

# Oxford County Water & Wastewater Rate Study



**Wednesday August 14<sup>th</sup>, 2013**

**HEMSON**  
Consulting Ltd.

**Oxford County**  
*growing stronger...together*

# Study Overview

- Hemson Consulting Ltd. was retained to assist County staff in setting water and wastewater user rates for the next 3 years (2014-2016)
- The user rates are intended to fully fund projected County water and wastewater expenditures
- Our role also involved creating an excel based calculation model
  - Rate model can be used for future rate setting exercises
  - monitor success

# Key Assumptions

- Water and Wastewater operating expenditures are based on the County's most current projections
- The analysis takes into account infrastructure renewal (e.g. non-growth related) capital projects only
- Asset replacement reserve contributions are incorporated into the user rate calculation in accordance with County policy

# Key Assumptions

- Customer growth is based on the County growth report and actual permits issued for each community
- Water consumption is forecast to remain constant over the period
  - balance new growth with declining water consumption

# Example: Township Water Expenditures

	2013 Budget	2014 Projected	2015 Projected	2016 Projected
<b>Expenditures</b>				
<b>1) Operating</b>				
Annual Operating Expenditures (net of non-rate revenues)	\$ 2,558,106	\$ 2,500,000	\$ 2,575,000	\$ 2,652,250
Debt Repayment	\$ -	\$ -	\$ -	\$ -
<b>Total Annual Gross Operating Expenditures</b>	<b>\$ 2,558,106</b>	<b>\$ 2,500,000</b>	<b>\$ 2,575,000</b>	<b>\$ 2,652,250</b>
<b>2) Capital</b>				
<b>A) Annual Capital Renewal Expenditures</b>				
Non-Growth Related Capital Works Share	\$ 3,155,000	\$ 1,140,000	\$ 399,000	\$ 1,691,000
Debenture Requirements (to pay for capital works)	\$ -	\$ -	\$ -	\$ -
Other Contributions (e.g. from customer)	\$ (188,000)	\$ -	\$ -	\$ -
<b>Subtotal Capital</b>	<b>\$ 2,967,000</b>	<b>\$ 1,140,000</b>	<b>\$ 399,000</b>	<b>\$ 1,691,000</b>
<b>B) Asset Replacement Reserve Contribution</b>				
Net Contribution to/(from) Reserves	\$ (1,891,156)	\$ 599,161	\$ 1,437,609	\$ 248,906
<b>Net Rate Funding Requirement</b>	<b>\$ 3,633,950</b>	<b>\$ 4,239,161</b>	<b>\$ 4,411,609</b>	<b>\$ 4,592,156</b>

