

THE CORPORATION OF THE CITY OF WINDSOR
Office of the City Treasurer - Finance



MISSION STATEMENT:

"Our City is built on relationships – between citizens and their government, businesses and public institutions, city and region – all interconnected, mutually supportive, and focused on the brightest future we can create together."

LiveLink REPORT #: 17518 AFB/11935 SW2015	Report Date: January 8, 2015
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To: Mayor and Members of City Council

Subject: 2015 Sewer Surcharge Update

1. RECOMMENDATION: City Wide: Ward(s): _____

- I. THAT the following status quo wastewater rates, which avoid any increase in costs in 2015 for the average user using the same quantity of water, **BE APPROVED:**
 - A. Fixed Charge- To be based the metre size as detailed in Appendix B (\$15.87 for residential customers)
 - B. Water Consumption Charge- To be based on a rate per cubic metre of water (\$2.35 per m3 of water for residential users and \$0.81 per m3 for commercial customers); and
- II. THAT in order to avoid charging a surcharge on the water that is estimated to not have been returned to the sewer system, water consumption for the purpose of calculating the sewer surcharge bills for the extended summer months (May through October) **BE BASED** on the lower of actual consumption or winter usage (November through April) and that WUC continue to use the appropriate billing methodology to achieve this goal; and
- III. THAT City Council **RECEIVE** the updated 5-Year Sewer Surcharge Forecasts (2015-2019) as presented in Appendix A of the report.

EXECUTIVE SUMMARY:

N/A

2. BACKGROUND:

The sewer surcharge on the water bill has been in place since January 1, 1994. Until that date the costs were funded from the property tax levy. The intent of the surcharge is to charge a user fee on the estimated water that is discharged into the sewer system and has to be treated prior to being released back into the environment.

This report provides an update on the 2015 sewer surcharge rates and expected revenues based on meter and water consumption projections received from Windsor Utilities Commission.

3. DISCUSSION:

General

The Sewer Surcharge budget is updated annually and a 5 year projection, inclusive of the sewer surcharge rates, is submitted as part of the annual City budget.

Water meter and consumption projections were recently received from WUC staff. While residential usage is projected to increase slightly, the increase is largely offset by the estimated reduction for commercial customers. Combined, the WUC water meter and consumption projections (on which the City's sewer surcharge rates are applied) reflect a very minor overall increase of 0.5%.

CITY OF WINDSOR'S SEWER NETWORK - OVERVIEW

The City's sewer network consists of approximately 1,700 km of the following four types of sewers:

- 1) **Storm Sewers** carry storm water runoff only. Storm sewers eventually drain to the Detroit River, untreated. There are 767 kilometres of storm sewers within the City of Windsor
- 2) **Sanitary Sewers** are designed to convey human domestic and industrial waste to the City's wastewater treatment facilities. The City of Windsor maintains approximately 716 kilometres of sanitary sewers.
- 3) **Combined Sewers** were constructed throughout the City until the 1950s. Combined sewers carry both stormwater and sanitary waste in a single pipe. Stormwater and sanitary water flow together to the City's wastewater treatment plants through 214 km of combined sewers.
- 4) **Over-and-Under Sewers** consist of a dedicated sanitary sewer pipe with a larger, separate storm pipe installed directly over it. There are 20 km of over-and-under sewers in Windsor which flow to the City's wastewater treatment plants.

Together, combined and over-and-under sewers represent 13.7% of the entire sewer system.

The City of Windsor also has two water treatment plants, Lou Romano Water Reclamation Plant (LRWRP) and Little River Pollution Control Plant (LRPCP). The Lou Romano Water Reclamation Plant (recently expanded and upgraded at a cost of approximately \$110 million) drains approximately two-thirds of Windsor and accepts flow from Tecumseh and LaSalle. The Little River Pollution Control Plant also accepts sewage from the Town of Tecumseh.

There are three main sewers that enter into the Lou Romano Plant:

- 1) Lands north of E.C. Row and West of Pillette feed by gravity to the C.M.H. Woods (formerly Caron Avenue) Pump Station and this flow is pumped to the LRWRP through the Riverfront Interception.
- 2) The Town of LaSalle pumps sanitary sewage to the Lou Romano Plant by agreement.
- 3) The Windsor area south of E.C. Row flows by gravity to the LRWRP.

