

## WATER AND WASTEWATER SERVICES

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**WATER AND WASTEWATER FUND**

This division provides for the maintenance of the Town’s water distribution and wastewater collection systems in accordance with the M.O.E. regulations. Drinking water quality is of the utmost importance and a significant effort is directed towards this objective. Another significant objective is to ensure that our wastewater collection system has a minimal amount of inflow and infiltration entering the system which reduces capacity and increases operational costs.

**Water and Wastewater User Fee Summary:**

On November 16, 2009, Council approved the implementation of a phased new Water and Wastewater Rate Structure for 2010. In 2011 the second phase of the new rate structure is proposed. The new approved Water & Wastewater Rate Structure includes two components: fixed fee and variable fee as follows:

$$\text{Water (or Sewer) User Fee(\$)} = \text{Fixed Fee(\$)} + \text{Variable Fee(\$)}$$

Where:

- Water (or Sewer) User Fee (\$) is collected to cover four areas: Operation Costs, Regional Charge, Contribution to Reserves and Capital Funding
- Fixed Fee (\$) is the fixed amount to assist in the funding of the Town’s water/wastewater capital for self-sustainability and baseline operational costs. The baseline operational costs are the minimum costs to maintain the systems regardless of usage.
- Variable Fee (\$) is based on water consumption or treated wastewater volumes multiplied by the Unit Rate (\$/m<sup>3</sup>)

**2010-2011 Comparison – Fixed Charge and Unit Rates for Water/Sewer Usage**

	Fixed (\$/Bill/User)		Variable \$/m <sup>3</sup>		2010-2011 Increase %	
	2010	2011	2010	2011	Fixed	Variable
Water	5.00	TBD	1.52	1.66	TBD	9%
Sewer	2.50	TBD	1.32	1.44	TBD	9%

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**Factors Affecting Water & Wastewater Variable Fee**

1. The volume of water consumed by the user.
2. The **Unit Rate** or charge per cubic meter by both the Town and Region of water consumed and wastewater treated.

**Factors Affecting Water & Wastewater Unit Rates (\$/cu. meter)**

1. Operational expenditures.
2. The Region's water charge based on volume supplied.
3. Corporate costs allocated to water and wastewater.
4. Contributions to reserves ("Infrastructure" or "Rate Stabilization") create an upward pressure on the unit rate. Conversely, draws from reserves create a downward pressure.
5. Using revenue collected through the rate structure to assist the capital program.
6. Volume of water consumed by the user.
7. Volume of water lost through watermain leakage and routine flushing operations.
8. Sewage flow increased through inflow and infiltration into the sewer system.

**2010 to 2011 Water/Sewer User Fee Variance**

Between 2010 and 2011, the water/sewer user fees vary due to a combination of many factors, some of which cause an upward pressure on rates and some a downward pressure as noted below:

**Upward Pressure**

- A slight increase in operational expenditures due to increases in contracted services, equipment costs and inflation.
- A 10% (water) and 10% (sewer) rate increase by the Region.
- Increase in allocated Corporate costs to better reflect time being spent by staff on the water and wastewater systems.

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**Downward Pressure**

- A reduction in the amount of rate supported capital projects in favour of using other financial resources.
- Due to the many variables affecting water and sewer rates, a “Rate Stabilization Reserve” had been established in prior years to mitigate major variances from year to year. In 2011, a draw from this reserve is not proposed to reduce the accumulated affect of the Upward Pressures.

**2011 Summary – Water & Wastewater Fund**

It is proposed that the 2011 water and sewer rates be increased by 9% to \$1.66/m<sup>3</sup> for water and \$1.44/m<sup>3</sup> for sewer usage without drawing from the rate stabilization reserve. The “Fixed Fee” will be presented to Council by Corporate and Financial Services.

The 2011 capital program totals \$1,259,000 and is comprised of \$1,204,000 of new capital projects and \$55,000 of 2010 carry-over projects. The major new capital projects for 2011 are the Holland Landing sewer inflow and infiltration remediation program (\$749,000) and a new watermain on Hilltop Drive to complement the road reconstruction (\$260,000).

