Minute No. 304
Report – Standing Policy Committee on Infrastructure Renewal and Public Works – March 5, 2012 adjourned to March 6, 2012

Item No. 1 2012 Water and Sewer Rates

COUNCIL DECISION:

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

1. That an increase to the water rate, based on the amount of water used, effective April 1, 2012, be approved as follows:

Customer Groups	Dollar Amount of Increase (per cubic metre)	New Rate Effective April 2012 (per cubic metre)
Block 1 Customers (0 – 272 cubic metres/quarter)	$0.01	$1.35 (up from the 2011 rate of $1.34)
Block 2 Customers (272.1 – 2,720 cubic metres/quarter)	$0.03	$1.20 (up from the 2011 rate of $1.17)
Block 3 Customers (over 2,720 cubic metres/quarter)	$0.12	$1.12 (up from the 2011 rate of $1.00)

2. That an $0.13 increase to the sewer rate, based on the amount of water used, effective April 1, 2012 be approved as follows:

2011 Rate	Recommended Rate for 2012	Amount Allotted for Environmental Projects Reserve Fund in 2011	Amount Recommended for Environmental Projects Reserve Fund in 2012
$1.97 per cubic metre	$2.10 per cubic metre	$0.22 per cubic metre	$0.26 per cubic metre

3. That an $0.05 increase in the daily rate be approved for all meter sizes for the basic charge effective April 1, 2012.

Report – Standing Policy Committee on Infrastructure Renewal and Public Works – March 5, 2012 adjourned to March 6, 2012

COUNCIL DECISION (continued):

4. That changes to the rate structure for overstrength compounds in wastewater be approved as follows:

   A. A $0.07 increase in the rate for total suspended solids in excess of 350 milligrams per litre, effective July 1, 2012.

2011 rate	Recommended 2012 Rate
$0.73 per kilogram	$0.80 per kilogram

   B. Implement a new fee of $2.00 per kilogram for total phosphorus in excess of 10 milligrams per litre, effective January 1, 2013.

   C. Implement a new fee of $1.00 per kilogram for total nitrogen in excess of 60 milligrams per litre, effective January 1, 2013.

5. That a By-law to amend the Water Works By-law No. 504/73 (Appendix G) be enacted to implement the above fee changes.

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 – March 5, 2012 adjourned to March 6, 2012

DECISION MAKING HISTORY:

Moved by Councillor Vandal,

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

Carried

EXECUTIVE POLICY COMMITTEE RECOMMENDATION:

On March 14, 2012, 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.

STANDING COMMITTEE RECOMMENDATION:

On March 6, 2012, the Standing Policy Committee on Infrastructure Renewal and Public Works concurred in the recommendation of the Winnipeg Public Service and submitted the matter to the Executive Policy Committee and Council.

ADMINISTRATIVE REPORT

ISSUE: 2012 WATER AND SEWER RATES

Critical Path: Standing Policy Committee on Infrastructure Renewal and Public Works - Executive Policy Committee – Council

AUTHORIZATION

Author	Department Head	CFO	CAO
M. L. Geer, C.A. Manager of Finance and Administration	D. Sacher, P. Eng. Director, Water and Waste Department	M Ruta CFO	D Joshi COO

RECOMMENDATIONS

1. An increase to the water rate, based on the amount of water used, is recommended effective April 1, 2012, as follows:

Customer Groups	Dollar Amount of Increase (per cubic metre)	New Rate Effective April 2012 (per cubic metre)
Block 1 Customers (0 – 272 cubic metres/quarter)	$0.01	$1.35 (up from the 2011 rate of $1.34)
Block 2 Customers (272.1 – 2,720 cubic metres/quarter)	$0.03	$1.20 (up from the 2011 rate of $1.17)
Block 3 Customers (over 2,720 cubic metres/quarter)	$0.12	$1.12 (up from the 2011 rate of $1.00)

2. A $0.13 increase to the sewer rate, based on the amount of water used, is recommended effective April 1, 2012:

2011 Rate	Recommended Rate for 2012	Amount Allotted for Environmental Projects Reserve Fund in 2011	Amount Recommended for Environmental Projects Reserve Fund in 2012
$1.97 per cubic metre	$2.10 per cubic metre	$0.22 per cubic metre	$0.26 per cubic metre

3. A $0.05 increase in the daily rate is recommended for all meter sizes for the basic charge effective April 1, 2012.

4. Changes to the rate structure for overstrength compounds in wastewater are recommended as follows:

    i. A $0.07 increase in the rate for total suspended solids in excess of 350 milligrams per litre, effective July 1, 2012.

