Minute No. 63
Report - Standing Policy Committee on Infrastructure Renewal and Public Works - November 8, 2005

Item No. 1 2006 Water and Sewer Utility Rates
File WW-2.3

COUNCIL DECISION:

Council concurred in the recommendation of the Standing Policy Committee on Infrastructure Renewal and Public Works and adopted the following:

1. That effective January 1, 2006 the sewer rates, based on water used, be increased to $3.87 from $3.39 per 100 cubic feet, which includes 55 cents per 100 cubic feet for the Environmental Projects Reserve (88 cents in 2005).

2. That effective January 1, 2006 the overstrength wastewater surcharge rate for Total Suspended Solids (TSS), in excess of 350mg/L, be increased to $0.56 from $0.49 per kilogram.

3. That effective January 1, 2006 the overstrength wastewater surcharge rate for Biochemical Oxygen Demand (BOD), in excess of 300 mg/L, be increase to $0.92 from $0.81 per kilogram.

4. That the additional fees and charges as outlined on Appendix G be approved effective January 1, 2006, incorporating the following amendment:

   A. That the 2006 Fee for Water - sold at Standpipe per 1,000 gallons - be reduced from $10.00 to $8.00 per unit.

5. That the City Solicitor/Manager of Legal Services be instructed to prepare the necessary By-laws for submission to Council.

6. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

Report - Standing Policy Committee on Infrastructure Renewal and Public Works - November 8, 2005

DECISION MAKING HISTORY:

Moved by Councillor Clement,

That the recommendation of the Standing Policy Committee on Infrastructure Renewal and Public Works be adopted.

Carried

EXECUTIVE POLICY COMMITTEE RECOMMENDATION:

On November 16, 2005, the Executive Policy Committee concurred in the recommendation of the Standing Policy Committee on Infrastructure Renewal and Public Works and submitted the matter to Council.

Further, on November 16, 2005, the Executive Policy Committee requested that the Director of Water and Waste make a presentation to the Committee on the (updated) financial costs and capital budgetary impacts of implementing the August 2003 Clean Environment Commission recommendation that the City implement a plan directed at improving the City's wastewater treatment and collection systems; including that invitations be extended to the appropriate Provincial Minister(s) and Members of the Legislative Assembly.

STANDING COMMITTEE RECOMMENDATION:

On November 8, 2005, the Standing Policy Committee on Infrastructure Renewal and Public Works concurred in the administrative recommendation, incorporating the following amendment, namely:

- 4. A. That the 2006 Fee for Water - sold at Standpipe per 1,000 gallons - be reduced from $10.00 to $8.00 per unit.

and submitted its recommendation to the Executive Policy Committee and Council.

RE: 2006 WATER AND SEWER UTILITY RATES

FOR SUBMISSION TO: Standing Policy Committee on Public Works

ORIGINAL REPORT SIGNED BY: Acting Director of Water and Waste Department

REPORT DATE: August 5, 2005

RECOMMENDATIONS:

1. Effective January 1, 2006 the sewer rates, based on water used, be increased to $3.87 from $3.39 per 100 cubic feet, which includes 55 cents per 100 cubic feet for the Environmental Projects Reserve (88 cents in 2005).

2. Effective January 1, 2006 the overstrength wastewater surcharge rate for Total Suspended Solids (TSS), in excess of 350mg/L, be increased to $0.56 from $0.49 per kilogram.

3. Effective January 1, 2006 the overstrength wastewater surcharge rate for Biochemical Oxygen Demand (BOD), in excess of 300 mg/L, be increase to $0.92 from $0.81 per kilogram.

4. The additional fees and charges as outlined on Appendix G be approved effective January 1, 2006.

5. The City Solicitor be instructed to prepare the necessary By-laws for submission to Council.

REPORT SUMMARY

KEY ISSUES:

The Department is recommending an increase in the sewer rate in 2006. A typical residential customer will see an annual increase to the utility bill of $40.83, from $570.25 in 2005 to $611.07 in 2006 (an impact of 7%).

The sewer rate increase is primarily the result of increased costs:
- to support the Land Drainage program
- for capital projects and operating protocol that are mandated by the Province under the

Environmental Act licenses for the three water pollution control centres

The rate model reflects the following ten year projected costs of improvements to the wastewater treatment and collection systems as mandated by Manitoba Conservation ($millions):

New Facility	Cash Flow [(1)] 2006-2015	Annual Operating Cost
WEWPCC		
- BNR	$ 23.7	$0.7
- Disinfection	$ 4.2	$0.1
SEWPCC		
- BNR	$ 88.4	$2.6
NEWPCC		
- Centrate	$ 27.4	$1.0
- Disinfection	$ 7.4	$1.0
- BNR	$234.3	$3.5
- Biosolids	$ 59.2	$3.4
CSO Control	$ 87.4	$1.2
TOTAL	$532.0	

WEWPCC - West End Water Pollution Control Centre
SEWPCC - South End Water Pollution Control Centre
NEWPCC - North End Water Pollution Control Centre
BNR - Biological Nutrient Removal
CSO - Combined Sewer Overflow
(1) Assume 2% inflation

For the water and sewer utilities, this ten year plan envisions:

- a 10 year change in the combined water and sewer rate, from $6.62 in 2006 to $9.89 in 2015
- total borrowing of $109.2 million in water and $305.7 million in sewer
- Ongoing infrastructure renewal totalling $60 million in water and $186 million in sewer to be funded from working capital

The sewer by-law provides for a surcharge on high-strength sewage discharged to the sewer system. Due to increasing costs of operations resulting from mandated programs, an increase is recommended to the TSS and BOD surcharge rates in order to recover the cost of providing this service.

IMPLICATIONS OF THE RECOMMENDATIONS:

General Implications

	None
X	For the organization overall and/or for other departments
X	For the community and/or organizations external to the City of Winnipeg
	Involves a multi-year contract

Comment: A typical residential customer will see an annual increase to the utility bill of $40.83, from $570.25 in 2005 to $611.07 in 2006.

Policy Implications

X	No
	Yes – Comment:

Environmental Implications

	None
X	Yes – Comment: Includes improvement in the City's wastewater system, including nutrient removal and combined sewer overflows

Human Resources Implications

X	No
	Yes – Comment:

Financial Implications

	Within approved current and/or capital budget
X	Current and/or capital budget adjustment required

Comment: The sewer rate plan calls for an increase of 14% in the sewer rate for 2006.

REPORT – 2006 WATER AND SEWER UTILITY RATES

REASON FOR THE REPORT:
Changes to the Sewer rate require Council approval in the form of a by-law.

HISTORY:

See Appendix A for the history of Water and Sewer rates for the past ten years.

2003 In August, the Clean Environment Commission (CEC) recommended that the City of Winnipeg implement a plan directed at improving the City's wastewater treatment and collection systems.

