



WATER RATE ANALYSIS UPDATE

November 5, 2012

Presentation Overview

1. Review of options
2. Revenue comparisons between the options
3. Extensive list of billing examples under the various options
4. Key points
5. Committee discussion and recommendation

Review of Options

- Our current water rates charge for a minimum consumption of 90 cubic metres (CM) for residential and commercial charges for a minimum of 100 cubic metres. Commercial sectors rates lower than residential and the rate tiers are much larger. Our current rates will leave our revenues short of budget by approximately \$212,000.
- Option 4a was proposed to Council in September and this included a base infrastructure charge of \$70 plus an escalating charge for every cubic metre of water used up to 500CM. This option also set the commercial rates and tiers the same as the residential rates. In addition to these changes an additional \$16 fixed charge for a reserve for the water treatment plant was included.
- Option 5 has been developed to reduce some of the large increases that were created in Option 4a. To accomplish this we removed the additional \$16 charge for the water treatment reserve, lowered the rate per CM in the first and 3rd tiers and phased in the commercial rate equalization over 3 years.
- Option 6 varies the commercial rates with residential remaining virtually the same as Option 5. The big change in this proposal is the commercial rates would be a flat rate per CM. The flat rate is higher than the first two tiers of the residential but then lower than the 3rd and 4th tier of residential. It has been indicated to Council on several occasions that commercial operations are already conserving as much as they can so a flat rate may be more appropriate than an escalating conservation rate which would not alter water use.

OPTION 4A - Fixed Fee plus Consumption Charge – Same rate for all users – expanded for Commercial Users

RESIDENTIAL

	Base	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Base Consumption	-	60	120	160	500	>500
Base Rate	\$ 86.00	\$ 42.00	\$ 72.00	\$ 94.00	\$ 1,020.00	
Rate per m3		\$ 0.70	\$ 1.20	\$ 2.35	\$ 3.00	\$ 1.70

FAMILY

	Base	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Base Consumption	-	60	150	200	500	>500
Base Rate	\$ 86.00	\$ 42.00	\$ 108.00	\$ 117.50	\$ 900.00	
Rate per m3		\$ 0.70	\$ 1.20	\$ 2.35	\$ 3.00	\$ 1.70

COMMERCIAL

	Base	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5	Tier 6	Tier 7
Base Consumption	0	60	120	160	500	1,000	5,000	> 5000
Base Rate	\$ 86.00	\$ 42.00	\$ 72.00	\$ 94.00	\$ 1,020.00	\$ 1,000.00	\$ 8,000.00	
Rate per m3		\$ 0.70	\$ 1.20	\$ 2.35	\$ 3.00	\$ 1.70	\$ 1.70	\$ 1.70

OPTION 5 - Fixed Fee plus Consumption Charge & Commercial Rates Phased In – 2013 Rates

RESIDENTIAL						
	Base	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Base Consumption	-	60	120	160	400	>400
Base Rate	\$ 70.00	\$ 36.00	\$ 72.00	80.00	720.00	
Rate per m3		\$ 0.60	\$ 1.20	\$ 2.00	3.00	1.74
Family Rate						
	Base	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Base Consumption		80	150	200	400	>400
Base Rate	\$ 70.00	\$ 48.00	\$ 84.00	100.00	600.00	
Rate per m3		\$ 0.60	\$ 1.20	\$ 2.00	\$ 3.00	1.74
COMMERCIAL						
	Base	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Base Consumption	-	60	120	160	400	> Tier 4
Base Rate	\$ 70.00	\$ 36.00	\$ 72.00	\$ 80.00	\$ 504.00	
Rate per m3		\$ 0.60	\$ 1.20	\$ 2.00	\$ 2.10	\$ 1.74

OPTION 5 - Fixed Fee plus Consumption Charge & Commercial Rates Phased In – 2014 Rates

RESIDENTIAL						
	Base	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Base Consumption	-	60	120	160	400	>400
Base Rate	\$ 72.00	\$ 37.20	\$ 74.40	82.40	741.60	
Rate per m3		\$ 0.62	\$ 1.24	\$ 2.06	\$ 3.09	\$ 1.74
Family Rate						
	Base	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Base Consumption		80	150	200	400	>400
Base Rate	72.00	\$ 49.60	\$ 86.80	\$ 103.00	\$ 618.00	
Rate per m3		\$ 0.62	\$ 1.24	\$ 2.06	\$ 3.09	\$ 1.74
COMMERCIAL						
	Base	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Base Consumption	-	60	120	160	400	> Tier 4
Base Rate	\$ 72.00	\$ 37.20	\$ 74.40	\$ 82.40	\$ 624.00	
Rate per m3		\$ 0.62	\$ 1.24	\$ 2.06	\$ 2.60	\$ 1.74

