

HALDIMAND COUNTY 2017 Rate Supported Water and Wastewater Capital Forecast and Operating Budget

Committee of the Whole December 1, 2016

Council Review of 2017 Draft Budgets

<u>Budget</u>	Review Dates
Water and Wastewater: Draft Capital Forecast and Operating Budget Review	December 1, 2016
Tax Supported Capital Budget and Forecast	January 23, 2017 (January 24 th if necessary)
Tax Supported Operating Budget Review	March 7, 2017 (March 8 th and 9 th if necessary)



Rate Supported Budget Constraints

Legislative Framework/External Budget Constraints

- 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 Budget Constraints

- •Full cost recovery from users of the system(s) (no support from tax levy)
 - •Relative small number of users (approx. 9,000) 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 of miscellaneous fees.



Rate Budget Drivers

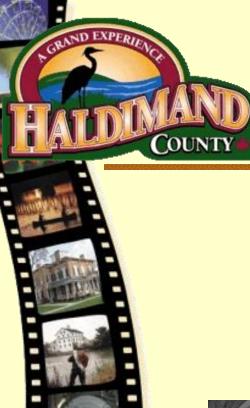
- The required rates revenues is a function of the following:
 - Impacts of increased cost of system(s)
 - Cost allocation methodology to specific customers
 - Offsetting Revenue from other sources
- •Impact on the "Rate" is a function of:
 - Net required rates revenue (from above)
 - Anticipated consumption/use 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>2016</u>	<u>2017</u>	\$ Change	% Change
		<u>Monthly</u>	<u>Services</u>		
Residential (15 m³)	Water	\$37.29	\$37.27	-\$0.02	-0.1%
	Sewer	\$45.22	\$47.95	\$2.74	6.1%
	Total	\$82.51	\$85.22	\$2.71	3.3%
Commercial (2" 500 m ³)	Water	\$791.12	\$783.81	-\$7.31	-0.9%
	Sewer	\$1,007.58	\$1,062.78	\$55.20	5.5%
	Total	\$1,798.70	\$1,846.58	\$47.89	2.7%
Industrial (4" 4,000 m ³)	Water	\$5,142.69	\$5,066.99	-\$75.70	-1.5%
	Sewer	\$6,749.04	\$7,096.09	\$347.05	5.1%
	Total	\$11,891.73	\$12,163.08	\$271.35	2.3%
		Bulk Services	(per use basis)		
Bulk Water (3,000 gallons)	Potable Water Costs (County)	\$40.34	\$39.41	-\$0.93	-2.3%
	<u>Estimated</u> Delivery Charges (Private Hauler)	\$72.60	\$72.60	\$0.00	0.0%
	Total	\$112.94	\$112.01	-\$0.93	-0.8%
Septic/Holding (2,000 gallons)	Treatment Costs (County)	\$122.90	\$125.35	\$2.45	2.0%
	<u>Estimated</u> Delivery Charges (Private Hauler)	\$87.70	\$87.70	\$0.00	0.0%
	Total	\$210.60	\$213.05	\$2.45	1.2%





HALDIMAND COUNTY 2017 Draft Rate Supported Capital Budget and Forecast





2017 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

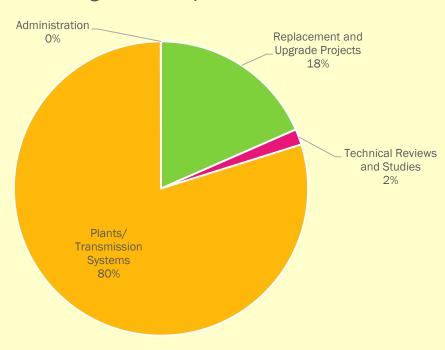
Comparison of average gross expenditures over forecasted period

<u>Gross Expenditures</u>	2016 Budget Average Annual Gross Expenditures	2017 Draft Budget Average Annual Gross Expenditures	10 Year Forecast from 2013 Rate Study (average annual gross expenditures)
Water System	\$3.3 Million	\$3.4 Million	\$4.7 Million
Wastewater System	\$3.8 Million	\$3.6 Million	\$4.3 Million
Total	\$7.1 Million	\$7.0 Million	\$9.0 Million