# Example: Township Water Revenue

	2013	2014	2015	2016
<b>1A) FLAT RATE STRUCTURE: IN COUNTY</b>				
Monthly Fee	\$ 46.94	\$ 48.35	\$ 49.80	\$ 51.29
<b>Total Revenue from flat rate</b>		<b>\$ 2,929,321</b>	<b>\$ 3,064,409</b>	<b>\$ 3,206,198</b>
<i>Increase (%)</i>		3.0%	3.0%	3.0%
<b>1B) FLAT RATE STRUCTURE: OUT OF COUNTY</b>				
Monthly Fee	\$ 63.97	\$ 65.89	\$ 67.87	\$ 69.90
<b>Total Revenue from flat rate</b>		<b>\$ 26,487</b>	<b>\$ 27,282</b>	<b>\$ 28,101</b>
<i>Increase (%)</i>		3.0%	3.0%	3.0%
<b>2) METERED RATE STRUCTURE</b>				
<b>User Rates</b>				
<b>A) Fixed Charge - Monthly Fee</b>				
<1"	\$ 25.50	\$ 26.27	\$ 27.05	\$ 27.86
1"	\$ 35.70	\$ 36.77	\$ 37.87	\$ 39.01
1 1/2"	\$ 45.90	\$ 47.28	\$ 48.70	\$ 50.16
2"	\$ 73.95	\$ 76.17	\$ 78.45	\$ 80.81
3"	\$ 280.49	\$ 288.90	\$ 297.57	\$ 306.50
4"	\$ 356.99	\$ 367.70	\$ 378.73	\$ 390.09
6"	\$ 535.49	\$ 551.55	\$ 568.10	\$ 585.14
8"	*	*	*	*
≥ 10"	*	*	*	*
<i>Increase (%)</i>		3.0%	3.0%	3.0%
<b>Total Annual Fixed Revenue</b>		<b>\$ 448,179</b>	<b>\$ 468,117</b>	<b>\$ 488,848</b>
<b>B) Charge per cubic meter</b>				
0-15 cubic metres/month	\$0.73	\$ 0.76	\$ 0.78	\$ 0.81
16-45 cubic metres/month	\$0.96	\$ 0.99	\$ 1.03	\$ 1.06
46-850 cubic metres/month	\$1.02	\$ 1.06	\$ 1.09	\$ 1.13
851 + cubic metres/month	\$0.88	\$ 0.91	\$ 0.94	\$ 0.98
<i>Increase (%)</i>		3.5%	3.5%	3.5%
<b>Total Annual Consumption Based Revenue</b>		<b>\$ 475,036</b>	<b>\$ 491,663</b>	<b>\$ 508,872</b>
<b>C) Other Revenue from Special Rates (including Maple Leaf)</b>		<b>\$ 360,137</b>	<b>\$ 360,137</b>	<b>\$ 360,137</b>
<b>TOTAL REVENUE GENERATED</b>		<b>\$ 4,239,161</b>	<b>\$ 4,411,609</b>	<b>\$ 4,592,156</b>

# Example: Township Water Key Indicators

1)

<b>Reserve Fund Continuity Schedule</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Opening Balance	\$ 5,043,835	\$ 3,152,679	\$ 3,751,840	\$ 5,189,449
<i>Transfer from Reserves</i>	\$ (2,967,000)	\$ (1,140,000)	\$ (399,000)	\$ (1,691,000)
<i>Transfer to Reserves</i>	\$ 1,075,844	\$ 1,739,161	\$ 1,836,609	\$ 1,939,906
<i>Net Contribution to/(from) Reserves</i>	\$ (1,891,156)	\$ 599,161	\$ 1,437,609	\$ 248,906
<b>Ending Balance</b>	<b>\$ 3,152,679</b>	<b>\$ 3,751,840</b>	<b>\$ 5,189,449</b>	<b>\$ 5,438,355</b>

2)

<b>Charge Per Typical Metered House (270m<sup>3</sup>/year)</b>				
Fixed Charge	\$ 306	\$ 315	\$ 325	\$ 334
Consumption Charge	\$ 218	\$ 225	\$ 233	\$ 241
<b>Annual Charge Per Typical Household</b>	<b>\$ 524</b>	<b>\$ 540</b>	<b>\$ 558</b>	<b>\$ 575</b>
<i>Annual Increase per Typical Household (%)</i>		3%	3%	3%
<b>Annual Charge Per Flat Rate Customer: In County</b>	<b>\$ 563</b>	<b>\$ 580</b>	<b>\$ 598</b>	<b>\$ 616</b>
<i>Annual Increase per Typical Household (%)</i>		3%	3%	3%
<b>Annual Charge Per Flat Rate Customer: Out of County</b>	<b>\$ 768</b>	<b>\$ 791</b>	<b>\$ 814</b>	<b>\$ 839</b>
<i>Annual Increase per Typical Household (%)</i>		3%	3%	3%

# Example: Township Water Key Indicators

3)