2011 rate	Recommended 2012 Rate
$0.73 per kilogram	$0.80 per kilogram

    ii. Implement a new fee of $2.00 per kilogram for total phosphorus in excess of 10 milligrams per litre, effective January 1, 2013.

    iii. Implement a new fee of $1.00 per kilogram for total nitrogen in excess of 60 milligrams per litre, effective January 1, 2013.

5. Council enact a By-law (draft attached as Appendix G, Water Works By-Law Amendment) to implement these fee changes.

REASON FOR THE REPORT

Changes to the water and sewer rates, including overstrength rates, require Council approval.

IMPLICATIONS OF THE RECOMMENDATIONS

The cost of Winnipeg's high quality water and sewer services, while increasing, is still very affordable at one third of a cent ($0.00345) per litre.

Winnipeggers continue to embrace good water conservation practices. As is being seen across North America, per capita water consumption is the lowest it has been in decades. Despite a steadily rising population, overall annual consumption is forecasted to continue to decline (Appendix A, Water Consumption Forecast). In the short term, rates will increase to support the systems' mostly fixed maintenance costs and regulatory-driven capital investment. Based on the most current data, the 2012 consumption forecast is approximately 2% per year lower than what was forecast in the 2011 rate report.

The good news is sustained conservation will eventually result in future capital cost savings. Winnipeg's population is forecasted to grow to over 760,000 by 2021. Conservation can eliminate the need for costly expansion of existing infrastructure.

The Department is moving to full cost recovery of the City's water, sewer and overstrength charges. The objective is to determine service rates by class of customer, using industry standard cost allocation practices. The Department studied and identified analytical models to develop financial plans for delivery of water, sewer and overstrength charges. The proposed rates in this report include components of the study.

Water Rate

The overall water rate is slightly increasing due to inflationary increases and there are varying increases to different customer types with the move towards a uniform water rate.

The Department is working on a plan to change from the current declining block rate structure to one uniform rate for all water customers. This change would be phased in over a multi-year period starting in 2012. This is consistent with the rate structure currently used for sewer charges and the full cost recovery strategy.

The move to a uniform water rate is appropriate given the change in customers' consumption patterns. Utilities design their water system to meet water demand requirements – water treatment and distribution systems are sized to meet variations in average and peak demand factors for all customer types. The trend all across North America and also in Winnipeg is that water usage patterns are fairly consistent across customer types and there is no longer a basis to charge different rates based upon variations in peak demands. In other words, there is no variation in the cost to provide water service to different customer classes. A uniform rate also helps promote the City's water conservation program.

Sewer Rate

The sewer rate is increasing primarily to pay for $1.2 billion in wastewater treatment improvements that have been mandated by the Province of Manitoba. Without these improvements the sewer rate would only increase due to inflation.

The wastewater upgrades consist of biological nutrient removal at the North and South End Water Pollution Control Centres, biosolids management and combined sewer overflow (CSO) control.

The existing cost estimates for this program are preliminary and are subject to change:

- Preliminary design is just underway for the sewage treatment plant upgrades and the recently introduced "Save the Lake Winnipeg Act" could prescribe more costly treatment processes.
- Biosolids and CSOs are in the very early planning stages and the cost of these improvements depends largely on what the Province will prescribe.

The sewer capital projections incorporate $50 million in Federal/Provincial Funding as secured under a Canada Strategic Infrastructure Fund Agreement.

The sewer capital projections incorporate an additional $206 million from the Province as announced in the 2007 throne speech.

Any additional funding from other levels of government, as was recommended in the 2003 Clean Environment Commission report, would mitigate the rate increase.