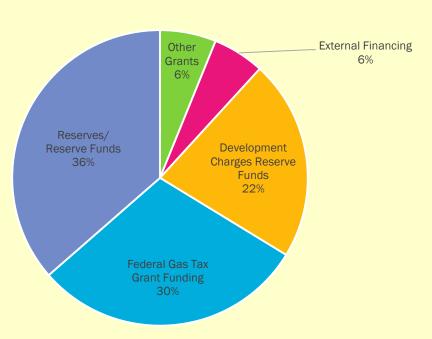


2017 Draft Rate Supported Capital Budget - Water

Average Annual Capital Costs



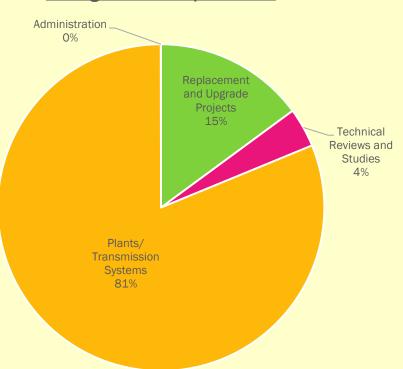
Average Annual Capital Financing



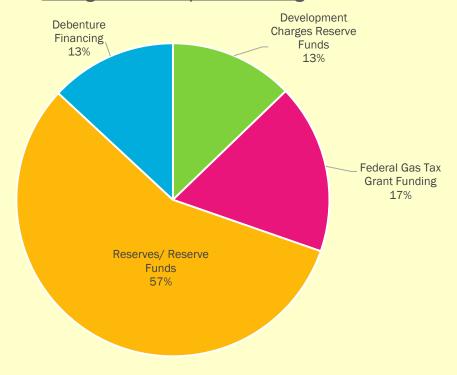


2017 Draft Rate Supported Capital Budget -Wastewater

Average Annual Capital Costs



Average Annual Capital Financing





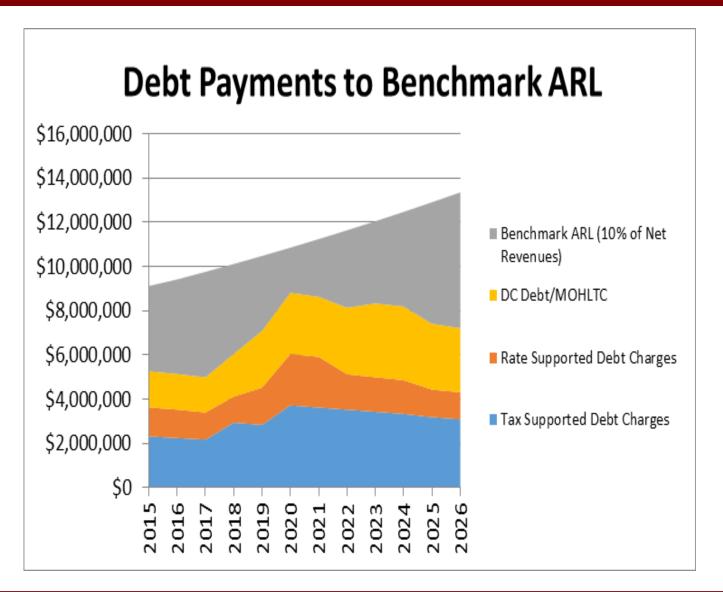
Impact on Capital Replacement Reserve Funds







Impact on Long Term Debt Payments





2017 Draft Rate Supported Capital Budget

Infrastructure Deficit

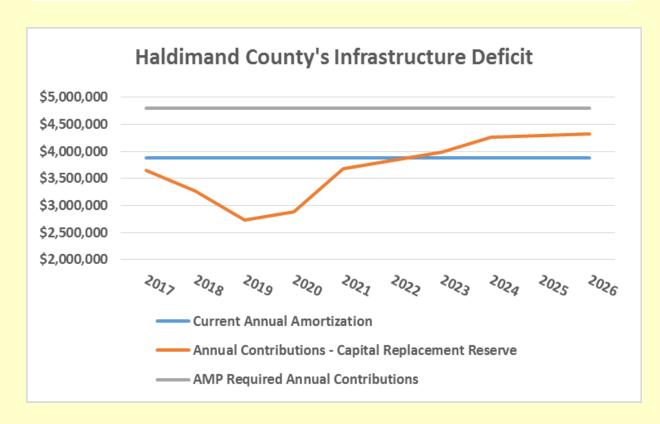
- "The total value of physical infrastructure investment that should have occurred to maintain optimal performance but did not."
- This would include any delayed rehabilitation and replacement of assets that are worn out.