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The net operating budget for the Community Programs and Infrastructure, Water and Wastewater Division is comprised of the following:

**WATER – Operating Budget**

	<b>2010</b>	<b>2011</b>	<b>Bud to Bud Variance</b>	
	<b><u>Approved</u></b>	<b><u>Approved</u></b>	<b><u>\$</u></b>	<b><u>%</u></b>
	<b><u>Budget</u></b>	<b><u>Budget</u></b>		
Expenditures	\$ 2,337,380	\$ 2,551,910	\$ 214,530	9.2%
Revenues				
User fees	(2,407,700)	(2,564,740)	(157,040)	6.5%
Other revenue	(97,500)	(85,500)	12,000	-12.3%
Transfers to reserves	88,970	84,330	(4,640)	-5.2%
Rate supported to capital	<u>78,850</u>	<u>14,000</u>	<u>(64,850)</u>	-82.2%
Total (Net) *	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	n/a

**WASTEWATER – Operating Budget**

Expenditures	\$ 1,066,080	\$ 1,174,940	\$ 108,860	10.2%
Revenues				
User fees	(1,089,000)	(1,225,470)	(136,470)	12.5%
Other revenue	(9,500)	(5,500)	4,000	-42.1%
Transfers to reserves	6,270	50,030	43,760	n/a
Rate supported to capital	<u>26,150</u>	<u>6,000</u>	<u>(20,150)</u>	-77.1%
Total (Net) *	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	n/a

Note: Total (Net) figures must equal to zero to ensure rate supported billing.

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**WATER –Expenditures**

**Overview**

This section summarizes the expenditures, revenues, transfers to/from reserves and capital funded from the user rate.

**Objectives**

To provide a safe and adequate water supply to the end users.

	<b>2010</b>	<b>2011</b>	<b>Bud to Bud Variance</b>	
	<b>Approved</b>	<b>Approved</b>	<b>Bud to Bud Variance</b>	
	<b><u>Budget</u></b>	<b><u>Budget</u></b>	<b><u>\$</u></b>	<b><u>%</u></b>
Water Quality				
"DWQMS"	\$ 23,300	\$ 23,640	\$ 340	
Flushing	57,500	61,980	4,480	
Sampling	105,500	110,450	4,950	
Chlorination/Testing	6,000	6,240	240	
Swabbing	12,500	12,570	70	
Sampling stations	9,700	9,920	220	
Lead testing	38,500	40,190	1,690	
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	253,000	264,990	11,990	4.7%
Hydrants	58,900	61,850	2,950	
Valves	48,200	50,530	2,330	
Watermains	47,000	49,360	2,360	
Water connections	59,500	62,030	2,530	
North Union System	4,500	4,570	70	
Meters	117,500	126,230	8,730	
Tools	9,500	9,500	-	
Administration	735,180	801,150	65,970	
Regional water charge	1,004,100	1,121,700	117,600	
	<hr/>	<hr/>		
	\$ 2,337,380	\$ 2,551,910	\$ 214,530	9.2%

**Expenditures**

With the exception of the Regional water charge, the budget to budget variance is predominantly due to additional labour distribution to the various activities. Administration has a net increase resulting from a combination of a review of effort of Town staff supporting

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water services, an increase in fleet replacement costs and a decrease in allocated corporate costs due to a reduction in the Civic Centre debt.

The single most upward pressure on the water rates is the Regional Charge which is dependent on the Regional water rate (\$/m<sup>3</sup>) and the volume of water supplied by the Region to the Town.

The Region increased their water rate charge by 10% which has an upward pressure of \$101,200±. The Region is projecting an increase in water consumption for 2011 resulting in an upward pressure of \$16,400 for a total impact of \$117,600.

