months of use);
 - ➤ Blended holding and septic tank rates (indexed annually);
 - > Annual indexing/review of miscellaneous fees.



Rate Budget Drivers

- The required rates revenues is a function of the following:
 - Impacts of increased cost of system(s)
 - Cost allocation methodology to specific customers
 - Offsetting Revenue from other sources
- •Impact on the "Rate" is a function of:
 - Net required rates revenue (from above)
 - Anticipated consumption/use of the system(s)
 - "consumption assumptions" Appendix M
 - customer impacts (number, service size, closures, weather, etc.)



Average Monthly Increase on Customers

<u>User</u>			<u>2017</u>	<u>2018</u>	\$ Change	% Change
		Monthly Serv	vices		•	
		Basic	\$ 21.78	\$ 21.10	\$ (0.68)	(3.1%)
	Water	Consumption	\$ 15.49	\$ 15.45	\$ (0.04)	(0.2%)
Residential		Total	\$ 37.27	\$ 36.55	\$ (0.72)	(1.9%)
(15 m3)		Basic	\$ 25.45	\$ 24.14	\$ (1.31)	(5.1%)
(13 1113)	Sewer	Consumption	\$ 22.50	\$ 22.05	\$ (0.45)	(2.0%)
		Total	\$ 47.95	\$ 46.20	\$ (1.76)	(3.7%)
	<u>Total</u>		<u>\$ 85.22</u>	<u>\$ 82.75</u>	<u>\$ (2.48)</u>	<u>(2.9%)</u>
		Basic	\$ 267.44	\$ 259.05	\$ (8.39)	(3.1%)
	Water	Consumption	\$ 516.37	\$ 515.14	\$ (1.23)	(0.2%)
Commercial		Total	\$ 783.81	\$ 774.18	\$ (9.62)	(1.2%)
(2" 500 m3)		Basic	\$ 312.47	\$ 296.48	\$ (15.99)	(5.1%)
(2 300 1113)	Sewer	Consumption	\$ 750.31	\$ 735.14	\$ (15.17)	(2.0%)
		Total	\$ 1,062.78	\$ 1,031.62	\$ (31.15)	(2.9%)
	<u>Total</u>		<u>\$ 1,846.58</u>	<u>\$ 1,805.81</u>	<u>\$ (40.78)</u>	(2.2%)
		Basic	\$ 936.03	\$ 906.66	\$ (29.37)	(3.1%)
	Water	Consumption	\$ 4,130.96	\$ 4,121.09	\$ (9.86)	(0.2%)
Industrial		Total	\$ 5,066.99	\$ 5,027.76	\$ (39.23)	(0.8%)
(4" 4,000 m3)		Basic	\$ 1,093.65	\$ 1,037.69	\$ (55.96)	(5.1%)
(4 4,000 1113)	Sewer	Consumption	\$ 6,002.44	\$ 5,881.12	\$ (121.32)	(2.0%)
		Total	\$ 7,096.09	\$ 6,918.81	\$ (177.29)	(2.5%)
	<u>Total</u>		<u>\$ 12,163.08</u>	<u>\$ 11,946.56</u>	<u>\$ (216.52)</u>	<u>(1.8%)</u>

Bulk Services (per use basis)							
Bulk Water	Potable Water Costs (County)	Potable Water Costs (County) \$39.41		\$0.69	1.7%		
(3,000 gallons) Estimated Delivery Charges (Private Hauler)		\$85.45	\$85.45	\$0.00	0.0%		
	Total		\$125.54	\$0.69	0.6%		
	Treatment Costs (County)	\$125.35	\$127.90	\$2.55	2.0%		
Septic/Holding (2,000 gallons)	Estimated Delivery Charges (Private Hauler)	\$91.57	\$91.57	\$0.00	0.0%		
	Total	\$216.92	\$219.47	\$2.55	1.2%		





HALDIMAND COUNTY 2018 Draft Rate Supported Capital Budget and Forecast





2018 Draft Rate Supported Capital Budget

- Focus on Corporate Strategic Objectives and Long Term Financial Plans
- Key Principles of Rate Supported Capital Budget
 - > Replacement/Rehabilitation Focus
 - > Studies/Reviews
 - ➤ Provide Service Capacity for Anticipated Growth
 - ➤ Focus on Financing of Projects over the forecast Water vs.