All three of the above flows enter the LRWRP at one location and are lifted into the Plant for treatment.

In addition to the two pollution control plants, the City has forty-three pumping stations (8 Sanitary, 29 Storm and 6 Combined). This is mainly due to the flat topography of Windsor. Pumping stations are a major component of the sewer network as they pump storm water and sewage to the appropriate places for discharge or treatment. All sanitary pump stations have back-up power and all storm pump stations have overflows.

The City also has a newly constructed riverfront Retention Treatment Basin (RTB). The RTB (construction cost of approximately \$67 million) is capturing, storing and treating combined sewer overflows that, before its construction, would otherwise discharge directly to the Detroit River. After a rain event, the solids retained by the RTB are conveyed by the sewer network to the LRWRP for further treatment.

As mentioned previously, there are 43 pump stations across Windsor. These pump stations are continuously monitored remotely from the LRWRP. There are a crew of 5 wastewater collection operators, licensed by the Ministry of the Environment, that ensure the pump stations are well maintained and operating efficiently. Staff monitors the systems during wet weather events to ensure there are no problems with the pump stations.

Capital Expenditures

Over the last several years, the sewer surcharge has contributed \$21.6 million annually to fund sewer related projects in the capital budget (compared to approximately \$5 million a decade ago). The 2015 allocation has been increased to \$23.6 million. These expenditures fund sewer rehabilitation projects which reconstruct deteriorating sewers, the installation of new sewers, as well as the replacement of old sewers. These ongoing capital expenditures are crucial in order to reduce the risk of basement flooding and to protect the environment. Additionally, the sewer surcharge also funds approximately \$2.1 million of equipment purchases and replacements at the two water reclamation plants as well as the pumping stations. The eavestrough disconnection and backwater valve installation aimed at reducing basement flooding are some of the worthwhile projects funded from the sewer surcharge.

Operating Expenditures

Although the City of Windsor makes improvements annually to the complex system of underground pipes, sewers and catch basins, given the volume of sewers to separate and/or repair it will take many years to completely accomplish. This also requires an operating budget to maintain the sewer system on an ongoing basis.

There are eighteen employees in the sewer maintenance area who perform sewer maintenance on the City's 1,700km sewer network. The Sewer Maintenance Division has a preventative maintenance cleaning program wherein, subject to available resources, they routinely:

- Maintain sanitary sewers
- Clean storm sewers
- Clean catch basins
- Clean and grade municipal drains and roadside ditches.

This work is supported by the following equipment or crews:

- 4 flushers
- 1 rodder
- 1 set of sewer bucket machines
- 1 interceptor inspection crew
- 1 eel crew

Due to the volume and complexity (heavy sedimentation, roots, etc.), it takes more time to clean the City's 900 km of sanitary/combined sewer network (approximately 5 years for one cleaning cycle, subject to attending to complaints and based on current resource levels) than it does to clean the storm water sewers. Stormwater sewers which carry clear rain water are not as complicated as sanitary sewers to clean. Therefore, it only takes 3 years to complete a cycle of cleaning the City's storm water sewer network, subject to attending to complaints and based on current resource levels.

Rodding of sewers in areas of the City known for root infiltration occurs continuously and takes approximately 2.75 years to complete one cleaning cycle.

The City has a program in place to video sewers to assess their condition. Approximately just over 20% of the city system has had video inspection. An annual allotment of \$100,000 is typically provided in the annual budget for this purpose. Contractors are used for this function, along with all sewer repair and installations.

Additionally, a system is in place to alert staff of upcoming forecasted rain events, which then proactively monitor the sewer system to address as many issues that arise as possible.

Other operating expenditures are incurred for various other sewer related activities, repayment of debt charges (for the Lou Romano Water Reclamation Plant upgrade and expansion) as well as administrative and support services.

4. RISK ANALYSIS:

As in prior years, there are a number of risks to be considered in conjunction with establishing the 2015 Sewer Surcharge rates some of which are summarized briefly below:

Expenditure Risks - The projections put forth are based on current estimates of the required expenditures relative to Pollution Control and Sewer Maintenance and Repair, etc. These estimates are expected to be reflective of final actual costs, however there is the risk given that these costs will be incurred throughout the year that some fluctuations in the expenditures as compared to budget may occur. The likelihood of this risk materializing is rated as possible; the likely impact of the consequences is rated as moderate. Therefore this should be considered a moderate risk. Mitigation for this risk comes from the Quarterly Variance monitoring and the Sewer Surcharge reserve fund.