•Haldimand County's "estimated" water and wastewater infrastructure deficit (based on assets reported for audited financial statement purposes)



Haldimand's "Infrastructure Deficit"

2015 Net Book Value (water and wastewater assets only)	<u>Haldimand</u>
Historical Cost	<u>\$196,497,129</u>
Net Book value	<u>\$126,127,487</u>
Percentage	<u>64.2%</u>







HALDIMAND COUNTY 2017 Draft Rate Supported Operating Budget





Revenue Required from Rates - Water Only

	WATER OPERATIONS				
	2016 Budget	2017 Budget	Increase/(Dec	rease)	
	\$	\$	\$	%	
Expenditures					
Salaries, Wages & Benefits	1,564,890	1,783,980	219,090	14.00%	
Supplies & Materials	127,240	127,770	460	0.36%	
Hamilton Water Supply	2,348,400	2,346,200	(2,200)	-0.09%	
Services	3,118,210	3,403,740	285,530	9.16%	
Veolia Operating Services Charges	2,042,170	2,100,430	58,260	2.85%	
Interdepartmental Charges	364,540	357,950	(6,590)	-1.81%	
Long Term Debt Charges	344,260	337,300	(6,960)	-2.02%	
Transfers to Reserves/Reserve Funds	1,591,630	1,870,600	278,970	17.53%	
Total Expenditures	11,501,340	12,327,900	826,560	7.19%	
Revenues					
Recoveries from New Credit	189,100	210,600	21,500	11.37%	
Fees & Recoveries	5,713,750	6,406,490	692,740	12.12%	
Total Revenues	5,902,850	6,617,090	714,240	12.10%	
Net Revenues Required from User Rates	5,598,490	5,710,810	112,320	2.01%	

<u>Driver</u>	Net Rate Revenues Impact	% Impact
A. Base Budget (net)	(\$115,020)	(2.05%)
B. New Initiatives	\$154,560	2.76%
C. Water Additional Capital Contribution	\$72,780	1.30%
Total	<u>\$112,320</u>	2.01%



Customers and Consumption

Water Customers and Consumption Comparison

			2016			2017		
	Ac	tual	Budge			BUDGET		
	Users	%	Consumption	%	Users	%	Consumption	%
Residential	8,231	89.60%	1,335,143	42.48%	8,284	89.45%	1,335,143	40.67%
Regular Commercial/Industrial	654	7.12%	414,225	13.18%	667	7.20%	406,613	12.39%
Large Commercial/Industrial	12	0.13%	232,843	7.41%	11	0.12%	203,953	6.21%
Large Industrial	4	0.04%	669,848	21.31%	4	0.04%	819,173	24.95%
Subtotal	8,901	96.90%	2,652,059	84.38%	8,966	96.81%	2,764,882	84.22%
Bulk Water	285	3.10%	380,648	12.11%	296	3.19%	398,119	12.13%
New Credit Wholesale			70,771	2.25%			71,247	2.17%
New Credit Depot			39,622	1.26%			48,783	1.49%
Total	9,186	100.00%	3,143,100	100.00%	9,261	100.00%	3,283,030	100.00%



Revenue Required from Rates - Wastewater only

<u>W</u> A	STEWATER OPERATIONS	<u> </u>		
	2016 Budget	2017 Budget	Increase(Decrea	se)
	\$	\$	\$	%
Expenditures				
Salaries, Wages & Benefits	638,240	690,660	52,420	8.21%
Supplies & Materials	22,140	20,060	(2,080)	-9.39%
Services	1,526,170	1,608,540	82,370	5.40%
Veolia Operating Services Charges	2,356,730	2,406,180	49 450	2.10%
Interdepartmental Charges	269,890	268,720	(1,170)	-0.43%
Long Term Debt Charges	1,297,680	1,245,270	(52,410)	-4.04%
Transfers to Reserves/Reserve Funds	2,257,150	2,378,520	121,370	5.38%
Total Expenditures	8,368,000	8,617,950	249,950	2.99%
Revenues				
Municipal Recoveries	77,900	74,100	(3,800)	-4.88%
Fees & Recoveries	1,951,590	1,860,360	(91,230)	-4.66%
Transfers from Reserves/Reserve Funds	410,380	403,140	(7,240)	-1.76%
Total Revenues	2,439,870	2,337,600	(102,270)	-4.19%
Net Revenues Required from User Rates	5,928,130	6,280,350	352,220	5.94%