 Wastewater



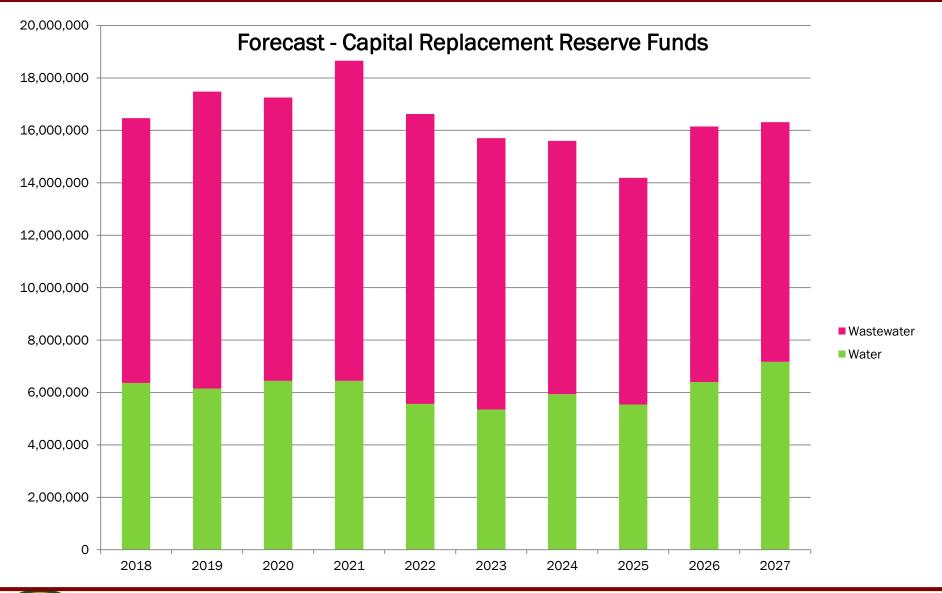
Gross Capital Expenditure Summary

Comparison of average gross expenditures over forecasted period

<u>Gross Expenditures</u>	2017 Budget Average Annual Gross Expenditures	2018 Draft Budget Average Annual Gross Expenditures	10 Year Forecast from 2013 Rate Study (average annual gross expenditures)
Water System	\$3.4 Million	\$3.5 Million	\$4.7 Million
Wastewater System	\$3.6 Million	\$8.4 Million	\$4.3 Million
Total	\$7.0 Million	<u>\$11.9 Million</u>	\$9.0 Million