Water Consumption Risk - Budget pressure on the sewer surcharge rate can result from any sewer surcharge revenue decrease related to the reduced consumption of water. Essentially, the decreased water consumption reduces the City's revenues from the sewer surcharge. At this point the water consumption is an estimate and is subject to considerable variability. This is a risk given the WUC planned increase to the water rates by 4% in 2015, and 4% in 2016. The likelihood of this risk materializing is rated as possible; the likely impact of the consequences is rated as moderate. Therefore this should be considered a moderate risk. Mitigation for this risk comes from the Quarterly Variance reports and the Sewer Surcharge reserve fund. In addition, contingency of \$2.1 million (approximately 3% of the planned expenditures) has been established to help mitigate this risk.

Capital Project Risks - The capital budget items put forth reflect the best estimate of the capital costs required to complete the various projects under the capital plan. As with all budgets, these represents management's best estimates of the expected capital costs however as with all capital projects there is always the risks that costs may increase due to unforeseen issues that could not have been reasonably predicted. The likelihood of this risk materializing is rated as possible; the likely impact of the consequences is rated as moderate. Therefore this should be considered a moderate risk. Mitigation for this risk comes from the Capital Variance reports and from other sewer projects in a surplus position that can be used to fund projects in a deficit. In addition, there is Sewer Surcharge reserve fund, if necessary.

Risks from possible Reduction in Capital Program – Consideration may be given to the possibility of reducing the Capital Budget component of the Sewer Surcharge. Any consideration to such options should take into account the significant negative impacts on the infrastructure and the local construction industry. There could also be a resultant impact on the ability to maintain the existing sewers, thereby reducing the pace of eliminating combined or leaky sewers. The likelihood of this risk materializing is rated as unlikely; the likely impact of the consequences is rated as high. Therefore this should be considered a moderate risk. Mitigation for this risk comes from the development of the Asset Management Plan that on an ongoing basis will assist with the prioritization of capital projects.

Risks from Depleting the Sewer Surcharge Reserve – Options may be considered to reduce / deplete the sewer surcharge reserve in order to further reduce the sewer surcharge rates. This would leave the Corporation without an adequate dedicated reserve to fund any shortfalls. This is especially risky given the historical trend of declining revenues due to decreasing water consumption. As well, this would leave the Corporation without the ability to fund the City's share of projects funded by provincial grants that are announced periodically for sewer/wastewater purposes. The likelihood of this risk materializing is rated as possible; the likely impact of the consequences is rated as moderate. Therefore this should be considered a moderate risk. Mitigation for this risk comes from the development of a five year forecast to anticipate future pressures.

Climate Change Risks- Increased rainfall from climate change may increase water infiltration into the sewer system. This would increase treatment costs. The likelihood of this risk materializing is rated as possible; the likely impact of the consequences is rated as moderate. Therefore this should be considered a moderate risk. Mitigation for this risk comes from the establishment of a budget that is based on historical averages and trends. In addition, there is the Sewer Surcharge reserve fund, if necessary.

5. FINANCIAL MATTERS:

2014 Year-End Results

While the 2014 year-end books will not be closed until the beginning of 2015, preliminary projections reported in the 3rd Quarter Variance Report indicate that Sewer Surcharge Operating Fund may end the year with a surplus of \$1.4 million (or 2.3%) of the total budget. Any surplus will be transferred to the Sewer Surcharge Reserve Fund. The current balance in this reserve fund is approximately \$8.1 million and is used as both rate stabilization fund and capital expenditure fund for projects where funds are required to match provincial funding announcements.

Recommended 2015 Operating Expenditures

The sewer surcharge funded operating costs are very challenging to reduce in the short term. Many of the processes in the pollution control plants are provincially legislated and must meet ever increasing environmental standards. The maintenance of the sewer system is also driven by required repairs, with most being reactionary in nature due to the age of the City's sewer infrastructure. Failing to provide ongoing maintenance will result in more expensive future replacement costs.