Driver	Net Rate Revenues Impact	% Impact
A. Base Budget (net)	\$249,260	4.20%
B. New Initiatives	\$60,970	1.03%
C. Wastewater Additional Capital Contribution	<u>\$41,990</u>	<u>0.71%</u>
Total	\$ 352,220	<u>5.94%</u>



Customers and Consumption

Wastewater Customers and Consumption Comparison

	2016						2017	
	Ac	tual Buc		t		Е	BUDGET	
	Users	%	Consumption	%	Users	%	Consumption	%
Residential	8,172	92.80%	1,309,129	62,12%	8,177	94.19%	1,309,129	61.54%
Regular Commercial/Industrial (*)	617	7.01%	400,982	19.03%	490	5.64%	398,765	18.74%
Large Commercial/Industrial	7	0.08%	106,038	5.03%	6	0.07%	90,494	4.25%
Large Industrial	3	0.03%	253,335	12.03%	3	0.03%	294,108	13.83%
Subtotal	8,799	99.92%	2,069,484	98.21%	8,676	99.94%	2,092,496	98.36%
Septic	7	0.08%	1,780	0.08%	7	0.06%	1,626	0.08%
Holding	'	0.0070	10,920	0.52%	'	0.0070	8,624	0.41%
Leachate			25,101	1.19%			24,568	1.15%
Total	8,806	100.00%	2,107,285	100.0%	8,681	100.00%	2,127,314	100.0%



Impact on Other Revenues/Rates

Water "Other" Revenues

- > Total other revenues represent approximately \$6.6 million
- Bulk Water Charges represent \$1.2 million; Fire Protection Recoveries represent \$2.1 million; and miscellaneous charges of \$469,000 (New Credit, property tax recovery and miscellaneous)
- Recovery of costs for non-potable water provided to Industry totals approximately \$2.5 million and \$327,000 for Port Maitland

Wastewater "Other" Revenues

- Total other revenues represent approximately \$2.3million
- Leachate treatment revenues represent \$1.6 million; holding/septic tank revenues represent \$141,100; transfer from development charges for debt payments of \$403,000; and miscellaneous charges of \$198,500 (sludge storage, overstrength, etc.)



Impact on Bulk Water Rate

Bulk Water Rate		2016 Approved	2017 Proposed	<u>Change</u>	
(per cubic metre)				(\$)	(%)
Controlled by Haldimand County:					
Bulk Water Rate (charged to hauler)		<u>\$2.96</u>	\$2.89	<u>-\$0.07</u>	<u>-2.4%</u>

Monthly Administration Fee (charged to hauler)		<u>\$16.19</u>	<u>\$16.52</u>	<u>\$0.33</u>	<u>2.0%</u>
Per Load Impact on "Typical End User" (3,000 gallon load)					
Water Commodity (determined by Haldimand County)		40.34	39.41	-\$0.93	-2.3%
Estimated hauler delivery charge (determined by hauler)		<u>\$72.60</u>	<u>\$72.60</u>	<u>\$0.00</u>	<u>0.0%</u>
Total "End User" estimated cost		\$112.94	<u>\$112.01</u>	<u>-\$0.93</u>	<u>-0.8%</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) and excludes any allocation of administration fee.



Impacts on Holding/Septic Charges

Holding/Septic/Portable Toilet Tank Treatment Charge		<u>2016</u> Approved	2017 Proposed	Change	
(per cubic metre)				(\$)	(%)
Controlled by Haldimand County:					
Proposed Rate (charged to hauler)		<u>\$13.52</u>	<u>\$13.79</u>	\$0.27	2.1%
Monthly Administration Fee (charged to hauler)		<u>\$16.19</u>	<u>\$16.52</u>	\$0.33	<u>2.1%</u>
Per Load Impact on "Typical End User" (2,000 gallon load)					
Treatment Cost (determined by Haldimand County)		\$122.90	\$125.35	\$2.45	2.1%
Estimated hauler delivery charge (determined by Hauler)		<u>\$87.70</u>	<u>\$87.70</u>	<u>\$0.00</u>	0.0%
Total "End User" estimated cost		\$210.60	\$213.05	<u>\$2.45</u>	1.2%

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. 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>2016</u>	<u>2017</u>	\$ Change	% Change
Monthly Services Monthly Services					
Residential (15 m³)	Water	\$37.29	\$37.27	-\$0.02	-0.1%
	Sewer	\$45.22	\$47.95	\$2.74	6.1%
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	Total	\$210.60	\$213.05	\$2.45	1.2%



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