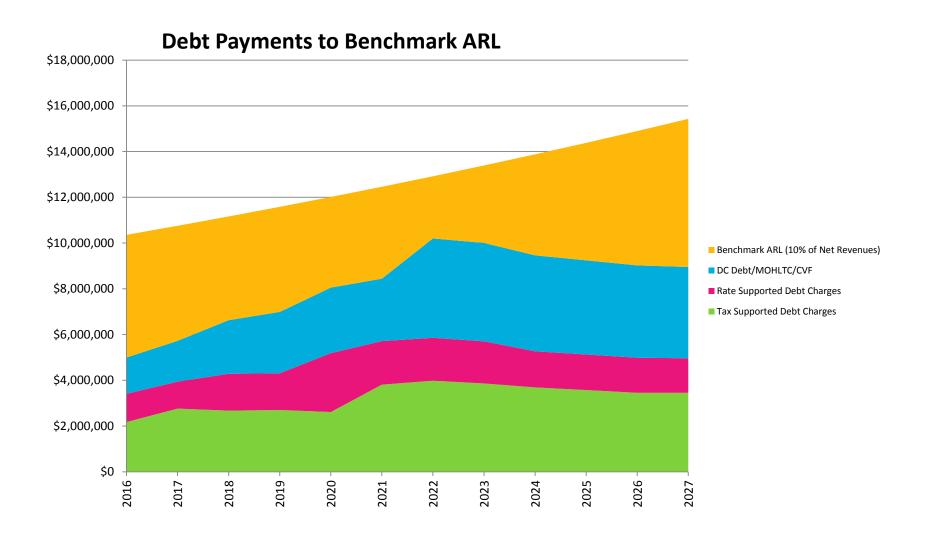


Impact on Capital Replacement Reserve Funds





Impact on Long Term Debt Payments







HALDIMAND COUNTY 2018 Draft Rate Supported Operating Budget





Revenue Required from Rates - Water Only

WATER OPERATIONS								
	2017 Budget	2018 Budget	increase/(deci	ease)				
	\$	\$	\$	%				
Expenditures								
Salaries, Wages & Benefits	1,783,980	1,850,430	66,450	3.72%				
Supplies & Materials	127,700	130,800	3,100	2.43%				
Hamilton Water Supply	2,346,200	2,347,930	1,730	0.07%				
Services	3,403,740	2,828,880	(574,860)	-16.89%				
Veolia Operating Services Charges	2,100,430	2,147,060	46,630	2.22%				
Interdepartmental Charges	357,950	383,650	25,700	7.18%				
Long Term Debt Charges	337,300	1,443,500	1,106,200	327.96%				
Transfers to Reserves/Reserve Funds	1,870,600	1,216,310	(654,290)	-34.98%				
Total Expenditures	12,327,900	12,348,560	20,660	0.17%				
Revenues								
Recoveries from New Credit	210,600	248,300	37,700	17.90%				
Fees & Recoveries	6,406,490	6,382,090	(24,400)	-0.38%				
Total Revenues	6,617,090	6,630,390	13,300	0.20%				
Net Revenues Required from User Rates	5,710,810	5,718,170	7,360	0.13%				

<u>Driver</u>	Net Rate Revenues Impact	<u>% Impact</u>
A. Base Budget (net)	(\$159,740)	(2.80%)
B. New Initiatives	\$87,160	1.53%
C. Water Additional Capital Contribution	\$79,940	1.40%
Total	<u>\$7,360</u>	<u>0.13%</u>



Customers and Consumption

Water Customers and Consumption Comparison

		2017			2018			
	Ac	tuals	Budge	t		Budget		
	Users	%	Consumption	%	Users	%	Consumption	%
Residential	8,533	89.81%	1,335,143	40.67%	8,665	89.82%	1,366,547	41.46%
Commercial/Industrial	680	7.16%	610,566	18.60%	680	7.05%	604,525	18.34%
Large Industrial	4	0.04%	819,174	24.95%	4	0.04%	804,002	24.40%
Subtotal	9,217	97.01%	2,764,883	84.22%	9,349	96.91%	2,775,075	84.20%
Bulk Water	284	2.99%	398,119	12.13%	298	3.09%	385,927	11.71%
New Credit Wholesale			71,247	2.17%			73,065	2.22%
New Credit Depot			48,783	1.49%			61,626	1.87%
Total	9,501	100.00%	3,283,032	100.00%	9,647	100.00%	3,295,693	100.00%



Revenue Required from Rates - Wastewater only

WASTEWATER OPERATIONS								
	2017 Budget	2018 Budget	increase/(de	crease)				
	\$	\$	\$	%				
Expenditures								
Salaries, Wages & Benefits	690,660	665,240	(25,420)	-3.68%				
Supplies & Materials	20,060	20,110	50	0.25%				
Services	1,608,540	1,571,230	(37,310)	-2.32%				
Veolia Operating Services Charges	2,406,180	2,477,170	70,990	2.95%				
Interdepartmental Charges	268,720	290,310	21,590	8.03%				
Long Term Debt Charges	1,245,270	1,150,900	(94,370)	-7.58%				
Transfers to Reserves/Reserve Funds	2,378,520	2,490,760	112,240	4.72%				
Total Expenditures	8,617,950	8,665,720	47,770	0.55%				
Revenues								
Municipal Recoveries	74,100	58,320	(15,780)	-21.30%				
Fees & Recoveries	1,860,360	1,833,240	(27,120)	-1.46%				
Transfers from Reserves/Reserve Funds	403,140	480,240	77,100	19.12%				
Total Revenues	2,337,600	2,371,800	34,200	1.46%				
Net Revenues Required from User Rates	6,280,350	6,293,920	13,570	0.22%				

<u>Driver</u>	Net Rate Revenues Impact	<u>% Impact</u>
A. Base Budget (net)	(\$109,550)	(1.74%)
B. New Initiatives	\$84,930	1.35%
C. Wastewater Additional Car	<u>\$38,190</u>	<u>0.61%</u>
Total	<u>\$13,570 </u>	<u>0.22%</u>