The sewer surcharge funded operating budget was reviewed in detail as part of the 2015 Operating Budget process with an effort to reduce costs wherever possible. During the 2015 operating budget, management did review a number of areas for possible operating efficiencies. Budget adjustment recommendations were made wherever possible. Some of the areas considered include the reduction in chemicals and maintenance costs to reflect actual expenditures and other service reductions some of which were accepted and others were not. Main inflationary budget pressures included increased costs for salary, wages and benefits, utilities, and insurance.

Overall, the sewer surcharge operating budget requirements have increased by approximately \$849,340 or 1.4% as compared to 2014 (assuming status quo capital expenditures as discussed in the next section of the report). It is important to note that \$600,000 in savings resulting from the optimization of chemical usage was reallocated to the depreciation reserves for the future replacement of equipment. This increases the annual contribution to the two pollution control plants and pumping stations reserves, for which we are projecting to be in a deficit position in 5 years time without an increased infusion of funds, based on the current 15 year capital replacement plan. In addition, these reserve projection models are being incorporated into the corporate asset planning methodology and will be refined in 2015.

Included in the increase is the estimate for the 2015 ENWIN Utilities Ltd. administration fee of \$3,524,400. This is an increase of \$251,079 or 7.7% over the 2014 budget of \$3,273,321. ENWIN administration advises that these significant cost increases are a result of continued investment in IT infrastructure, including a full year's depreciation for the new billing system and the required ERP support costs.

The new Sewer Surcharge Budget and Forecast (2015-2019) is attached as Appendix A to this report.

Recommended 2015 Capital Expenditures

In addition to the operating expenditures the sewer surcharge budget currently includes \$21.6 million in annual capital funding that is used to fund sewer related capital projects. Total available sewer surcharge funding in 2015 is \$21.6 million. Significant ISF funding was received in 2009/2010 to complete sewer servicing in the Employment Lands and to construct the Retention Treatment Basin (RTB) on the riverfront. Over the last decade, Council has steadily increased capital funding (from approximately \$5 million to the current \$21.6 million) to address basement flooding across the City and to chip away at the accumulated infrastructure deficit.

It is important to note that sewer maintenance and repair, drain maintenance, capital budget construction of sanitary, storm, storm relief and combined sewer replacement, and the support required for the above are all funded by sewer surcharge.

In addition to the noted \$21.6 million funding, the proposed budget includes additional contingent capital expenditures of \$2.1. As noted in the risk section, the \$2.1 million is required given the risk of declining revenues given the province-wide trend and the proposed water rate increases over the next few years. This risk is especially pronounced given that the consumption portion accounts for 70% of the sewer surcharge revenues. Once the books are closed in 2015, if the contingency is not required to offset declining consumption revenues, the contingency can be redirected to fund additional capital works in the 2016 capital budget.

Two million of the 2014 contingency has been included as a recommended funding source in the 2015 capital budget. This brings the capital funding from the sewer surcharge to \$23.6 million for 2015.

Recommended Status Quo Rates

The sewer surcharge water consumption rates for 2015 are recommended to remain at \$2.35 per cubic metre of water for residential customers and \$0.81 per cubic meter for commercial customers. In addition, the fixed charge component of the surcharge is also being recommended to remain at the amounts shown in Appendix B (\$15.87 for residential consumers).

It is important to note that by leaving the 2015 sewer surcharge rates unchanged, consumers using the same quantity of water in 2015 as in 2014, will not see an increase to their sewer surcharge bills. The City will collect approximately the same sewer surcharge revenues as in 2014. The projected sewer surcharge revenues and expenditures are detailed in Appendix A.

Typical Residential Customer		
Sewer Rates	2014 Current Rates	2015 Proposed Rates
Fixed Sewer Charge	\$15.87	\$15.87
Variable Sewer Charge	\$2.35 per cubic metre of water used (reduced for excess summer consumption)	\$2.35 per cubic metre of water used (reduced for excess summer consumption)

Typical Commercial Customer		
Sewer Rates	Current Commercial Rates	Proposed Commercial Rates
Fixed Sewer Charge	\$80.58 for typical 1" service	\$80.58 for typical 1" service
Variable Sewer Charge	\$0.81 per cubic metre of water used (reduced for excess summer consumption)	\$0.81 per cubic metre of water used (reduced for excess summer consumption)

Impact of WUC's "Winter Average Daily Usage" Calculation

This calculation will continue to be completed for each customer with the sewer surcharge rates to be applied to the lower of actual water usage or winter average, whichever is lower, for each customer. This ensures that excess summer water usage (for watering lawns, washing cars, etc) is not used in calculating the sewer surcharge.