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**WATER –Revenues**

	<b>2010</b>	<b>2011</b>	<b>Bud to Bud Variance</b>	
	<b>Approved</b>	<b>Approved</b>	<b>\$</b>	<b>%</b>
	<b><u>Budget</u></b>	<b><u>Budget</u></b>	<b><u>\$</u></b>	<b><u>%</u></b>
Water operations	\$ (97,500)	\$ (85,500)	\$ 12,000	-12.3%
Water user fees	<u>(2,407,700)</u>	<u>(2,564,740)</u>	<u>(157,040)</u>	6.5%
	<u>\$ (2,505,200)</u>	<u>\$ (2,650,240)</u>	<u>\$ (145,040)</u>	5.8%

“Water operations” aka “Other” revenue is revenue received for supply and installation of new water meters or service connections to existing buildings, hydrant anti-tampering devices for developers and late payment penalties.

**WATER – Transfers to/from reserves**

	<b>2010</b>	<b>2011</b>	<b>Bud to Bud Variance</b>	
	<b>Approved</b>	<b>Approved</b>	<b>\$</b>	<b>%</b>
	<b><u>Budget</u></b>	<b><u>Budget</u></b>	<b><u>\$</u></b>	<b><u>%</u></b>
Rate stabilization	\$ 5,000	\$ -	\$ (5,000)	n/a
Fleet replacement	39,600	36,580	(3,020)	-7.6%
Water infrastructure	44,370	47,750	3,380	7.6%
	<u>\$ 88,970</u>	<u>\$ 84,330</u>	<u>\$ (4,640)</u>	-5.2%

**Expenditures**

In 2010, Fleet replacement costs were only charged to water operations rather than split between water and wastewater. In 2011, the Fleet replacement costs are apportioned between water and wastewater.

Overall Fleet replacement costs within water and wastewater combined have increased by \$12,660 due to manufacturer price adjustments.

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**WATER – User rate funded capital**

	<b>2010</b>		<b>2011</b>	<b>Bud to Bud Variance</b>	
	<b>Approved</b>		<b>Approved</b>	<b>\$</b>	<b>%</b>
	<b><u>Budget</u></b>		<b><u>Budget</u></b>	<b><u>\$</u></b>	<b><u>%</u></b>
Water rate funded capital	\$ 78,850	\$	14,000	\$ (64,850)	-82.2%
	<u>\$ 78,850</u>	<u>\$</u>	<u>14,000</u>	<u>\$ (64,850)</u>	<u>-82.2%</u>

**Expenditures**

Capital funded from the water rate has been minimized to reduce upward pressure on the water rate.

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**WASTEWATER –Expenditures**

**Overview**

This section summarizes the expenditures, revenues, transfers to/from reserves and capital funded from the user rate.

**Objectives**

To provide a wastewater disposal system at a minimal cost to the end user.

	<b>2010</b>	<b>2011</b>	<b>Bud to Bud Variance</b>	
	<b>Approved</b>	<b>Approved</b>	<b>Bud to Bud Variance</b>	
	<b><u>Budget</u></b>	<b><u>Budget</u></b>	<b><u>\$</u></b>	<b><u>%</u></b>
Sewer main	\$ 52,100	\$ 54,250	\$ 2,150	
Sewer manholes	25,000	25,140	140	
Sewer connections	13,000	13,030	30	
Lift stations	45,000	57,890	12,890	
Tools	9,000	9,000	-	
Administration	329,480	343,250	13,770	
Regional sewer treatment charge	592,500	672,380	79,880	
	<u>\$ 1,066,080</u>	<u>\$ 1,174,940</u>	<u>\$ 108,860</u>	10.2%

**Expenditures**

The budget to budget variance for all activities is predominantly due to additional labour distribution. In addition, the sewage lift station costs increase was due to the assumption of the Harvest Hills lift station and increased utility costs (water and hydro) to operate/maintain all lift stations. The reason for the increase in the administration cost is the same as that for water administration costs.

Once again the single most upward pressure on the sewer rates is the Regional Charge which is dependent on the Regional sewer rate (\$/m<sup>3</sup>) and the volume of sewage treated by the Region.

Similar to water, the Region has increased their sewer rates by 10% which has an upward pressure of \$60,500±. With an increase in water usage, there will be an increase in sewage volume. The increase in sewage volume creates an upward pressure of \$19,380 for a total impact of \$79,880.