2003 On September 26, Manitoba Conservation announced a wastewater treatment plan for the City of Winnipeg, implementing the recommendations of the CEC.

2003 On November 19, Executive Policy Committee (EPC) directed the administration to work with the Province of Manitoba to propose a work schedule and financing plan.

2004 On June 16, City Council concurred with the recommendation of the EPC.

1. *That the administrative report dated June 3, 2004, with respect to the work schedule and financing plan for the Sewer Utility, be received as information.*
2. *That the proper officers of the City be authorized to do all things necessary to implement the intent of the foregoing.*

2004 On September 3, the Province of Manitoba issued a final Environment Act License No. 2669 for the WEWPCC.

2004 On October 1, the City of Winnipeg issued an appeal to the Minister of Conservation to address specific aspects of the license.

2004 On November 24, City Council approved an increase in the sewer rate and fixed quarterly charges for 2005.

2005 On March 23, City Council approved that the water treatment program approved by Council as part of the five year capital forecast be amended to include on-site generation of sodium hypochlorite for disinfection instead of chorine gas, and to include a standby power system to allow operation during power outages, at a total estimated cost of $13.3 million.

DISCUSSION:

The Water and Wastewater utilities continue to face major challenges over the next decade to meet expectations both in terms of facilities, and of new requirements for public accountability. To meet these challenges, ongoing rate increases are required. In addition, the Department will grow in terms of staff numbers, and capability to deliver and operate new systems.

The Department is recommending an increase in the utility rates over the next ten years to support capital projects and operating protocol that are mandated by the Province of Manitoba under the Environmental Act licenses.

The following new facilities are expected to be constructed and in operation. The 2006 utility rates reflect the following ten year cash flow estimates for the years 2006 to 2015.

New Facility	Year Complete	10 year Cash Flow (1)	Total Capital Cost (1)	Annual Operating Cost
Water Treatment Plant	2007	$179.6	$227.3	$13.5
WEWPCC – BNR	2008	$23.7	$26.4	$0.7
WEWPCC - Disinfection	2007	$4.2	$4.2	$0.1
SEWPCC – BNR	2012	$88.4	$88.4	$2.6
NEWPCC - Centrate	2006	$27.4	$30.8	$1.0
NEWPCC - Disinfection	2006	$7.4	$19.7	$1.0
NEWPCC – BNR	2014	$234.3	$234.3	$3.5
NEWPCC - Biosolids	2010	$59.2	$60.2	$3.4
CSO Control	To 2017	$87.4	$400.9	$1.2

WEWPCC - West End Water Pollution Control Centre SEWPCC - South End Water Pollution Control Centre
NEWPCC - North End Water Pollution Control Centre BNR - Biological Nutrient Removal
CSO - Combined Sewer Overflow
(1) Costs assume 2% inflation

Water Rate

For 2006 the water rates will remain at the 2005 levels.

- $2.75 per 100 cu. ft. from 0 - 9,600 cu. ft./quarter (Block 1)
- $2.27 per 100 cu. ft. from 9,601 - 96,000 cu. ft./quarter (Block 2)
- $1.79 per 100 cu. ft. over 96,001 cu. ft./quarter (Block 3)

This includes 40.6 cents per 100 cubic feet for the Water Treatment Reserve in 2006 (39.4 cents in 2005).

The water rate is expected to increase in 2007. Increases in costs for the Water Utility reflect the effects of inflation, changes in estimated consumption due to conservation efforts and technology changes, workplace safety and health programs, and mandated environmental regulations. In addition, the Water Utility's ten year plan includes increases in staff and operating costs that reflect the staged implementation of the water treatment program.

Sewer Rate

In 2006, the Department is proposing that the sewer rate increase from $3.39 to $3.87 per 100 cubic feet. The sewer rate is expected to further increase each year up to 2011 to provide, in part, the necessary funds to implement and operate the expanded wastewater facilities and programs resulting from sewage treatment plant licensing requirements. In addition, the sewer rate will support 100% of the land drainage program costs by the year 2008.

The sewer utility rate projections continue to reflect increasing costs due to the following variables:

- Environmental Act Licenses. The licenses for the WEWPCC and NEWPCC have been issued and the license for the SEWPCC is expected to be issued by the end of 2005. The rate model reflects the first ten years of the program and is based upon the expected license requirements.

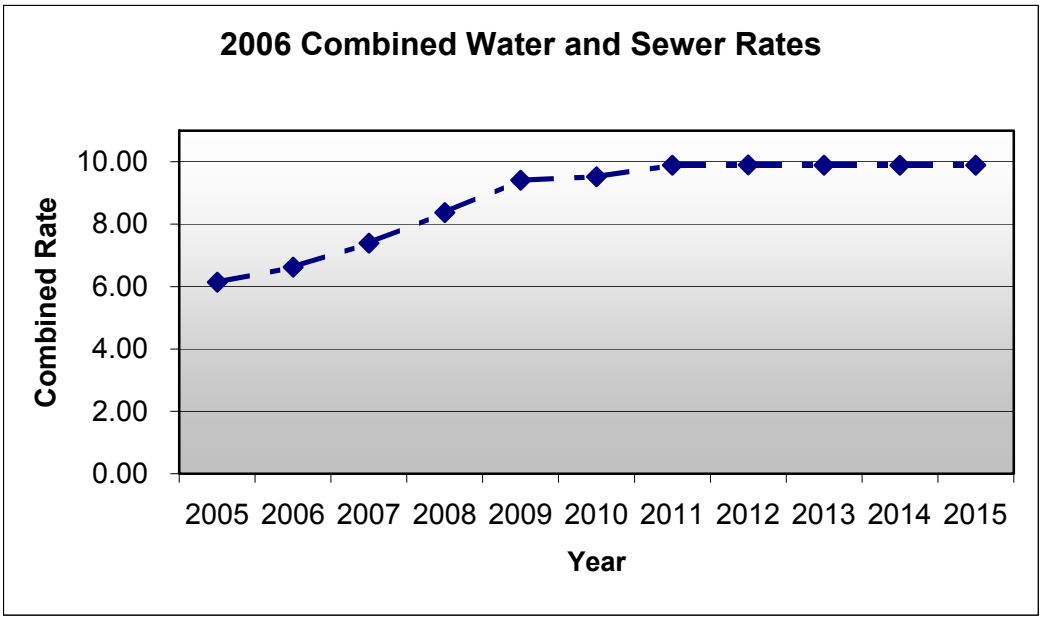
  $533 million in capital costs over the next ten years
  - $346 million for Nutrient Removal
  - $87 million for Combined Sewer Overflow
  - $59 million for biosolids-alternative handling and disposal
  - $27 million for Centrate Treatment
  - $12 million for Disinfection
  - $2 million for other CEC recommendations (licensing, public consultation/notification, environmental management system)

- Federal/Provincial Funding. $48 million in funding under a federal-provincial infrastructure program is expected to be provided to the City of Winnipeg for wastewater system improvements. The Department is anticipating that the agreement will be finalized by 2006 and has included these funds in the sewer utility rate model. This funding is distributed over 5 years (2006 to 2010) reducing the impact of future years' rate increases.

