



WATER RATE ANALYSIS

September 13, 2012

Presentation Overview

1. Background
2. Assumptions
3. Options
4. Billing Cost Examples under the Various Options
5. Recommendations
6. Committee discussion and recommendation

Background

- In 2009 Council approve a tiered billing structure to be implemented in 3 stages over 3 years. The Stage 1 rates were very successful at reducing residential consumption.
- In March 2011 Council was presented with various options to modify the Stage 2 water rates for the residential sector since the Stage 1 rates were successful in reducing consumption. The staff proposal was to leave the residential sector at the Stage 1 rates with 5% increases in the tier rates and move the commercial sector to Stage 2 rates.
- Concerns were raised by several members of Council because remaining in Stage 1 means not lowering the base consumption rate from 90 cubic meters to 75 cubic meters (as it would in stage 2). Additional concerns were raised about the unfairness of moving the commercial sector to stage 2 without moving the residential sector to that stage.
- Council considered the options presented to them and implemented the recommended rate of remaining at stage 1 levels and increasing the rate by 3% for both residential and commercial accounts

Assumptions

- Water rates should encourage water conservation particularly for high users
- Models were built assuming 2013 consumptions would be the same as 2011/2012

OPTION 1 - Stage Two Rates as Originally presented in 2009

RESIDENTIAL

ALL METERS

	Base	Tier 1	Tier 2	Tier 3
Base Consumption	75	120	155	> Tier 2
Base Rate	\$ 97.50	\$ 56.25	\$ 87.50	
Rate per m ³		\$ 1.25	\$ 2.50	\$ 4.25

FAMILY RATE

ALL METERS

	Base	Tier 1	Tier 2	Tier 3
Base Consumption	75	165	215	> Tier 2
Base Rate	\$ 97.50	\$ 112.50	\$ 125.00	
Rate per m ³		\$ 1.25	\$ 2.50	\$ 4.25

COMMERCIAL

	Base	Tier 1	Tier 2	Tier 3	Tier 4
Base Consumption	100	2,750	7,500	14,000	> Tier 3
Base Rate	\$133.90	\$3,275.40	\$7,583.38	\$11,943.75	
Rate per m ³		\$ 1.24	\$ 1.60	\$ 1.84	\$ 2.10

OPTION 1 - Stage Two Rates as Originally presented in 2009

Original Stage 2 2013 Estimated Results

Residential

	Mar-13 Estimate	Sep-13 Estimate	TOTAL	2013 budget	Residential	Family
					60 m ³	97.50 97.50
Residential Rate	\$ 525,850.18	\$ 793,936.78	\$ 1,319,786.95		120 m ³	153.75 153.75
Multi Family	190,813.55	305,878.23	\$ 496,691.78		150 m ³	228.75 191.25
Family Rate	4,672.50	5,635.00	\$ 10,307.50		200 m ³	432.50 297.50
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Total residential	\$ 721,336.23	\$ 1,105,450.00	\$ 1,826,786.23			
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Commercial	284,102.86	439,224.18	723,327.04		Commercial	
					100 m3	133.90
					1,000 m3	1,246.30
					5,000 m3	7,001.43
					10,000 m3	15,586.43
Totals	\$ 1,005,439.08	\$ 1,544,674.18	\$ 2,550,113.26	\$ 2,793,400.00	15,000 m3	25,036.43

OPTION 2 – Current Structure with 10% Increase

RESIDENTIAL

	Base	Tier 1	Tier 2	Tier 3
Base Consumption	90	120	160	> Tier 2
Base Rate	\$125.42	\$ 40.80	\$ 82.00	
Rate per m3		\$ 1.36	\$ 2.04	\$ 3.60

FAMILY RATE

Rate per m3

	Base	Tier 1	Tier 2	Tier 3
Base Consumption	90	165	230	> Tier 2
Base Rate	\$125.42	\$ 102.00	\$ 132.60	
Rate per m3		\$ 1.36	\$ 2.04	\$ 3.60

COMMERCIAL

	Base	Tier 1	Tier 2	Tier 3	Tier 4
Base Consumption	100	3,000	8,000	15,000	> Tier 3
Base Rate	\$147.29	\$3,944.00	\$8,800.00	\$13,860.00	
Rate per m3		\$ 1.36	\$ 1.76	\$ 1.98	\$ 2.27

OPTION 2 – Current Structure with 10% Increase

REVENUES

BILLING AMOUNTS

2012 Rates with 10% Increase

Residential

	Mar-13 Estimate	Sep-13 Estimate	TOTAL	2013 budget	Residential	Family
					60 m3	125.42 125.42
Residential Rate	\$ 593,463.12	\$ 811,683.58	\$ 1,405,146.69		120 m3	166.22 166.22
Multi Family	240,722.52	341,543.46	\$ 582,265.98		150 m3	227.42 207.02
Family Rate	5,048.01	6,023.37	\$ 11,071.38		200 m3	392.15 298.82
Total residential	\$ 839,233.65	\$ 1,159,250.41	\$ 1,998,484.06			
					Commercial	
					100 m3	147.29
					1,000 m3	1,371.29
Commercial	310,652.38	478,175.53	788,827.91		5,000 m3	7,611.29
					10,000 m3	16,851.29
Totals	\$ 1,149,886.03	\$ 1,637,425.94	\$ 2,787,311.97	\$ 2,793,400.00	15,000 m3	26,751.29