OPTION 5 - Fixed Fee plus Consumption Charge & Commercial Rates Phased In – 2015 Rates

RESIDENTIAL						
	Base	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Base Consumption	-	60	120	160	400	>400
Base Rate	\$ 74.00	\$ 38.40	\$ 76.80	84.80	763.20	
Rate per m3		\$ 0.64	\$ 1.28	\$ 2.12	\$ 3.18	\$ 1.74
Family Rate						
Rate per m3						
	Base	Tier 1	Tier 2	Tier 3	Tier 3	Tier 5
Base Consumption		80	150	200	400	>400
Base Rate	\$ 74.00	\$ 51.20	\$ 89.60	106.00	636.00	
Rate per m3		\$ 0.64	\$ 1.28	\$ 2.12	\$ 3.18	\$ 1.74
COMMERCIAL						
	Base	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Base Consumption	-	60	120	160	400	> Tier 4
Base Rate	\$ 74.00	\$ 38.40	\$ 76.80	\$ 84.80	\$ 763.20	
Rate per m3		\$ 0.64	\$ 1.28	\$ 2.12	\$ 3.18	\$ 1.74

OPTION 6 - Fixed Fee plus Consumption Charge & Commercial with Flat Rate per Cubic Metre

RESIDENTIAL						
	Base	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Base Consumption	-	60	120	160	400	>400
Base Rate	\$ 70.00	\$ 36.00	\$ 72.00	80.00	720.00	
Rate per m3		\$ 0.60	\$ 1.20	\$ 2.00	3.00	1.68
LARGE FAMILY RATE						
	Base	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Base Consumption		80	150	200	400	>400
Base Rate	\$ 70.00	\$ 48.00	\$ 84.00	100.00	600.00	
Rate per m3		\$ 0.60	\$ 1.20	\$ 2.00	\$ 3.00	1.68
COMMERCIAL						
	Base	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Base Consumption	-	60	120	160	400	> Tier 4
Base Rate	\$ 70.00	\$ 100.80	\$ 100.80	\$ 67.20	\$ 403.20	
Rate per m3		\$ 1.68	\$ 1.68	\$ 1.68	\$ 1.68	\$ 1.68

Revenue Comparisons – Current Rates and Option 4a

Current Rates - 2012 Actual Results						
	Mar-12 (actual)	Sep-12 (actual)	TOTAL		2013 Budget	Budget Surplus (shortfall)
Residential						
Residential Rate	\$ 531,686.45	\$ 758,327.03	\$ 1,290,013.48			
Multi Family	217,118.30	327,859.37	\$ 544,977.68			
Family Rate	4,426.60	7,081.21	\$ 11,507.81			
Total residential	\$ 753,231.35	\$ 1,093,267.61	\$ 1,846,498.96	71.5%		
Commercial	288,727.74	445,496.96	734,224.70	28.5%		
Totals	\$ 1,041,959.09	\$ 1,538,764.57	\$ 2,580,723.66		\$ 2,793,000.00	\$ (212,276.34)
Option 4a-2013 Estimated Results-No phase in						
	Mar-13 Estimate	Sep-13 Estimate	TOTAL		2013 budget	Budget Surplus (shortfall)
Residential						
Residential Rate	\$ 631,828.37	\$ 888,604.42	\$ 1,520,432.80			
Multi Family	244,382.35	384,796.48	\$ 629,178.83			
Family Rate	5,824.90	9,060.35	\$ 14,885.25			
Total residential	\$ 882,035.62	\$ 1,282,461.26	\$ 2,164,496.88	68.8%		
Commercial	401,846.05	580,867.90	982,713.95	31.2%		
Totals	\$ 1,283,881.67	\$ 1,863,329.16	\$ 3,147,210.83		\$ 2,793,400.00	\$ 353,810.83

Revenue Comparisons – Options 5 & 6

<u>Option 5 - 2013 Estimated Results-Fixed Base Rate - Phase in</u>						
	Mar-13 Estimate	Sep-13 Estimate	TOTAL		2013 budget	Budget Surplus (shortfall)
<u>Residential</u>						
Residential Rate	\$ 542,964.59	\$ 789,041.30	\$ 1,332,005.89			
Multi Family	205,025.20	337,847.54	\$ 542,872.74			
Family Rate	5,248.00	7,816.60	\$ 13,064.60			
Total residential	<u>\$ 753,237.79</u>	<u>\$ 1,134,705.44</u>	<u>\$ 1,887,943.23</u>	67.6%		
Commercial	362,326.60	540,944.88	903,271.48	32.4%		
Totals	<u>\$ 1,115,564.39</u>	<u>\$ 1,675,650.32</u>	<u>\$ 2,791,214.71</u>		\$ 2,793,400.00	\$ (2,185.29)
<u>Option 6: Fixed Base Rate - Flat Commercial Rate - 2013 Estimated Results</u>						
	Mar-13 Estimate	Sep-13 Estimate	TOTAL		2013 budget	Budget Surplus (shortfall)
Residential						
Residential Rate	\$ 542,893.07	\$ 788,870.48	\$ 1,331,763.55			
Multi Family	205,025.20	337,847.54	542,872.74			
Family Rate	5,248.00	7,816.60	13,064.60			
Total residential	<u>\$ 753,166.27</u>	<u>\$ 1,134,534.62</u>	<u>\$ 1,887,700.89</u>	67.6%		
Commercial	366,040.64	539,853.44	905,894.08	32.4%		
Totals	<u>\$ 1,119,206.91</u>	<u>\$ 1,674,388.06</u>	<u>\$ 2,793,594.97</u>		\$ 2,793,400.00	\$ 194.97