Sewer Surcharge Revenue

Below is a table that details the projected 2015 sewer surcharge revenues as compared to 2014. The allocation between residential & commercial customers has remained the same as 2014 and the allocation between fixed and variable costs remains at 30/70 (fixed vs. variable) for residential customers.

	Projected 2014 Sewer Revenues (\$)			Projected 2015 Sewer Revenues (\$)		
	Residential	Commercial	Total	Residential	Commercial	Total
Fixed Component	12,115,073	7,719,779	19,834,852	12,189,350	7,785,389	19,974,739
Variable Component	27,711,277	11,002,367	38,713,644	28,504,777	11,079,313	39,584,090
Total	39,826,350	18,722,146	58,548,496	40,694,127	18,864,702	59,558,829
Residential vs Commercial	68%	32%		68%	32%	
Fixed/Variable Allocation	30%	41%		30%	41%	
	70%	59%		70%	59%	

Note: The City will be collecting the sewer surcharge revenue in the same proportion as in 2014 as between commercial and residential customers. The increase in revenues is not from a rate increase but results from the higher expected consumption patterns due to the improving economy.

Allocation of Costs

The residential/commercial ratio of 68%/32% was maintained at the historical ratio to avoid a shift in costs. Likewise, the fixed/variable allocation for commercial customers was maintained at the historical level of 41%/59%. Changing the fixed vs. variable split in the commercial customers to mirror the

previously approved 30%/70% fixed/variable allocation for the residential customers would result in costs shifting from commercial customers with lower water usage to customers with a higher water usage. These are the reasons for the lower recommended consumption charge for the commercial customers.

Other Factors Impacting the Sewer Surcharge Revenue

In recent years, the City experienced a trend of stable to lower water consumption similar to other municipalities in the province. This trend is likely related to water conservation measures and technology as well as the slowdown in the economy. It is difficult to predict if this trend will stabilize or continue in future years.

It should be noted that the declining consumption puts upward pressure on the surcharge rate. The reason for this is that a significant portion of the costs related to wastewater are largely fixed and therefore reduced revenues from consumption cannot generally be offset by equal decreases in operating costs. Therefore, the impact of water consumption on sewer surcharge revenues remains a significant risk to the sewer surcharge model. This is evident in Appendix A, where by holding the sewer surcharge rates constant, the annual operating deficit funded by the sewer surcharge reserve increases annually.

In order to maintain the reserve at reasonable levels (above \$6 million which is a proximately \$10% of the annual expenditures) the next rate increase is currently projected to be required in 2017.

Comparison of Charges

Inclusive of the 2015 budget, there will have been rate increases in only two of the last seven years.

However, Based on the BMA Study, Windsor's sewer surcharge costs, at \$680 per year for the average residential consumer remain significantly higher than the provincial average of \$352 (though Windsor's costs are somewhat below average for the heavy users in the commercial and industrial category).

This is not due to inefficiencies (see attached Appendix C - OMBI comparison chart that shows Windsor's operating costs are among the lowest in the province. Rather, the main reason for the higher cost is the amount of sewer capital projects that are funded by the sewer surcharge. Windsor's share of the sewer surcharge revenues that go to fund capital projects ranks second highest in the province. In other words, as an older municipality with older infrastructure the funds are being put to good use to fund projects aimed at curbing basement flooding. Reducing the sewer surcharge rates would directly reduce the ongoing basement flooding mitigation efforts.

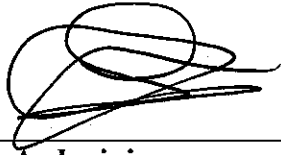
When comparing the combined costs of property taxes, water, and the sewer surcharge, the average Windsor property owner pays less in total charges than the provincial average.

6. CONSULTATIONS:

Windsor Utilities Commission Staff
Public Works Staff

7. CONCLUSION:

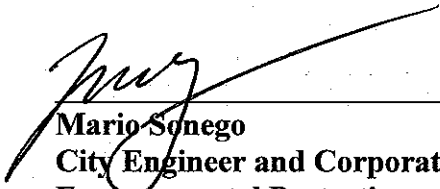
Given recent water consumption projections provided by WUC staff, increasing costs in the sewer surcharge operating fund, and the need to continue to fund much needed basement flooding mitigation projects as previously approved by Council, it is recommended that sewer surcharge rates remain unchanged for 2015.