- Property tax reassessment. The City reassessment of the wastewater treatment facilities has resulted in increases in property taxes paid by the sewer utility over the past several years. These increases have been incorporated into the sewer rates.

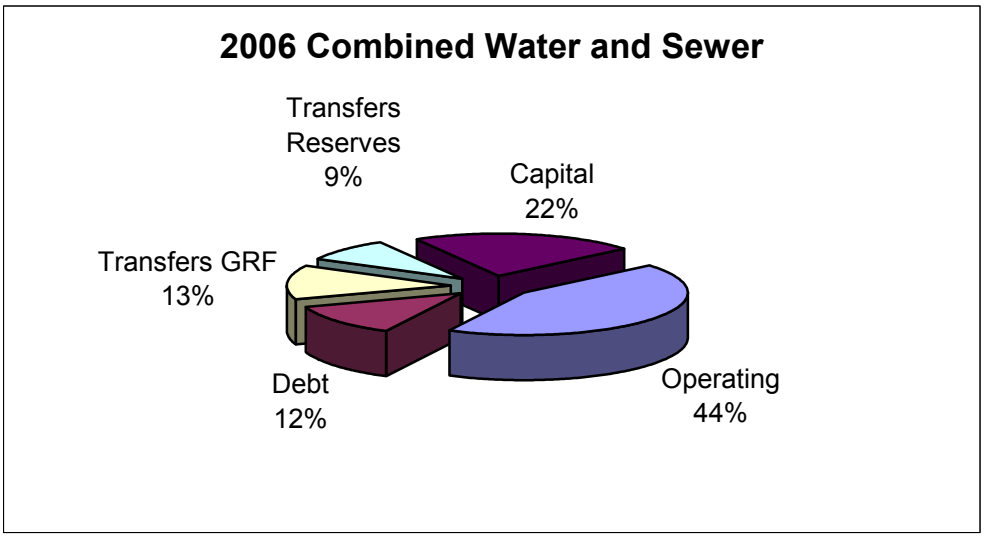
Combined Water and Sewer Rates:

The 2006 water and sewer rate model projects an increase to the combined water and sewer rate up to year 2011 where it is then anticipated that the combined rate will not change.



The combined water and sewer rate is proposed to increase in 2006, from $6.14 to $6.62 per 100 cubic feet. Individually the water rate remains unchanged while the sewer rate increases from $3.39 to $3.87 per 100 cubic feet. The total financial impact on a typical residential customer is an annual increase to the utility bill of $40.83, from $570.25 to $611.07.

For 2006, the following represents the major cost categories contributing to the water and sewer rates. Total costs are forecast at $208 million, including $46 million for cash funded capital projects.



Fixed Quarterly Charge (FQC):

The FQC recovers the cost of meter reading, customer billing, accounts administration, and customer service centre support. Costs associated with the meter installation and maintenance are also recovered from the quarterly charge. A review of the cost allocation to the FQC was completed in 2004. Increased costs associated with customer accounts and meters necessitated a rate change in 2005 in order to recover the fixed cost of these services. The 2006 FQC will remain at the 2005 levels

Reserves:

The Department has established reserves to fund and plan for large and complex capital projects.

Water Treatment Plant Reserve: This reserve will fund a portion of the cost of a Water Treatment program. Total cost of the water treatment plant is estimated at $227.3 million, an increase of $13.3 million from 2005. On March 23, Council adopted a recommendation to amend the Water Treatment Program to include on-site generation of sodium hypochlorite for disinfection, to mitigate the risk of using Chlorine, and a standby power system to ensure a treated water supply during a power outage. Debt financing requirements are projected to

Water Treatment Plant Financing Schedule $000s
(actual to year ending December 31, 2004)

Year	Capital Expenditure	Project Funding			Balance	
		Volume Rate [1]	Debt	Total	Debt	Reserve
to 2003	4,144	82,092	-	82,092	-	77,948
2004	7,346	14,204	-	14,204	-	84,806
2005	36,226	11,596	-	11,596	-	60,176
2006	92,513	10,213	22,500	32,713	22,500	-
2007	85,985	-	86,695	86,695	109,195	-
2008	1,086	-	-	-		
Total	**227,300**	**118,105**	**109,195**	**227,300**		

[1] Includes Interest

increase from $97.2 million to $109.2 million. The following table summarizes the timing of capital expenditures and financing plans.

Environmental Projects Reserve: The Environmental Projects Reserve will support the wastewater treatment improvement program as directed by Manitoba Conservation. Federal/Provincial funding of $48 million over five years has been incorporated into the financing plan. In addition, under this rate plan, the Department will require borrowing authority for up to $305.7 million over the next 10 years in order to fully fund the improvements.

Sewer Utility
Environmental Projects and Financing Schedule $000s

Year	Annual Capital	Project Financing				Balance	
	Expenditure	Volume Rate [1]	Fed/Prov	Debt	Total	Debt	Reserve
to 2003	13,043	52,218			52,218		39,175
2004	2,440	13,095			13,095		49,830
2005	28,877	14,639			14,639		35,592
2006	65,890	8,688	9,600	13,000	31,288	13,000	-
2007	23,435	7,758	9,600	6,000	23,358	19,000	-
2008	38,556	7,773	9,600	21,000	38,373	40,000	-
2009	37,340	11,694	9,600	16,000	37,294	56,000	-
2010	61,192	12,474	9,600	39,000	61,074	95,000	-
2011	73,234	20,391		53,000	73,391	148,000	-
2012	60,574	21,793		38,700	60,493	186,700	-
2013	80,700	21,793		59,000	80,793	245,700	-
2014	82,195	21,809		60,000	81,809	305,700	-
2015	10,483	13,871			13,871		3,388
2016	11,513	13,000			13,000		4,875
2017	9,764	13,000			13,000		8,111
2018	20,292	13,000			13,000		819
2019	21,109	21,000			21,000		710
2020	21,391	21,000			21,000		319
2021	21,534	22,000			22,000		785
2022	22,401	22,000			22,000		384
2023	22,701	23,000			23,000		683
2024	22,852	23,000			23,000		831
2025	23,772	23,000			23,000		59
2026	24,090	25,000			25,000		969
2027	24,250	25,000			25,000		1,719
2028	25,227	25,000			25,000		1,492
2029	25,565	25,000			25,000		927
2030	25,735	25,000			25,000		192
Total to 2015	577,959	227,995	48,000	305,700	581,695		3,388
Total to 2030	900,155	546,995	48,000	305,700	900,695		192

Transfers to the General Revenue Fund:

In 2006, the water and sewer utilities' transfers to the General Revenue Fund (GRF) are estimated at $27.1 million ($21.5 million for 2005) or 16.1% of volume sales.