Customers and Consumption

Wastewater Customers and Consumption Comparison

		2017			2018			
	Ad	ctuals	Budge	et		Budget		
	Users	%	Consumption	%	Users	%	Consumption	%
Residential	8,369	92.76%	1,309,129	61.54%	8,501	92.87%	1,344,153	61.71%
Commercial/Industrial	644	7.14%	489,259	23.00%	644	7.04%	480,157	22.05%
Large Industrial	3	0.03%	294,108	13.83%	3	0.03%	316,089	14.51%
Subtotal	9,016	99.93%	2,092,496	98.36%	9,148	99.93%	2,140,398	98.27%
Septic/Holding	6	0.07%	10,250	0.48%	6	0.07%	10,712	0.49%
Leachate		0.00%	24,568	1.15%			26,956	1.24%
Total	9,022	100.00%	2,127,314	100.00%	9,154	100.00%	2,178,066	100.00%



Impact on Other Revenues/Rates

Water "Other" Revenues

- Total other revenues represent approximately \$6.6 million
- Bulk Water Charges represent \$1.0 million; Fire Protection Recoveries represent \$2.2 million; Development charges recovery for debt payments \$502,000 and miscellaneous charges of \$567,000 (New Credit - \$248,000, property tax recovery - \$98,000 and miscellaneous – \$221,000)
- Recovery of costs for non-potable water provided to Industry totals approximately \$2.1 million and \$261,000 for Port Maitland

Wastewater "Other" Revenues

- Total other revenues represent approximately \$2.4 million
- Leachate treatment revenues represent \$1.4 million; holding/septic tank revenues represent \$151,000; transfer from development charges for debt payments of \$480,000; and miscellaneous charges of \$139,000 (sludge storage, overstrength, etc.)



Impact on Bulk Water Rate

Bulk Water Rate	<u>2017 Rates</u>	2018 Proposed Rates	Chan	g <u>e</u>
(per cubic metre)			(\$)	(%)
Controlled by Haldimand County				
Bulk Water Rate (charged to hauler)	<u>\$2.89</u>	<u>\$2.94</u>	<u>\$0.05</u>	<u>1.7%</u>
Monthly Administration Fee (charged to hauler)	<u>\$16.52</u>	<u>\$16.85</u>	<u>\$0.33</u>	<u>2.0%</u>
Per Load Impact on "Typical End User" (3,000 gallo	<u>n load)</u>			
Water Commodity (determined by Haldimand County)	\$39.41	\$40.10	\$0.69	1.7%
Estimated hauler delivery charge (determined by hauler)	<u>\$85.45</u>	<u>\$85.45</u>	\$0.00	0.0%
Total "End User" estimated cost	<u>\$124.86</u>	<u>\$125.54</u>	<u>\$0.69</u>	<u>0.6%</u>

The following assumptions were used in the above chart: average load is 3,000 gallons (i.e. approximately 13.6 cubic metres); no change in the hauler's delivery charge (due to reduced fuel charges) from 2017 to 2018 and excludes any allocation of administration fee.



Impacts on Holding/Septic Charges

Holding/Septic/Portable Toilet Tank Treatment Charge	<u>2017</u>	2018 Proposed	<u>Cha</u>	ange
(per cubic metre)			(\$)	(%)
Controlled by Haldimand County:				
Proposed Rate (charged to hauler)	<u>\$13.79</u>	<u>\$14.07</u>	<u>\$0.28</u>	<u>2.0%</u>
Monthly Administration Fee (charged to hauler)	<u>\$16.52</u>	<u>\$16.85</u>	<u>\$0.33</u>	<u>2.0%</u>
Per Load Impact on "Typical End User" (2,000 gallon load)				
Treatment Cost (determined by Haldimand)	\$125.35	\$127.90	\$2.55	2.0%
Estimated hauler delivery charge (determined by Hauler)	<u>\$91.57</u>	<u>\$91.57</u>	<u>\$0.00</u>	<u>0.0%</u>
Total "End User" cost	<u>\$216.92</u>	<u>\$219.47</u>	<u>\$2.55</u>	<u>1.2%</u>

To determine the <u>per use</u> impact on the "typical end user" (i.e. predominantly rural residents), the following assumptions were used: average load is 2,000 gallons (i.e. approximately 9.1 cubic metres); and no change in the hauler delivery charge from 2017 to 2018. The impacts on specific users will vary considerably based on the number of times a year this service is required.