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Chief Financial Officer/City Treasurer and
Corporate Leader Finance and Technology



Mario Sonogo
City Engineer and Corporate Leader
Environmental Protection and
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Helga Reidel
Chief Administrative Officer

TA

APPENDICES:

Appendix A - Sewer Surcharge Forecast (2015-2019)

Appendix B - Fixed Sewer Surcharge Rates

Appendix C - OMBI - What is the total cost of wastewater collection and conveyance?

DEPARTMENTS/OTHERS CONSULTED:

Name:

Phone #: 519 ext.

NOTIFICATION :

Name	Address	Email Address	Telephone	FAX

Sewer Surcharge - 2015 Budget and Four Year Forecast (2016 - 2019)
Forecast Based on No Change to Rates @ January 1, 2015

	2014	2015	2016	2017	2018	2019
	Budget (\$)	Budget (\$)	Forecast (\$)	Forecast (\$)	Forecast (\$)	Forecast (\$)
PUBLIC WORKS EXPENDITURES						
POLLUTION CONTROL						
Treatment Plants & Pump Stations	16,619,799	16,464,417	16,793,705	17,129,579	17,472,171	17,821,614
Depreciation (Transfer To Reserves for Equipment Replacement)	2,103,168	2,703,168	2,703,168	2,703,168	2,703,168	2,703,168
	18,722,967	19,167,585	19,496,873	19,832,747	20,175,339	20,524,782
SEWER MAINTENANCE & REPAIR						
PW - Operations	5,459,242	5,623,159	5,735,622	5,850,335	5,967,341	6,086,688
PW - Environmental Services	1,160,747	1,050,747	1,071,762	1,093,197	1,115,061	1,137,362
PW - Engineering & Corporate Projects	175,000	224,177	228,661	233,234	237,898	242,656
PW - Administration	108,228	108,228	110,393	112,600	114,852	117,149
	6,923,217	7,006,311	7,146,437	7,289,366	7,435,153	7,583,856
Total Public Works Operating Budget Expenditures	29,646,184	26,173,896	26,643,311	27,122,113	27,610,492	28,108,639
Total Public Works Capital Expenditures	21,600,000	21,600,000	21,600,000	21,600,000	21,600,000	21,600,000
Contingent Public Works Capital Expenditures (Note E)	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000
TOTAL PUBLIC WORKS EXPENDITURES	49,346,184	49,873,896	50,343,311	50,822,113	51,310,492	51,808,639
OTHER EXPENDITURES						
Debt Servicing Costs - LRWRP 20 Year Debenture	2,565,079	2,565,079	2,565,079	2,565,079	2,565,079	2,565,079
ENWIN Administration Fee	3,273,321	3,524,400	3,594,888	3,666,786	3,740,121	3,814,924
Overhead Allocation (Transfer to Current)	3,420,624	3,491,173	3,524,032	3,557,548	3,691,734	3,626,605
Appeal Refunds & General Expenses	500,000	500,000	500,000	500,000	500,000	500,000
TOTAL OTHER EXPENDITURES	9,759,024	10,080,652	10,183,999	10,289,413	10,396,935	10,506,608
TOTAL OF ALL EXPENDITURES	59,105,208	59,954,548	60,527,309	61,111,526	61,707,427	62,315,246
SURCHARGE REVENUES	58,548,496	59,588,829	59,588,829	61,078,550	61,078,550	61,078,550
NET CHANGE IN SEWER SURCHARGE OPERATING FUND #28	(556,712)	(365,719)	(938,480)	(32,976)	(628,877)	(1,236,696)
PROJECTED CUMMULATIVE BALANCE OF SEWER SURCHARGE RESERVE FUND #153	9,500,000	9,134,281	8,195,801	8,162,825	7,533,947	6,297,251

NOTES:

A - Assumes general expenditures increase at a rate of 2% per annum (2016-2019) for inflation, except where specific projections are available and a sewer surcharge rate increase of 2.5% in 2017.

B - Overhead expenditure allocation based on 7% of total Public Works expenditures.

C - Revenues are based on 2015 water meter and consumption projections received from ENWIN staff discounted by 5%

D - The chart above is meant to reflect the net wastewater expenditures funded by the sewer surcharge. Therefore, expenditures and revenues in the chart exclude approximately \$2.5 million in expenses funded directly by billings to the towns of Lasalle & Tecumseh.