Transfers to the GRF include a percent of the utilities' base sales, subsidization of the tax-supported programs for fire hydrant maintenance and land drainage, in addition to contributions to general mill-rate programs.

Transfers to Capital Program:

The utilities continue to employ a pay-as-you-go policy for ongoing infrastructure renewal programs. In 2006, the water utility will cash finance an estimated capital program of $7.2 million. The cash financed sewer capital program in 2006 is estimated at $38.7 million.

Overstrength Wastewater Surcharge:

The sewer by-law provides for a surcharge on high-strength sewage discharged to the sewer system. Due to increasing costs of operations resulting from mandated programs, an increase is recommended to the TSS and BOD surcharge rates in order to recover the cost of providing this service.

- Total Suspended Solids (TSS), in excess of 350mg/L, be increased to $0.557 from $0.49 per kilogram
- Biochemical Oxygen Demand (BOD), in excess of 300 mg/L, be increase to $0.92 from $0.813 per kilogram.

Schedule of Fees & Charges (Appendix G):

The sewer by-law and water by-law, Schedule A, contain a number of fees and charges which have not been reviewed for several years. The proposed increases are part of a longer term plan to have full cost recovery for all miscellaneous services provided by the Water and Sewer utilities.

Financial Projection Risks:

The detailed financial projections and rate plans are contained in Appendices B (Water) and C (Sewer). There are several variables that can affect the financial projection and resulting water and sewer rates.

1. Consumption. Consumption is forecast to remain relatively constant over the next ten years. Consumption projections are based on a five year historical average and incorporate the

assumptions found in the 2003 Water Treatment Plant Capacity Assessment report including marginal population growth offset by increased conservation and efficiencies for water usage. If actual consumption is less than plan, this could cause a rate increase (conversely, actual consumption greater than plan could effect a rate decrease). See Appendix D for six year history.

2. Frontage levy. Anticipated frontage levy funding of $9 million per annum for the water main and wastewater sewer renewal programs. Any reduction in frontage levy would require an increase in rates to maintain utility infrastructure as per the planned work schedule.

3. Working capital position. The utilities target to maintain a minimum combined working capital position of 11% of the combined water and sewer sales on an annual basis. The purpose of the working capital reserve is to provide medium-term stability and the ability to absorb losses in any given year when consumption falls short of anticipated levels and/or unforeseen emergency funds are required. The working capital reserve is comprised of current assets (cash and accounts receivable) net of current liabilities (current accounts payable), cash or near cash items that can readily absorb unexpected fluctuations.

4. Rate structure. The 2006 rate model does not contemplate any major changes to the existing rate structure. The Department will report on a cost-of-service rate model along with the effects of winter cost averaging for summer consumption once the implementation of a new billing system is complete.

5. Capital Investment. Capital investment is based upon the Department's best estimate of improvements that are required. Many items can influence the capital program expenditures, including changes in market price, the introduction of new technology and availability of consultant and contractor resources. Recent tenders confirm these risks as the latest estimates reflect increasing costs.

6. Economic development. The City's economic climate can have significant impact on the utilities' financial plan. The addition or deletion of a major customer could effect a change in rates due to the consumption and sales revenue associated with the utilities' large volume users.

7. New legislation. Environmental and public health concerns are driving more stringent standards in the water and wastewater industry. The Environment Act Licenses for the three water pollution control centers could include more stringent limits, and the capital and operating costs could increase. The further introduction of new legislation could cause increased rates through the operating and capital costs associated with compliance.

8. Capacity. A number of labour intensive projects are planned for the Department and for the city as a whole. The consulting, construction and engineering community may reach a

capacity such that the amount of work required could surpass the ability of the community to meet the timelines.

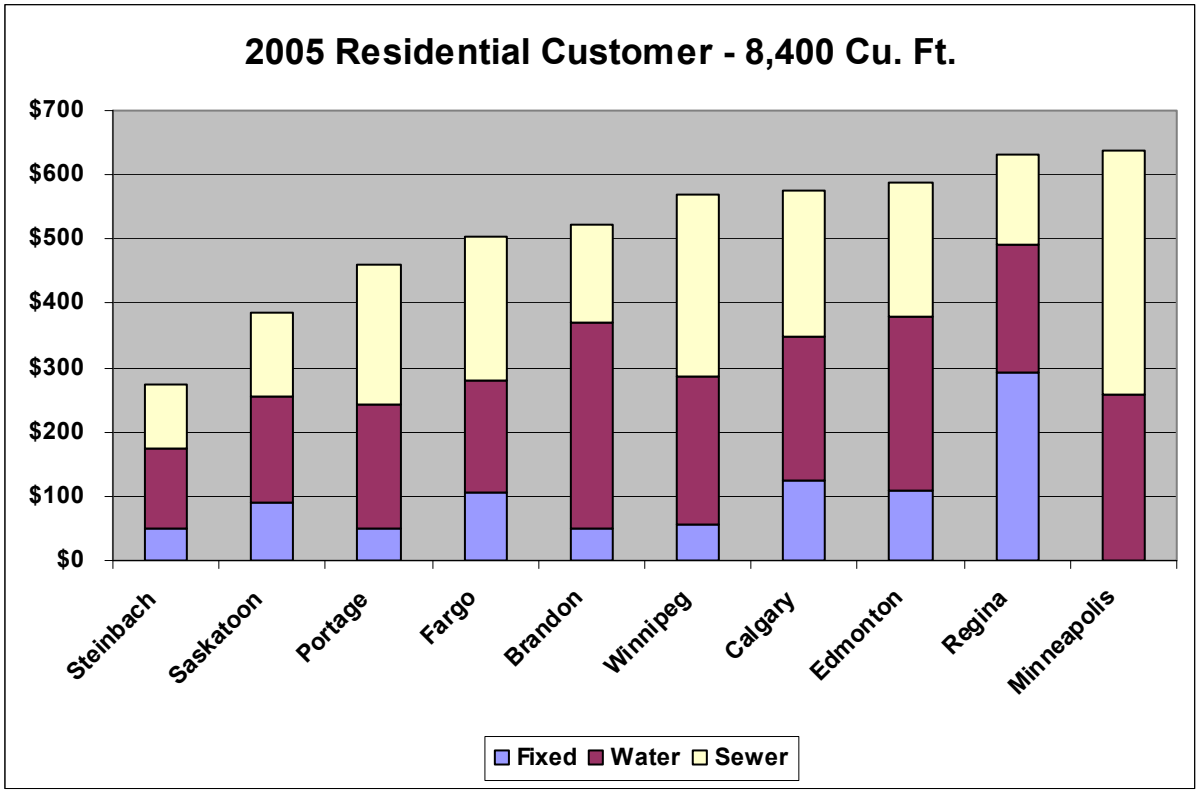
The Water and Sewer Utilities adhere to a set of operating principles that can be found in Appendix E. Appendix F illustrates the impact of the rate strategy on various sample customers.