Daily Basic Service Charge

The recommended increase in the daily basic service charge of $0.05 per day for all meters (both City and privately owned) is the first of a five year strategy to phase in full cost recovery of this service. Currently, for a customer with a 5/8" meter, the Department is only recovering 35% of the full cost of this service. Other jurisdictions have a much larger fixed component in their rate structure.

Billed as a daily rate, this charge is based on meter size, and covers the cost of water meters (including maintenance and readings), Water Bill Inquiry Line customer service, and billing costs. For a typical residential customer, the increase would be $0.05 per day or $18.25 per year.

Overstrength Wastewater Rates

In response to Provincial legislation which has established limits on phosphorus and nitrogen in wastewater effluent, new phosphorus and nitrogen limits at source were approved by Council on July 21, 2010, in the new Sewer By-law. The new fees for phosphorus and nitrogen in wastewater are recommended as a result of new biological nutrient removal processes implemented at the West End Water Pollution Control Centre and interim treatment processes implemented at the North End Water Pollution Control Centre. Up until now, any costs associated with treatment of high levels of nitrogen and phosphorus discharges in wastewater has been subsidized by the sewer rate. Based upon existing nutrient removal facilities, the total cost to remove phosphorus is $8.43 per kilogram and the cost to remove nitrogen is $2.96 per kilogram. These costs will rise with the addition of full biological nutrient removal at the North and South End Water Pollution Control Centre and will be phased in over a multi-year period starting in 2012.

An increase in the rate for total suspended solids is recommended to move towards full cost recovery for this service. This rate has not increased since 2007.

HISTORY

Working Capital

Historically, the Water and Sewer Utilities strive to maintain a minimum working capital reserve of 11% of the combined water and sewer sales.

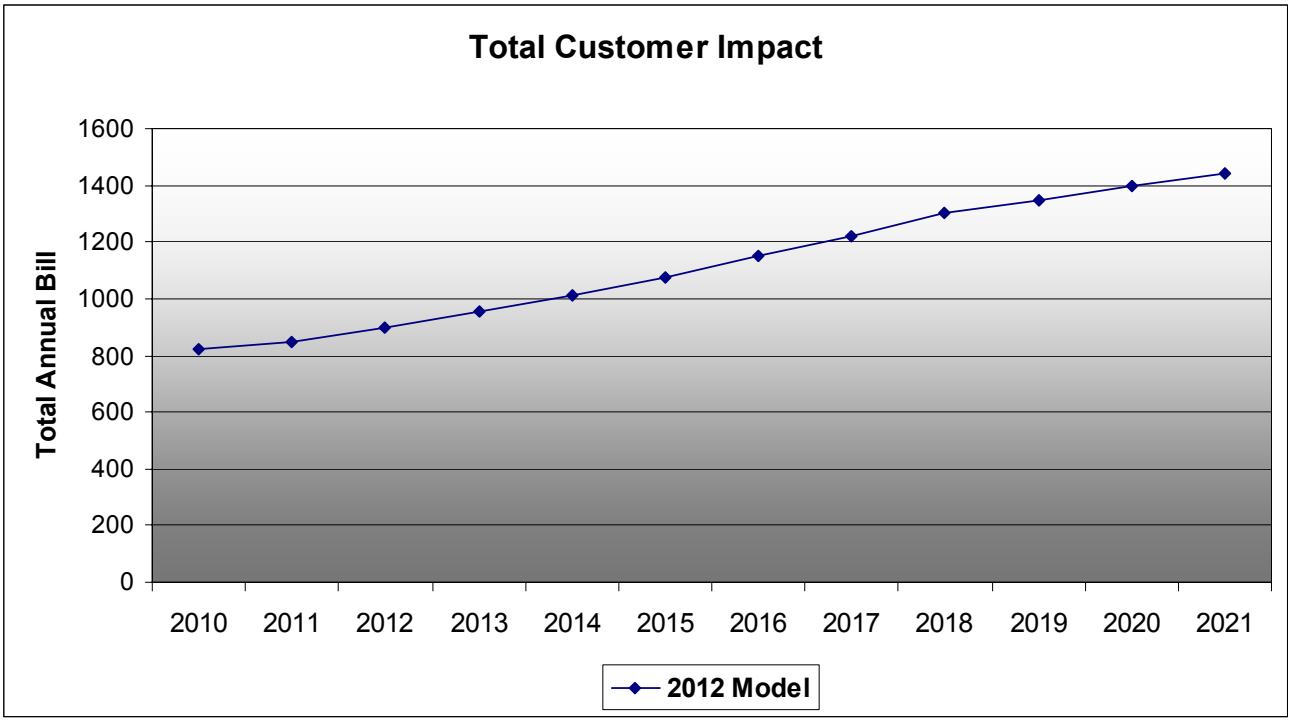
Based upon industry best practices, the working capital target has been revised to 60 days or 17% of combined operating and maintenance costs (O&M). Maintaining this level of working capital ensures sufficient funds are available to sustain operations, protect our customers from significant rate fluctuations, provide medium-term financial stability, and absorb losses in any given year that may otherwise result from a decline in consumption or major unforeseen expenditures.