Residential Water Billing Examples (Semi Annual)

Residential						Option 4a	Option 5	Option 6	Option 6
	2012	Option 4a	Option 5	Option 6		2013	2013	2013	2013
Consumption	Actual	2013	2013	2013		Incr (decr)	Incr (decr)	Incr from	Incr from
Level		Charge	Charge	Charge		from 2012	from 2012	from 2012	from 2012
(Cubic Mtrs)	\$	\$	\$	\$		\$	\$	\$	%
20	114.02	100.00	82.00	82.00		(14.02)	(32.02)	(32.02)	-28.08%
40	114.02	114.00	94.00	94.00		(0.02)	(20.02)	(20.02)	-17.56%
60	114.02	128.00	106.00	106.00		13.98	(8.02)	(8.02)	-7.03%
70	114.02	140.00	118.00	118.00		25.98	3.98	3.98	3.49%
80	114.02	152.00	130.00	130.00		37.98	15.98	15.98	14.02%
100	126.42	176.00	154.00	154.00		49.58	27.58	27.58	21.82%
120	151.22	200.00	178.00	178.00		48.78	26.78	26.78	17.71%
140	188.22	247.00	218.00	218.00		58.78	29.78	29.78	15.82%
160	225.22	294.00	258.00	258.00		68.78	32.78	32.78	14.55%
170	261.32	324.00	288.00	288.00		62.68	26.68	26.68	10.21%
190	333.52	384.00	348.00	348.00		50.48	14.48	14.48	4.34%
200	369.62	414.00	378.00	378.00		44.38	8.38	8.38	2.27%
210	405.72	444.00	408.00	408.00		38.28	2.28	2.28	0.56%
220	441.82	474.00	438.00	438.00		32.18	(3.82)	(3.82)	-0.86%
230	477.92	504.00	468.00	468.00		26.08	(9.92)	(9.92)	-2.08%
240	514.02	534.00	498.00	498.00		19.98	(16.02)	(16.02)	-3.12%
250	550.12	564.00	528.00	528.00		13.88	(22.12)	(22.12)	-4.02%
260	586.22	594.00	558.00	558.00		7.78	(28.22)	(28.22)	-4.81%
270	622.32	624.00	588.00	588.00		1.68	(34.32)	(34.32)	-5.51%
280	658.42	654.00	618.00	618.00		(4.42)	(40.42)	(40.42)	-6.14%
290	694.52	684.00	648.00	648.00		(10.52)	(46.52)	(46.52)	-6.70%
300	730.62	714.00	678.00	678.00		(16.62)	(52.62)	(52.62)	-7.20%

Commercial Water Billing Examples (Semi Annual)