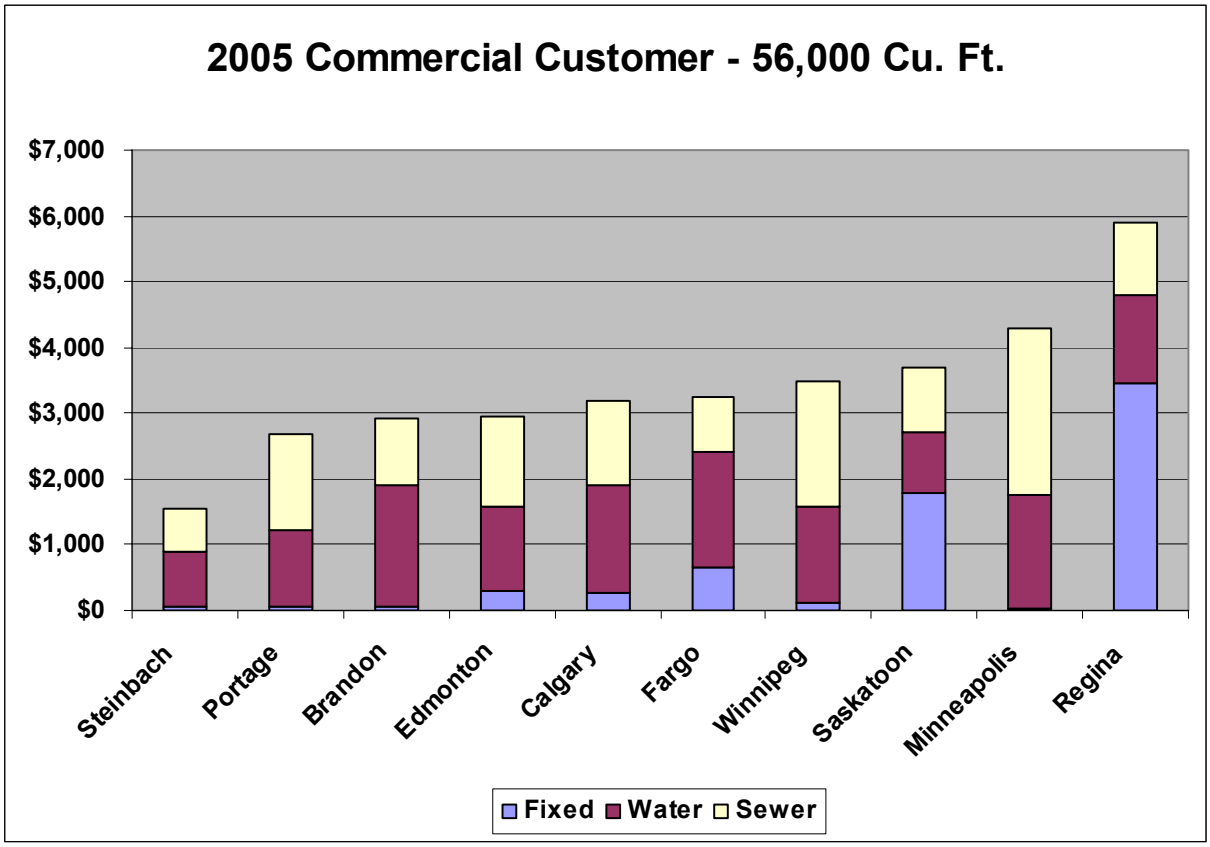
Competitiveness

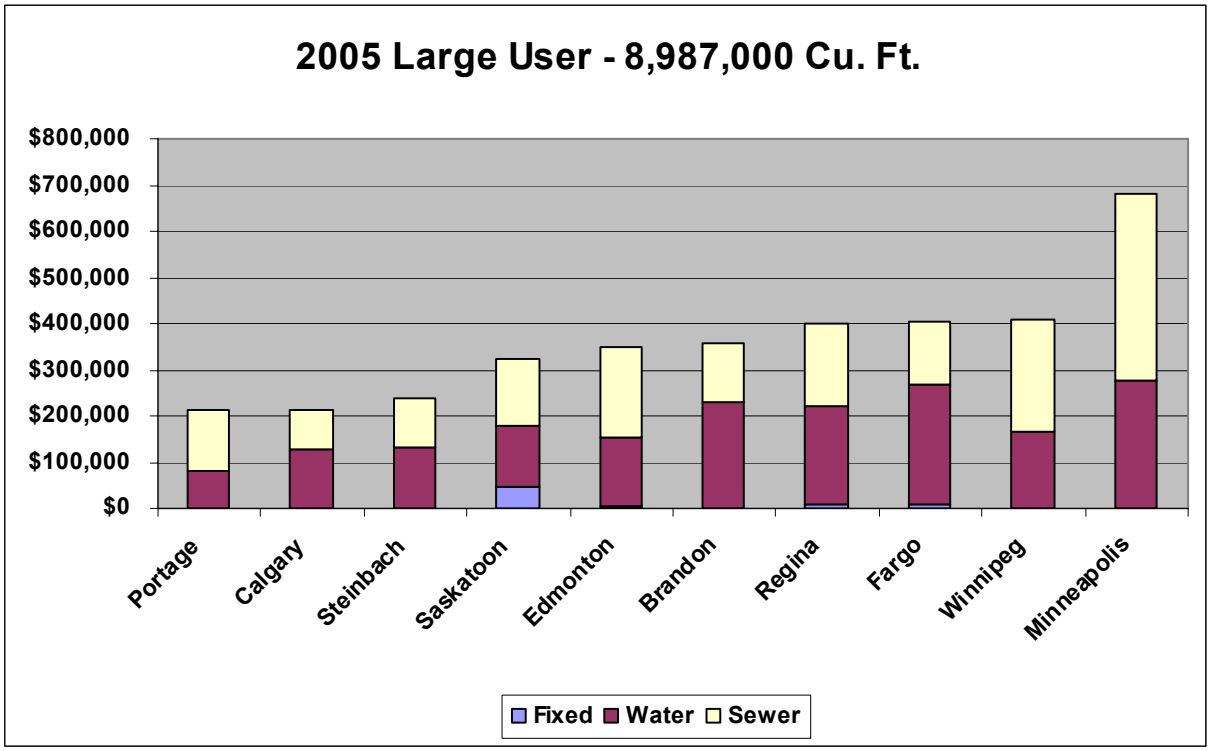
Winnipeg's combined water and sewer rates remain competitive to other cities of similar size. The following table illustrates costs for residential customers (Block 1 rates, consumption of 8,400 cubic feet, 2005 rates).