OPTION 3 - Fixed Fee plus Consumption Charge

RESIDENTIAL

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

FAMILY RATE

Rate per m3

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

COMMERCIAL

	Base	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Base Consumption	0	60	2,500	7,000	12,500	> Tier 4
Base Rate	\$ 86.00	\$ 42.00	\$2,928.00	\$10,575.00	\$ 14,300.00	
Rate per m3		\$ 0.70	\$ 1.20	\$ 2.35	\$ 2.60	\$ 3.00

OPTION 3 - Fixed Fee plus Consumption Charge

	REVENUES			2013 budget	BILLING AMOUNTS	
	Mar-13 Estimate	Sep-13 Estimate	TOTAL		Residential	Family
Flat Base Rate - No Consumption						
Residential						
					60 m3	128.00 128.00
Residential Rate	\$ 634,548.37	\$ 894,106.02	\$ 1,528,654.40		120 m3	200.00 200.00
Multi Family	247,775.45	364,729.16	\$ 612,504.61		150 m3	270.50 236.00
Family Rate	5,953.30	7,113.35	\$ 13,066.65		200 m3	414.00 353.50
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Total residential	\$ 888,277.12	\$ 1,265,948.53	\$ 2,154,225.65			
						Commercial
					100 m3	176.00
Commercial	328,647.70	542,343.40	870,991.10		1,000 m3	1,256.00
					5,000 m3	8,931.00
					10,000 m3	21,431.00
Totals	\$ 1,216,924.82	\$ 1,808,291.93	\$ 3,025,216.75	\$ 2,793,400.00	15,000 m3	35,431.00

OPTION 4 - Fixed Fee plus Consumption Charge – Same rate for all users

RESIDENTIAL

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

FAMILY RATE

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

COMMERCIAL

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

OPTION 4 - Fixed Fee plus Consumption Charge – Same rate for all users

REVENUES				BILLING AMOUNTS			
Flat Rate Base - Same Rate Res/Comm							
Residential	Mar-13 Estimate	Sep-13 Estimate	TOTAL	2013 budget	Residential	Family	
					60 m3	128.00	128.00
Residential Rate	\$ 634,548.37	\$ 894,106.02	\$ 1,528,654.40		120 m3	200.00	200.00
Multi Family	247,775.45	364,729.16	\$ 612,504.61		150 m3	270.50	236.00
Family Rate	5,953.30	7,113.35	\$ 13,066.65		200 m3	414.00	353.50
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Total residential	\$ 888,277.12	\$ 1,265,948.53	\$ 2,154,225.65				
					Commercial		
					100 m3	176.00	
Commercial	567,223.35	860,361.50	1,427,584.85		1,000 m3	2,814.00	
					5,000 m3	14,814.00	
					10,000 m3	29,814.00	
Totals	\$ 1,455,500.47	\$ 2,126,310.03	\$ 3,581,810.50	\$ 2,793,400.00	15,000 m3	44,814.00	

Water Billing Cost Examples

		2013 Estimate	2013 Estimate	2013 Estimate	2013 Estimate	
		<u>Option 1</u>	<u>Option 2</u>	<u>Option 3</u>	<u>Option 4</u>	
Cubic Meters		Original Stage 2 of Current Model	2012 Rates with 10% Increase	Flat Base Rate - No Consumption	Flat Base Rate - Same Rate Res/Comm	Current Rates
Residential Rate		\$	\$	\$	\$	\$
R	60	97.50	125.42	128.00	128.00	114.02
R	120	153.75	166.22	200.00	200.00	151.22
R	150	228.75	227.42	270.50	270.50	206.72
R	200	432.50	392.15	414.00	414.00	387.67
R	250	645.00	572.15	564.00	564.00	550.05
Family Rate						
F	60	97.50	125.42	128.00	128.00	114.02
F	120	153.75	166.22	200.00	200.00	151.22
F	150	191.25	207.02	236.00	236.00	188.42
R	200	297.50	298.82	353.50	353.50	271.77
F	250	483.75	432.02	503.50	503.50	399.51
Commercial Rate						
C	60	133.90	147.29	128.00	128.00	133.90
C	100	133.90	147.29	176.00	176.00	133.90
C	200	257.50	283.29	296.00	414.00	257.90
C	1,000	1,246.30	1,371.29	1,256.00	2,814.00	1,240.74
C	5,000	7,001.43	7,611.29	8,931.00	14,814.00	6,203.69
C	10,000	15,586.43	16,851.29	21,431.00	29,814.00	15,329.90
C	15,000	25,036.43	26,751.29	35,431.00	44,814.00	24,329.90

Recommendations

- Option 4 – Flat Rate Base plus consumption fee - same rate for all users
 - Advantages
 - Further promote water conservation in the commercial sector
 - Remove perceived inequity in the current rates between customer groups
 - Maintain stable parcel tax rate
 - Excess revenues generated to be used to reduce debt needs for water treatment plant
 - Disadvantages
 - Commercial billings will increase substantially at the current rates in the model. Reducing the top rates in the model to correct this may reduce the impetus for residential conservation.



COMMITTEE DISCUSSION AND RECOMMENDATION