	2013 Budget	2014 Projected	2015 Projected	2016 Projected
<b>Charge Per Typical Commercial (618m3/month)</b>				
Fixed Charge (2" meter)	\$ 887	\$ 914	\$ 941	\$ 970
Consumption Charge	\$ 7,491	\$ 7,753	\$ 8,024	\$ 8,305
<b>Annual Charge Per Typical Commercial</b>	<b>\$ 8,378</b>	<b>\$ 8,667</b>	<b>\$ 8,965</b>	<b>\$ 9,275</b>
<i>Annual Increase per Typical Commercial (%)</i>		3%	3%	3%
<b>Charge Per Typical Industrial (2500m3/month)</b>				
Fixed Charge (3" meter)	\$ 3,366	\$ 3,467	\$ 3,571	\$ 3,678
Consumption Charge	\$ 27,754	\$ 28,726	\$ 29,731	\$ 30,772
<b>Annual Charge Per Typical Industrial</b>	<b>\$ 31,120</b>	<b>\$ 32,193</b>	<b>\$ 33,302</b>	<b>\$ 34,450</b>
<i>Annual Increase per Typical Industrial (%)</i>		3%	3%	3%
<b>Charge Per Typical Industrial (10000m3/month)</b>				
Fixed Charge (6" meter)	\$ 6,426	\$ 6,619	\$ 6,817	\$ 7,022
Consumption Charge	\$ 106,954	\$ 110,698	\$ 114,572	\$ 118,582
<b>Annual Charge Per Typical Industrial</b>	<b>\$ 113,380</b>	<b>\$ 117,317</b>	<b>\$ 121,389</b>	<b>\$ 125,604</b>
<i>Annual Increase per Typical Industrial (%)</i>		3%	3%	3%



# Calculated Monthly Residential Water Rates

	2013 Current	2014 Calculated	2015 Calculated	2016 Calculated
Ingersoll	\$40.67	\$42.92	\$45.40	\$48.01
		6%	6%	6%
Tillsonburg	\$35.92	\$37.40	\$39.00	\$40.64
		4%	4%	4%
Woodstock	\$34.83	\$35.68	\$36.54	\$37.42
		2%	2%	2%
Township - Flat	\$46.94	\$48.35	\$49.80	\$51.29
		3%	3%	3%
Township - Metered	\$43.67	\$45.02	\$46.47	\$47.95
		3%	3%	3%

*Note: Monthly rate for metered systems is based on 22.5m<sup>3</sup>/month*

# Calculated Monthly Residential Wastewater Rates

	2013 Current	2014 Calculated	2015 Calculated	2016 Calculated
Ingersoll	\$49.17	\$53.92	\$59.17	\$65.03
		10%	10%	10%
Tillsonburg	\$40.83	\$43.71	\$46.73	\$50.11
		7%	7%	7%
Woodstock	\$30.83	\$32.04	\$33.17	\$34.50
		4%	4%	4%
Norwich	\$52.08	\$54.49	\$57.07	\$59.68
		5%	5%	5%

*Note: Monthly rate for metered systems is based on 22.5m<sup>3</sup>/month*

# Calculated Monthly Residential Wastewater Rates

	2013 Current	2014 Calculated	2015 Calculated	2016 Calculated
Embros	\$50.00	\$53.00	\$56.18	\$59.55
		6%	6%	6%
Innerkip	\$50.00	\$52.50	\$55.13	\$57.88
		5%	5%	5%
Thamesford	\$50.60	\$53.89	\$57.39	\$61.12
		6.5%	6.5%	6.5%
Mt. Elgin	\$57.88	\$62.51	\$67.51	\$72.91
		8%	8%	8%