Residential Customers

	Steinbach	Saskatoon	Portage	Fargo	Brandon	Winnipeg	Calgary	Edmonton	Regina	Minneapolis
Fixed	50.00	73.80	50.84	106.76	49.00	55.00	124.80	107.52	294.00	
Water	125.05	143.64	193.07	172.76	321.11	231.00	224.73	271.42	197.43	259.50
Sewer	97.84	161.52	217.66	223.91	152.23	284.76	225.66	207.87	140.43	377.83
	$272.89	$378.96	$461.57	$503.44	$522.34	$570.25	$575.19	$586.81	$631.86	$637.32




2005 Commercial Customer - 56,000 Cu. Ft.
$7,000
$6,000
$5,000
$4,000
$3,000
$2,000
$1,000
$0
Steinbach
Portage
Brandon
Edmonton
Calgary
Fargo
Winnipeg
Saskatoon
Minneapolis
Regina
Fixed
Water
Sewer



FINANCIAL IMPACT:

The 2006 rates and financial plans for water and sewer and utilities are contained in Appendices B and C. These plans are reflected in the utilities' current and capital estimates and as such, a financial impact statement has not been prepared.

Moira L. Geer, C.A.
Manager of Finance and Administration

APPENDICES

The following appendices are attached as additional information:

APPENDIX A	Water and Sewer Rates - Ten Year History
APPENDIX B	Waterworks System Fund - Ten year financial projection of revenue, expenditures and working capital based on the recommendations contained in this report
APPENDIX C	Sewage Disposal System Fund - Ten year financial projection of revenue, expenditures and working capital based on the recommendations contained in this report
APPENDIX D	Water Consumption Six Year Historical Summary 1999 - 2004
APPENDIX E	Water and Sewer Utility - Principles of Operation
APPENDIX F	Impact of the Water and Sewer recommendations on sample customers January 1st, 2006
APPENDIX G	Schedule of Fees and Charges

IN PREPARING THIS REPORT THERE WAS CONSULTATION WITH AND CONCURRENCE BY:
n/a

THIS REPORT SUBMITTED BY:

Water and Waste Department
Finance and Administration Division
Prepared by: Moira Geer, Lucy Szkwarek, Darlene Capp
File No: 010-07-20-01-00 and 010-07-20-02-00

Appendix A

History of Water, Sewer and Solid Waste Utility Rates
1996 - 2005

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Water Rates (per 100 cu ft)										
Block 1 (< 9,600 cu ft)	**$1.89**	**$2.10**	**$2.32**	**$2.54**	**$2.70**	**$2.75**	**$2.75**	**$2.75**	**$2.75**	**$2.75**
Block 2 (9,600 - 96,000 cu ft)	**$1.54**	**$1.72**	**$1.91**	**$2.10**	**$2.22**	**$2.27**	**$2.27**	**$2.27**	**$2.27**	**$2.27**
Block 3 (> 96,000 cu ft)	**$1.18**	**$1.33**	**$1.50**	**$1.65**	**$1.74**	**$1.79**	**$1.79**	**$1.79**	**$1.79**	**$1.79**
Sewer Rates (per 100 cu ft)										
Volume Rate	**$2.56**	**$2.83**	**$2.83**	**$2.80**	**$2.78**	**$2.73**	**$2.73**	**$2.73**	**$3.11**	**$3.39**
Total Water and Sewer Rate (Block 1)	**$4.45**	**$4.93**	**$5.15**	**$5.34**	**$5.48**	**$5.48**	**$5.48**	**$5.48**	**$5.86**	**$6.14**

Appendix B

WATERWORKS SYSTEM FUND
Financial Projection 2006-2015 ($000s)

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Waterworks System	2005 BUDGET	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Revenue											
Sales Revenue	59,994	60,982	71,642	79,767	86,107	87,834	87,749	87,897	87,988	88,135	88,346
Non Rate Revenue	5,334	5,345	5,477	5,644	5,981	6,264	6,630	7,012	7,190	6,946	6,478
Water Treatment Reserve	10,349	10,213	0	0	0	0	0	0	0	0	0
Total Revenue	**75,676**	**76,540**	**77,120**	**85,411**	**92,088**	**94,098**	**94,379**	**94,908**	**95,178**	**95,081**	**94,825**
Expenditures											
Operating	39,258	42,310	51,728	55,411	56,519	57,650	58,803	59,979	61,178	62,402	63,650
Debt Service	9,032	9,536	11,053	16,430	16,709	16,760	17,081	17,418	17,134	15,654	13,554
Transfer to Water Treatment Reserve	10,349	10,213	0	0	0	0	0	0	0	0	0
Transfer to General Revenue Fund	11,957	12,443	12,496	12,496	12,597	12,699	12,803	12,906	13,012	13,118	13,225
Total Expenditures	**70,596**	**74,503**	**75,277**	**84,337**	**85,825**	**87,109**	**88,686**	**90,303**	**91,324**	**91,174**	**90,429**
Surplus(Deficit) for the year	5,080	2,037	1,843	1,075	6,262	6,989	5,692	4,605	3,854	3,907	4,396
Opening Working Capital		22,319	17,059	15,210	9,849	9,504	5,123	6,315	6,420	5,773	5,331
Appropriated to Capital		(7,246)	(6,112)	(6,435)	(6,615)	(11,415)	(4,500)	(4,500)	(4,500)	(4,500)	(4,500)
Other Changes in Working Capital		(51)	2,420	0	7	45	0	0	0	151	393
Ending Working Capital		17,059	15,210	9,849	9,504	5,123	6,315	6,420	5,773	5,331	5,620
Working Capital as a % of Sales		**28%**	**21%**	**12%**	**11%**	**6%**	**7%**	**7%**	**7%**	**6%**	**6%**

Water Rate	**Block 1 ($dollars)**	**$2.75**	**$2.75**	**$2.94**	**$3.26**	**$3.55**	**$3.55**	**$3.55**	**$3.55**	**$3.55**	**$3.55**	**$3.55**
Rate Change	**Block 1**		**0.0%**	**6.9%**	**10.9%**	**8.9%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**

Long-Term Debt Summary											
New debt, Water Treatment Plant		22,500	86,695								
Debt outstanding, closing year end balance	31,594	49,615	133,056	125,493	117,681	109,674	101,346	92,681	83,886	75,535	68,290

Appendix C

SEWAGE DISPOSAL SYSTEM FUND
Financial Projection 2006-2015 ($000s)