Average Monthly Increase on Customers

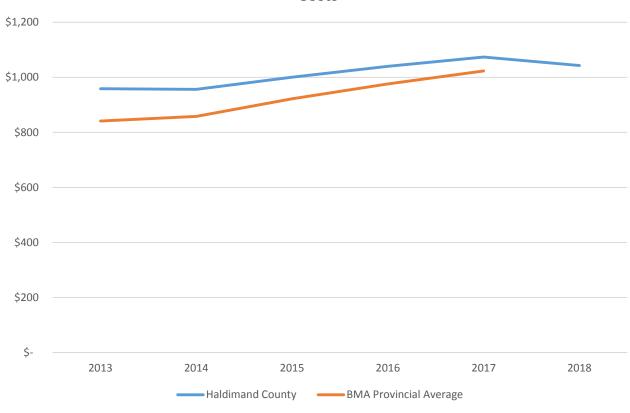
<u>User</u>			<u>2017</u>	<u>2018</u>	\$ Change	% Change				
Monthly Services										
Residential (15 m3)	Water	Basic	\$ 21.78	\$ 21.10	\$ (0.68)	(3.1%)				
		Consumption	\$ 15.49	\$ 15.45	\$ (0.04)	(0.2%)				
		Total	\$ 37.27	\$ 36.55	\$ (0.72)	(1.9%)				
	Sewer	Basic	\$ 25.45	\$ 24.14	\$ (1.31)	(5.1%)				
		Consumption	\$ 22.50	\$ 22.05	\$ (0.45)	(2.0%)				
		Total	\$ 47.95	\$ 46.20	\$ (1.76)	(3.7%)				
	<u>Total</u>		<u>\$ 85.22</u>	<u>\$ 82.75</u>	<u>\$ (2.48)</u>	(2.9%)				
	Water	Basic	\$ 267.44	\$ 259.05	\$ (8.39)	(3.1%)				
Commercial (2" 500 m3)		Consumption	\$ 516.37	\$ 515.14	\$ (1.23)	(0.2%)				
		Total	\$ 783.81	\$ 774.18	\$ (9.62)	(1.2%)				
	Sewer	Basic	\$ 312.47	\$ 296.48	\$ (15.99)	(5.1%)				
		Consumption	\$ 750.31	\$ 735.14	\$ (15.17)	(2.0%)				
		Total	\$ 1,062.78	\$ 1,031.62	\$ (31.15)	(2.9%)				
	<u>Total</u>		<u>\$ 1,846.58</u>	<u>\$ 1,805.81</u>	<u>\$ (40.78)</u>	(2.2%)				
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		Consumption	\$ 4,130.96	\$ 4,121.09	\$ (9.86)	(0.2%)				
		Total	\$ 5,066.99	\$ 5,027.76	\$ (39.23)	(0.8%)				
	Sewer	Basic	\$ 1,093.65	\$ 1,037.69	\$ (55.96)	(5.1%)				
		Consumption	\$ 6,002.44	\$ 5,881.12	\$ (121.32)	(2.0%)				
		Total	\$ 7,096.09	\$ 6,918.81	\$ (177.29)	(2.5%)				
	<u>Total</u>		<u>\$ 12,163.08</u>	<u>\$ 11,946.56</u>	<u>\$ (216.52)</u>	<u>(1.8%)</u>				

Bulk Services (per use basis)									
Bulk Water (3,000 gallons)	Potable Water Costs (County)	\$39.41	\$40.10	\$0.69	1.7%				
	Estimated Delivery Charges (Private Hauler)	\$85.45	\$85.45	\$0.00	0.0%				
	Total	\$124.86	\$125.54	\$0.69	0.6%				
Septic/Holding (2,000 gallons)	Treatment Costs (County)	\$125.35	\$127.90	\$2.55	2.0%				
	Estimated Delivery Charges (Private Hauler)	\$91.57	\$91.57	\$0.00	0.0%				
	Total	\$216.92	\$219.47	\$2.55	1.2%				



Average Monthly Increase on Customers







Future Issues and Challenges

- ➤Impacts of Reduced Consumption by Large Industrial Users or conversion to raw water
- ➤ Maintenance Costs Associated with OPG Water Intake
- ➤ Tangible Capital Asset Reporting and Long Range Asset Management
- ➤ Ongoing Performance Evaluations of Facilities
- ➤ Leachate Treatment Volumes
- ➤ Available Balances in Rate Stabilization Reserve