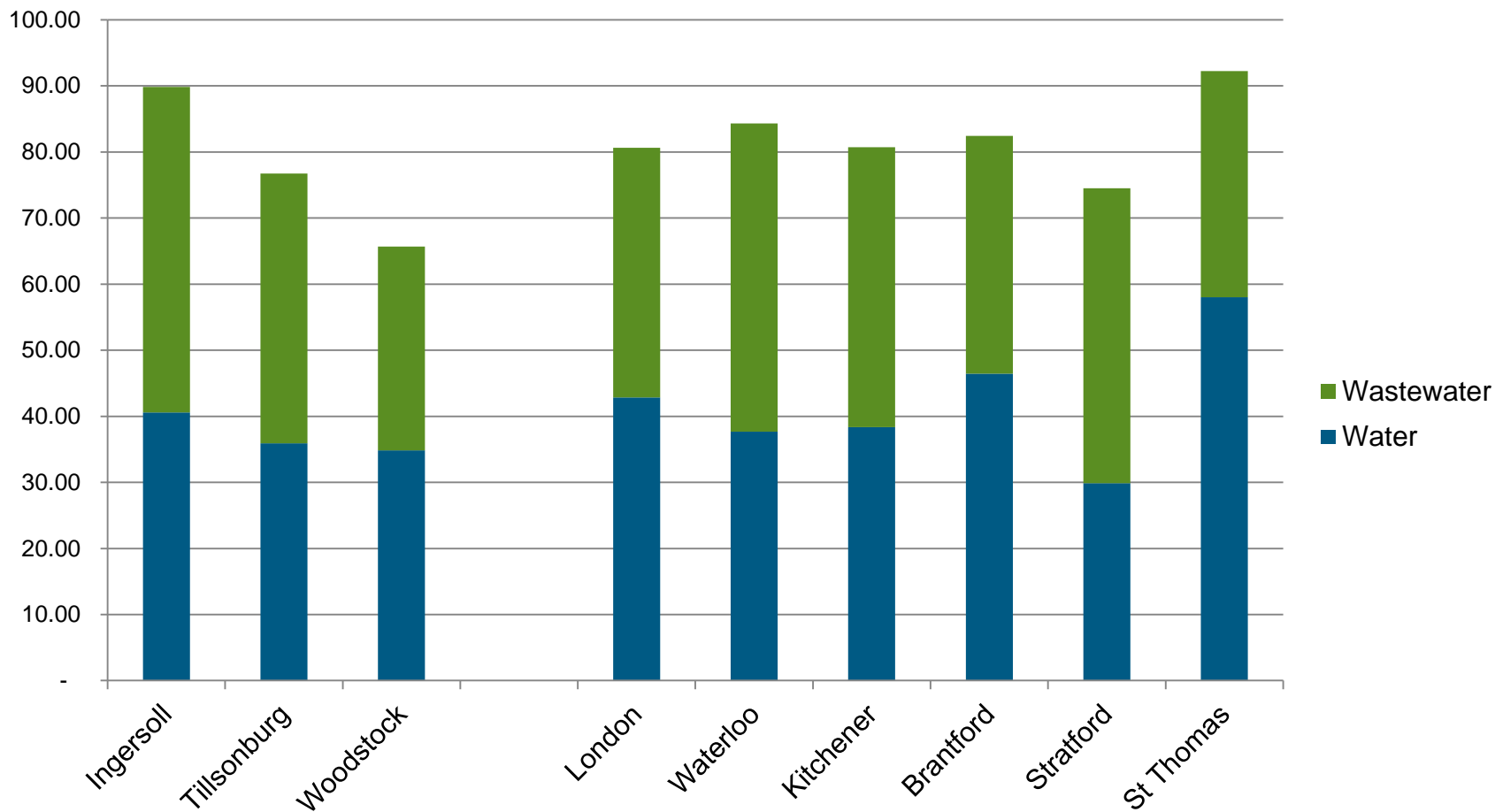
# Calculated Monthly Residential Wastewater Rates

	2013 Current	2014 Calculated	2015 Calculated	2016 Calculated
Drumbo	\$70.33	\$72.44	\$74.61	\$76.85
		3%	3%	3%
Plattsville	\$70.07	\$71.82	\$73.62	\$75.46
		2.5%	2.5%	2.5%
Tavistock	\$34.34	\$40.62	\$48.06	\$56.85
		18%	18%	18%