O:\Fa\Lszkware\Rate Model\2006\[06RTS_02.xls]SEWAGE_REPORT Values

Sewage Disposal System	2005 Budget	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Revenue											
Sales Revenue	77,864	88,322	102,835	119,080	133,885	138,277	138,166	138,289	138,314	138,433	138,662
Non Rate Revenue	3,276	4,368	4,995	6,834	7,181	7,069	7,517	8,066	6,932	5,661	5,737
Environmental Projects Reserve	13,944	8,688	7,758	7,773	11,694	12,474	20,391	21,793	21,793	21,809	13,871
Total Revenue	**95,084**	**101,377**	**115,588**	**133,686**	**152,761**	**157,820**	**166,073**	**168,147**	**167,039**	**165,903**	**158,270**
Expenditures											
Operating	40,905	48,522	53,073	56,135	59,341	66,366	69,868	73,449	80,152	82,009	88,175
Debt Service	19,028	15,329	16,175	17,496	22,381	24,631	27,206	29,054	28,638	28,421	29,146
Transfer to Environmental Projects Reserve	13,944	8,688	7,758	7,773	11,694	12,474	20,391	21,793	21,793	21,809	13,871
Transfer to General Revenue Fund	10,592	14,643	18,836	23,771	24,004	24,239	24,476	24,716	24,958	25,203	25,449
Total Expenditures	**84,469**	**87,182**	**95,842**	**105,175**	**117,420**	**127,710**	**141,941**	**149,012**	**155,541**	**157,442**	**156,641**
Surplus(Deficit) for the year	10,615	14,195	19,746	28,512	35,341	30,110	24,133	19,135	11,498	8,461	1,628
Opening Working Capital		11,359	(12,745)	(12,015)	(7,205)	1,991	16,496	23,978	26,865	24,003	22,161
Appropriated to Capital		(38,703)	(18,732)	(21,321)	(24,750)	(17,250)	(15,000)	(15,000)	(15,000)	(10,000)	(10,000)
Other Changes in Working Capital		404	(284)	(2,380)	(1,395)	1,645	(1,651)	(1,248)	640	(303)	9,301
Ending Working Capital		(12,745)	(12,015)	(7,205)	1,991	16,496	23,978	26,865	24,003	22,161	23,091
Working Capital as a % of Sales		**-14%**	**-12%**	**-6%**	**1%**	**12%**	**17%**	**19%**	**17%**	**16%**	**17%**

Sewer Rate	**$3.39**	**$3.87**	**$4.46**	**$5.12**	**$5.85**	**$5.97**	**$6.34**	**$6.34**	**$6.34**	**$6.34**	**$6.34**
Rate Change		**14.2%**	**15.2%**	**14.8%**	**14.3%**	**2.1%**	**6.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**

Long-Term Debt Summary											
New debt, Environmental Projects		**13,000**	**6,000**	**21,000**	**16,000**	**39,000**	**53,000**	**38,700**	**59,000**	**60,000**	
Debt outstanding, closing year end balance	**50,177**	**57,828**	**57,983**	**72,544**	**80,841**	**111,928**	**154,923**	**180,586**	**226,154**	**272,799**	**257,660**

Appendix D

WATER CONSUMPTION HISTORICAL SUMMARY - 000s GALLONS

Consumption for volume sales (excludes standpipe)

O:\Fa\Lszkware\Rate Model\2006\[06RTS_01.xls]Consumption Historical

	1999	2000	2001	2002	2003	2004
B-1 Sales	**98/99**	**99/00**	**00/01**	**01/02**	**02/03**	**03/04**
October	946,381	906,724	824,164	965,309	933,722	795,325
November	724,133	710,007	689,014	738,590	724,901	619,909
December	788,713	758,809	747,260	821,073	817,935	751,683
January	821,931	831,380	801,656	876,961	837,821	852,006
February	686,466	680,216	654,591	620,700	630,317	651,738
March	763,391	758,647	747,005	768,535	759,140	785,707
April	818,561	790,161	826,841	803,207	830,781	808,006
May	666,027	686,032	673,964	665,609	677,894	632,943
June	799,673	902,067	767,123	790,454	858,112	872,663
July	927,065	981,311	849,050	960,142	943,887	853,732
August	784,359	743,338	741,022	761,990	777,798	725,259
September	829,197	772,084	859,102	856,568	869,904	828,967
Total	**9,555,897**	**9,520,776**	**9,180,792**	**9,629,138**	**9,662,212**	**9,177,938**
B-2 Sales	**98/99**	**99/00**	**00/01**	**01/02**	**02/03**	**03/04**
October	377,210	377,891	326,255	443,628	388,686	295,871
November	364,077	373,842	345,176	365,758	318,955	331,895
December	244,511	270,708	257,387	254,680	280,674	198,561
January	318,717	310,487	309,390	342,561	360,932	328,743
February	337,426	342,212	320,493	293,732	315,362	313,277
March	250,387	265,185	245,104	276,281	230,457	279,872
April	267,168	280,253	320,751	308,196	316,622	311,378
May	343,653	323,220	344,120	337,517	306,117	324,550
June	246,325	250,325	242,352	224,977	258,537	256,964
July	327,753	333,668	329,190	365,064	313,258	272,493
August	362,658	379,563	350,348	345,719	396,572	364,001
September	247,023	305,175	277,549	300,375	322,785	333,051
Total	**3,686,908**	**3,812,529**	**3,668,115**	**3,858,488**	**3,808,957**	**3,610,656**
B-3 Sales	**98/99**	**99/00**	**00/01**	**01/02**	**02/03**	**03/04**
October	442,681	352,163	279,214	382,924	297,954	192,412
November	301,648	274,705	301,776	289,609	218,225	324,615
December	117,817	173,978	186,582	180,823	167,851	40,529
January	348,742	267,287	221,279	193,635	295,438	211,402
February	312,489	213,172	191,856	199,970	207,787	252,773
March	104,530	185,755	185,126	138,922	100,921	148,316
April	306,294	234,648	227,242	235,043	242,005	169,360
May	194,127	236,943	223,285	249,468	201,851	312,176
June	238,274	138,755	112,734	115,750	131,279	92,735
July	209,178	302,471	282,364	341,669	436,628	166,094
August	252,974	266,899	254,438	279,939	205,735	360,388
September	278,374	192,008	169,016	179,995	225,071	184,180
Total	**3,107,128**	**2,838,784**	**2,634,912**	**2,787,747**	**2,730,745**	**2,454,980**
TOTAL B1-B3	**16,349,933**	**16,172,089**	**15,483,819**	**16,275,373**	**16,201,914**	**15,243,574**

Appendix E

WATER AND SEWER UTILITY
PRINCIPLES OF OPERATION

1. Self-Supporting Utilities. The Utilities do not receive subsidies from the mill rate.

2. Cost of Service Rates. Customers pay water and sewer rates, which represent the operating and capital costs of providing the utility services.