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**WASTEWATER –Revenues**

	<b>2010</b>	<b>2011</b>	<b>Bud to Bud Variance</b>	
	<b><u>Approved</u></b> <b><u>Budget</u></b>	<b><u>Approved</u></b> <b><u>Budget</u></b>	<b><u>\$</u></b>	<b><u>%</u></b>
Wastewater user fees	\$ (1,089,000)	\$ (1,225,470)	\$ (136,470)	12.5%
Wastewater operations	<u>(9,500)</u>	<u>(5,500)</u>	<u>4,000</u>	<u>-42.1%</u>
	<u>\$ (1,098,500)</u>	<u>\$ (1,230,970)</u>	<u>\$ (132,470)</u>	<u>12.1%</u>

In 2010 “Wastewater Operations” aka “Other” revenue was \$9,500 for payment from the Harvest Hills developers to cover operational costs for the Harvest Hills sewage pumping station prior to assumption. In 2011 this cost will be absorbed through the rates since the pumping station has been assumed. The \$5,500 is potential revenue for new sewer connections.

**WASTEWATER – Transfers to/from reserves**

	<b>2010</b>	<b>2011</b>	<b>Bud to Bud Variance</b>	
	<b><u>Approved</u></b> <b><u>Budget</u></b>	<b><u>Approved</u></b> <b><u>Budget</u></b>	<b><u>\$</u></b>	<b><u>%</u></b>
Rate stabilization	\$ -	\$ -	\$ -	n/a
Fleet replacement	-	15,680	15,680	n/a
Sewer infrastructure	6,270	34,350	28,080	447.8%
	<u>\$ 6,270</u>	<u>\$ 50,030</u>	<u>\$ 43,760</u>	<u>n/a</u>

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**WASTEWATER – User rate funded capital**

	<b>2010</b>		<b>2011</b>	<b>Bud to Bud Variance</b>	
	<b>Approved</b>		<b>Approved</b>	<b>\$</b>	<b>%</b>
	<b><u>Budget</u></b>		<b><u>Budget</u></b>	<b><u>\$</u></b>	<b><u>%</u></b>
Capital funded from rate	\$ 26,150	\$	6,000	\$ (20,150)	-77.1%
	<u>\$ 26,150</u>	<u>\$</u>	<u>6,000</u>	<u>\$ (20,150)</u>	<u>-77.1%</u>

**Expenditure**

Capital funded from the sewer rate has been minimized to reduce upward pressure on the sewer rate.

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**CAPITAL BUDGET**

	Expenditure	Funding Source					
		User Rate	Infra. Res.	Equip. Res.	Other Gov't	Dev. Char.	Unexpended
<b>Water main and Manhole Remediation</b>							
I & I Holland Landing mainline	\$ 749,000	\$ -	\$ -	\$ -	\$ 675,000	\$ 74,000	\$ -
<b>Water main reconstruction</b>							
Hilltop drive (Holland River blvd to Grist Mill)	260,000	-	260,000	-	-	-	-
<b>Other</b>							
Holland river sewer crossing design (1)	83,000	-	-	-	-	83,000	-
3/4 tonne cargo van (T11) replacement	40,000	-	-	40,000	-	-	-
1/2 tonne pick-up (T27) replacement	40,000	-	-	40,000	-	-	-
(a) Meter reading guns (equipment and software)	30,000	-	-	-	-	-	30,000
(a) Water and wastewater long range financial plan	25,000	-	-	-	-	-	25,000
Zoom camera for sewer inspection	10,000	10,000	-	-	-	-	-
North Queensville air relief valve and chamber	10,000	10,000	-	-	-	-	-
Truck mounted crane replacement	7,000	-	-	7,000	-	-	-
Water service thawing equipment replacement	5,000	-	-	5,000	-	-	-
	<u>\$ 1,259,000</u>	<u>\$ 20,000</u>	<u>\$ 260,000</u>	<u>\$ 92,000</u>	<u>\$ 675,000</u>	<u>\$ 157,000</u>	<u>\$ 55,000</u>

(1) The Holland river sewer crossing design is to be front-ended by developers who will recover their investment through reduced development charges.

(a) Denotes capital project which was approved in the prior year