E - \$2 million of the Contingent Public Works Capital Expenditure for 2014 has been recommended as additional funding for the 2015 capital budget.

It should be stressed that both the Windsor Utility Commission's water consumption and Public Work's expenditure figures are projections. As with all projections, they are based on a number of variables and assumptions that, if not achieved, may materially impact the results of this model. This is especially true for longer term projections such as this.

Fixed Sewer Surcharge Rates

Residential Accounts

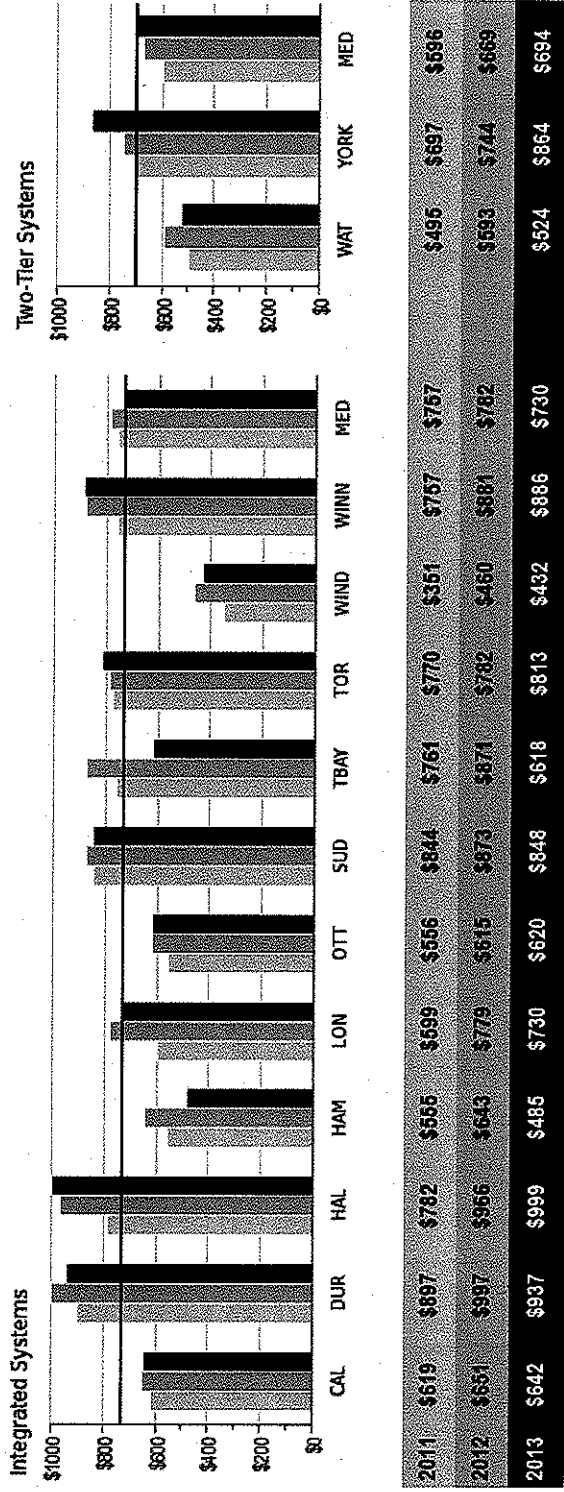
Stand Alone Fixed Sewer Surcharge	
\$15.87	

Commercial Accounts

Meter Size		Stand Alone Fixed Sewer Surcharge
1"	25mm	\$80.58
1 1/2"	40mm	\$188.77
2"	51mm	\$315.11
3"	75mm	\$566.33
4"	100mm	\$1,002.85
6"	150mm	\$1,831.13
8"	200mm	\$3,051.02
10"	250mm	\$5,026.15

What is the total cost for the treatment/disposal and collection/conveyance per megalitre?

Fig 35.7 OMBI Total Operating Cost of Wastewater Treatment/Disposal and Collection / Conveyance per Megalitre



Source: WWTR315T (Efficiency)

Note: Refer to additional information regarding integrated vs. two-tier systems. The amortization component can vary significantly from year to year depending on the type of infrastructure, additions and disposals of capital assets, capital fund expenditures, etc.