3. Debt Servicing. The Utilities' revenues are sufficient to service the Utilities' long-term debt.

4. Working Capital Reserves - Water and Sewer Utilities. The Water and Sewer Utilities maintain working capital reserves to protect the Utilities' financial position and prevent significant rate fluctuations that may otherwise result from a decline in consumption or major unforeseen expenditures. On an annual basis, the Utilities strive to maintain a minimum combined working capital position of 11% of the combined Water and Sewer sales.

5. Ten Year Financial Plan - Water and Sewer Utilities. Rates in the Water and Sewer Utilities are planned over a ten-year time frame to mitigate the effects of year over year fluctuations and to coincide with the longer term infrastructure development and renewal planning.

6. Transfers to the General Revenue Fund. The Water and Sewer Utilities transfer funds to the General Revenue Fund in the form of:
   - a percentage of sales revenue, net of capital reserves, as a return to the City on ownership of the Utilities
   - additional general provisions to meet the City's financial targets
   - support to the Fire Hydrant which funds 100% of the cost of this program
   - support to the Land Drainage program which funds 100% of the costs of this program. In addition the utility will fund all of the debt servicing costs in the Land Drainage program by the year 2008.

Capital Reserve Funds. The Utilities establish reserves to fund major capital projects. The pay-as-you-go capital program is more economical than traditional debt financing, which equates to lower rates for our customers. In addition, for specific and cost intensive projects, the Department has developed a strategy whereby a portion of the project is funded through reserves and a portion through debt financing. This strategy facilitates an equitable approach for short and long term funding support.

Appendix F

CUSTOMER IMPACT ANALYSIS
Annual Basis

O:\Fa\Lszkware\Rate Model\2006\[06RTS_02.xls]customer impact calculation

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Residential 5/8" meter												
8,400	cu.ft. Water	2.75	2.75	2.94	3.26	3.55	3.55	3.55	3.55	3.55	3.55	3.55
	Sewer	3.39	3.87	4.46	5.12	5.85	5.97	6.34	6.34	6.34	6.34	6.34
	Total Volume Rate	**6.14**	**6.62**	**7.40**	**8.38**	**9.40**	**9.52**	**9.89**	**9.89**	**9.89**	**9.89**	**9.89**
	FQC	**13.75**	**13.75**	**13.75**	**13.75**	**13.75**	**13.75**	**13.75**	**13.75**	**13.75**	**13.75**	**13.75**
		$570.25	$611.07	$676.04	$758.53	$844.92	$854.71	$885.37	$885.37	$885.37	$885.37	$885.37
Overall $ Change		29.61	40.83	64.96	82.49	86.39	9.80	30.66	0.00	0.00	0.00	0.00
Overall % Change		5.48%	7.16%	10.63%	12.20%	11.39%	1.16%	3.59%	0.00%	0.00%	0.00%	0.00%
Small Restaurant 1" meter												
56,000	cu.ft. Water	2.27	2.27	2.44	2.76	3.05	3.05	3.05	3.05	3.05	3.05	3.05
	Sewer	3.39	3.87	4.46	5.12	5.85	5.97	6.34	6.34	6.34	6.34	6.34
	Total Volume Rate	**5.66**	**6.14**	**6.90**	**7.88**	**8.90**	**9.02**	**9.39**	**9.39**	**9.39**	**9.39**	**9.39**
	FQC	**17.70**	**17.70**	**17.70**	**17.70**	**17.70**	**17.70**	**17.70**	**17.70**	**17.70**	**17.70**	**17.70**
		$3,286.40	$3,553.74	$3,979.28	$4,530.29	$5,101.71	$5,171.67	$5,376.07	$5,376.07	$5,376.07	$5,376.07	$5,376.07
Large Restaurant 3" meter												
626,000	cu.ft. Water	1.79	1.79	1.97	2.28	2.57	2.57	2.57	2.57	2.57	2.57	2.57
	Sewer	3.39	3.87	4.46	5.12	5.85	5.97	6.34	6.34	6.34	6.34	6.34
	Total Volume Rate	**5.18**	**5.66**	**6.43**	**7.40**	**8.42**	**8.54**	**8.91**	**8.91**	**8.91**	**8.91**	**8.91**
	FQC	**109.45**	**109.45**	**109.45**	**109.45**	**109.45**	**109.45**	**109.45**	**109.45**	**109.45**	**109.45**	**109.45**
		$33,367.72	$36,359.42	$41,147.26	$47,273.01	$53,673.25	$54,412.08	$56,696.98	$56,696.98	$56,696.98	$56,696.98	$56,696.98
Foundry 4" meter												
8,987,600	cu.ft. Water	1.79	1.79	1.97	2.28	2.57	2.57	2.57	2.57	2.57	2.57	2.57
	Sewer	3.39	3.87	4.46	5.12	5.85	5.97	6.34	6.34	6.34	6.34	6.34
	Total Volume Rate	**5.18**	**5.66**	**6.43**	**7.40**	**8.42**	**8.54**	**8.91**	**8.91**	**8.91**	**8.91**	**8.91**
	FQC	**139.25**	**139.25**	**139.25**	**139.25**	**139.25**	**139.25**	**139.25**	**139.25**	**139.25**	**139.25**	**139.25**
		$466,559.09	$509,530.42	$578,362.46	$666,221.64	$758,152.21	$768,644.28	$801,449.02	$801,449.02	$801,449.02	$801,449.02	$801,449.02

Appendix G

Water and Waste Department
Schedule of Fees and Charges
Effective January 1, 2006

Description	2005 Fee	Proposed 2006	Units	Authority
WATERWORKS SYSTEM				
Water-Sold at Standpipe				
per 1,000 gallons	$6.00	$10.00	each	By-law 504/73
Key Guard Deposit Fee				
Deposit fee for key access to standpipes	$75.00	$200.00	per key	By-law 504/73
SEWAGE DISPOSAL SYSTEM				
Overstrength Wastewater Surcharge Rates				
Biochemical Oxygen Demand surcharge rate (in excess of 300 mg/L)	$0.81	$0.92	per Kg	By-law 7070/97
Total Suspended Solids surcharge rate (in excess of 350 mg/L)	$0.49	$0.56	per Kg	By-law 7070/97
Record Search Fee				
Record search account history up to 5 most recent years	$25.00	$50.00	per account	By-law 7070/97
Record search account history each additional year	$5.00	$50.00	per account	
Sewer Adjustment Fee				
Initial application fee-nonrefundable	$150.00	$175.00	per application	By-law 7070/97
Annual renewal and inspection fee	$100.00	$125.00	per application	
Additional charge per metering device	$20.00	$25.00	per meter	