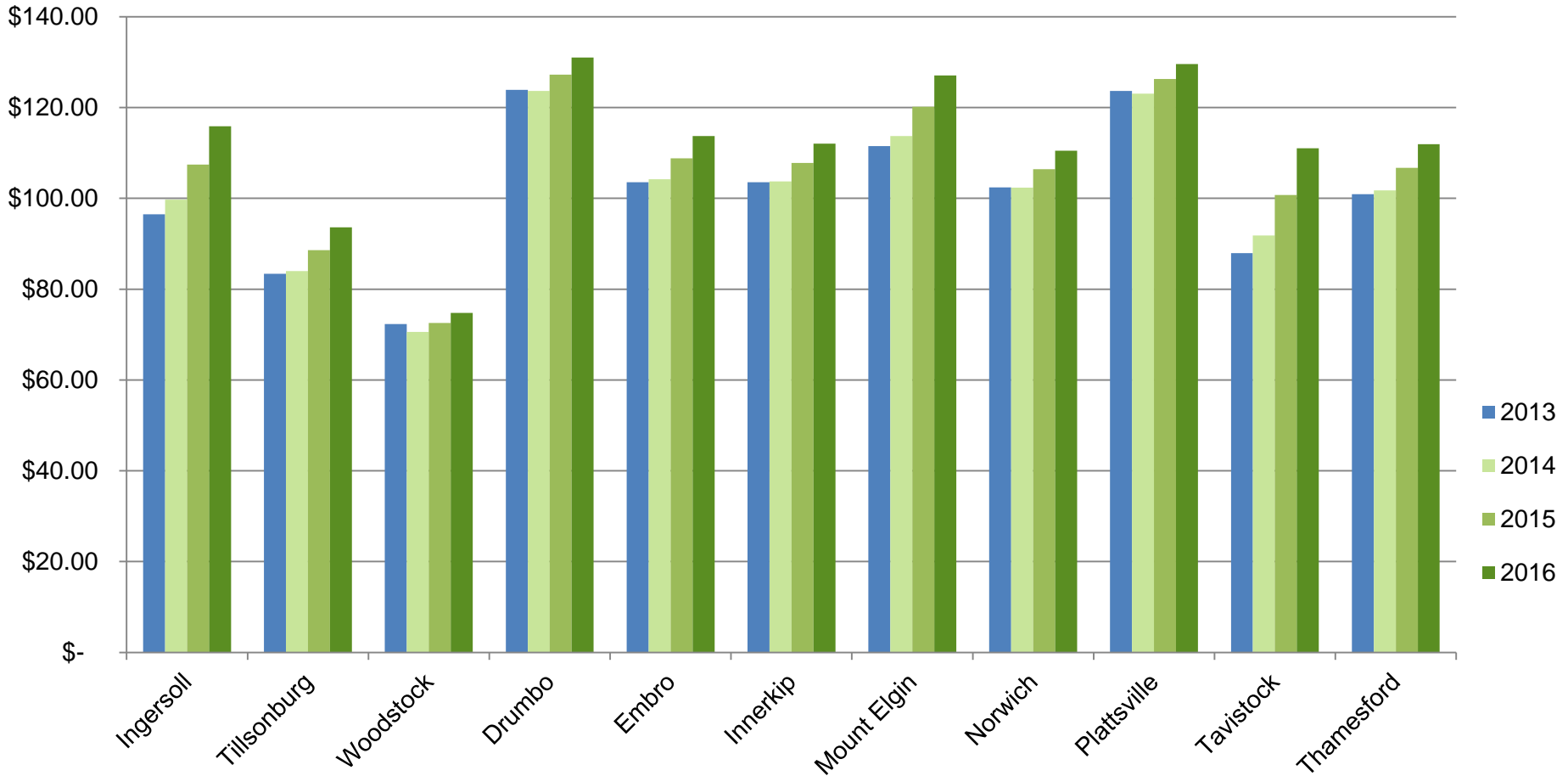
# General Conclusions

- Calculated rates leave the County in a position to move forward
  - Addresses unfinanced capital
  - Consolidated financial position (pg.35)
- Calculated rates will remain competitive with similar and surrounding jurisdictions

# 2013 Monthly Residential Urban Rate Comparison



# Proposed Monthly Residential Combined Rates (Incl. County Programs)



# Next Steps (Consultation)

- Stakeholder Meeting –August
- Public consultation through polling research and use of online tools
  - Supported by media/advertising campaign
- Presentation to Chambers of Commerce – September 12, 2013
- Public Meeting – September 25, 2013
- Adoption of Rates by Council – October 9, 2013