Commercial		Option 4a	Option 5	Option 6	Option 5	Option 6	Option 4a	Option 5	Option 6	Option 5	Option 6
Consumption	2012	2013	2013	2013	2014	2014	2013	2013	2013	2014	2014
Level	Actual	Estimate	Estimate	Estimate	Estimate	Estimate	Incr (decr)	Incr (decr)	Incr (decr)	Incr from	Incr from
(Cubic Mtrs)	\$	\$	\$	\$	\$	\$	from 2012	from 2012	from 2012	2013	2013
							\$	\$	\$	\$	\$
20	133.90	100.00	82.00	103.60	84.40	106.60	(33.90)	(51.90)	(30.30)	2.40	3.00
40	133.90	114.00	94.00	137.20	96.80	141.20	(19.90)	(39.90)	3.30	2.80	4.00
60	133.90	128.00	106.00	170.80	109.20	175.80	(5.90)	(27.90)	36.90	3.20	5.00
70	133.90	140.00	118.00	187.60	121.60	193.10	6.10	(15.90)	53.70	3.60	5.50
80	133.90	152.00	130.00	204.40	134.00	210.40	18.10	(3.90)	70.50	4.00	6.00
90	133.90	164.00	142.00	221.20	146.40	227.70	30.10	8.10	87.30	4.40	6.50
100	133.90	176.00	154.00	238.00	158.80	245.00	42.10	20.10	104.10	4.80	7.00
120	158.70	200.00	178.00	271.60	183.60	279.60	41.30	19.30	112.90	5.60	8.00
140	183.50	247.00	218.00	305.20	224.80	314.20	63.50	34.50	121.70	6.80	9.00
160	208.30	294.00	258.00	338.80	266.00	348.80	85.70	49.70	130.50	8.00	10.00
180	233.10	354.00	300.00	372.40	318.00	383.40	120.90	66.90	139.30	18.00	11.00
200	257.90	414.00	342.00	406.00	370.00	418.00	156.10	84.10	148.10	28.00	12.00
250	319.90	564.00	447.00	490.00	500.00	504.50	244.10	127.10	170.10	53.00	14.50
280	357.10	654.00	510.00	540.40	578.00	556.40	296.90	152.90	183.30	68.00	16.00
300	381.90	714.00	552.00	574.00	630.00	591.00	332.10	170.10	192.10	78.00	17.00
340	431.50	834.00	636.00	641.20	734.00	660.20	402.50	204.50	209.70	98.00	19.00
360	456.30	894.00	678.00	674.80	786.00	694.80	437.70	221.70	218.50	108.00	20.00
400	505.90	1,014.00	762.00	742.00	890.00	764.00	508.10	256.10	236.10	128.00	22.00
450	567.90	1,164.00	849.00	826.00	977.00	850.50	596.10	281.10	258.10	128.00	24.50
500	629.90	1,314.00	936.00	910.00	1,064.00	937.00	684.10	306.10	280.10	128.00	27.00
600	753.90	1,484.00	1,110.00	1,078.00	1,238.00	1,110.00	730.10	356.10	324.10	128.00	32.00
700	877.90	1,654.00	1,284.00	1,246.00	1,412.00	1,283.00	776.10	406.10	368.10	128.00	37.00
800	1,001.90	1,824.00	1,458.00	1,414.00	1,586.00	1,456.00	822.10	456.10	412.10	128.00	42.00
900	1,125.90	1,994.00	1,632.00	1,582.00	1,760.00	1,629.00	868.10	506.10	456.10	128.00	47.00
1,000	1,249.90	2,164.00	1,806.00	1,750.00	1,934.00	1,802.00	914.10	556.10	500.10	128.00	52.00
2,000	2,489.90	3,864.00	3,546.00	3,430.00	3,674.00	3,532.00	1,374.10	1,056.10	940.10	128.00	102.00
3,000	3,729.90	5,564.00	5,286.00	5,110.00	5,414.00	5,262.00	1,834.10	1,556.10	1,380.10	128.00	152.00
5,000	6,929.90	8,964.00	8,766.00	8,470.00	8,894.00	8,722.00	2,034.10	1,836.10	1,540.10	128.00	252.00
10,000	15,329.90	17,464.00	17,466.00	16,870.00	17,594.00	17,372.00	2,134.10	2,136.10	1,540.10	128.00	502.00
15,000	24,329.90	25,964.00	26,166.00	25,270.00	26,294.00	26,022.00	1,634.10	1,836.10	940.10	128.00	752.00
24,500	43,899.90	42,114.00	42,696.00	41,230.00	42,824.00	42,457.00	(1,785.90)	(1,203.90)	(2,669.90)	128.00	1,227.00

Key Points

- All options include a fixed infrastructure charge which is based upon the annual depreciation of the capital assets currently in place. This fixed charge generates approximately \$600,000 of the total water fees and ensures everyone pays a reasonable share of the infrastructure costs.
- The commercial sector used 32.4% of the billable water in 2012 and the residential sector used 67.6%. The rates in models 5 and 6 have been set so that approximately 32.4% of the revenues come from the commercial sector. In 2012 the commercial sector revenues amounted to 28.5% of the total revenue.
- The infrastructure charge for the water treatment plant has been removed from these models but it is recommended that this fee be added back in for the 2014 billing so that a reserve can be built to reduce the borrowing that will be necessary to build the intake and treatment plant.
- Mixed use properties (commercial/residential) are currently billed at commercial rates in accordance with our water fee bylaw. Under Option 6 this practice will inadvertently charge any residential unit within a commercial building at the \$1.68 commercial flat rate even for low consumptions. This can be corrected by changing our bylaw to allow mixed use commercial that is primarily residential (ie. over 50%) to make an election to use the tiered residential rate structure. This is not an issue under Option 5.
- The average residential user will pay \$308 per year for their water under Options 5 or 6. Hydro/gas bills range between \$600-\$1,200+ per year. Cable and Internet costs range from \$600 to \$2,000/year.



COMMITTEE DISCUSSION AND RECOMMENDATION