Working capital is an important measure of liquidity that bond rating agencies will look at when issuing the City's bond rating.

Total Water and Sewer Charges – A Ten Year Forecast

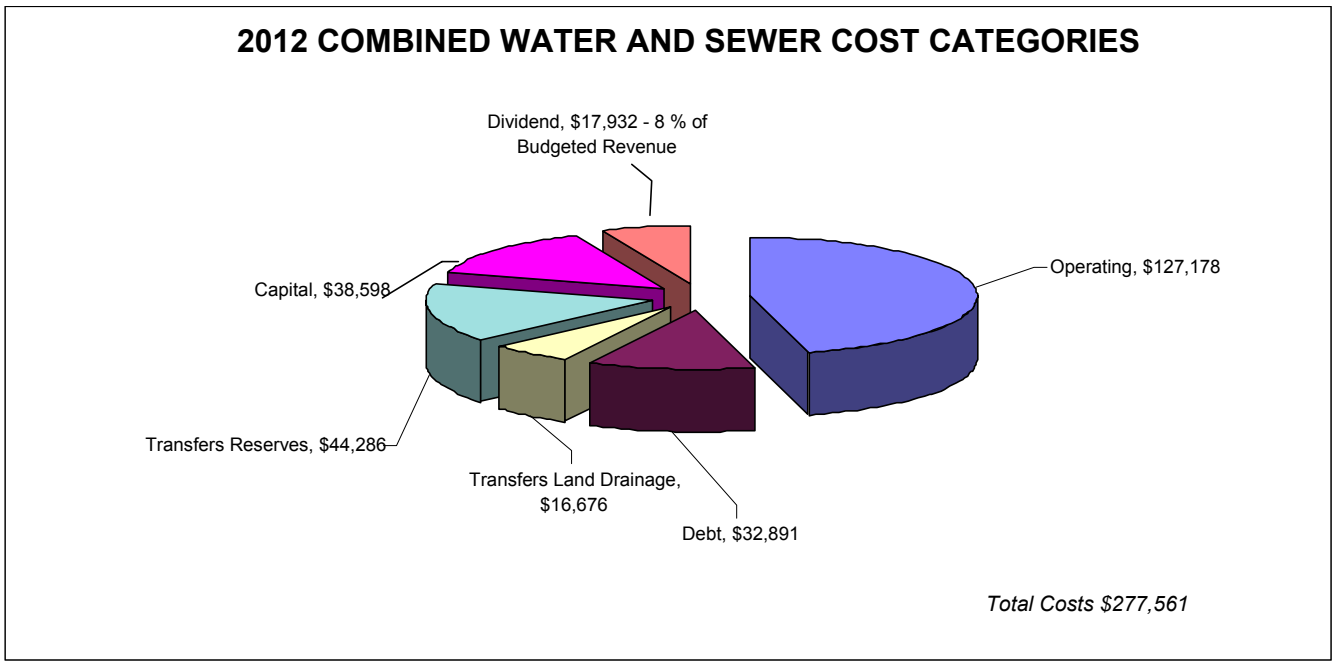
For a typical residential customer, the 2012 rate model projects an increase to the combined water and sewer rate (not including daily basic charge) of $0.14 or 4.2%, from $3.31 in 2011 to $3.45 in 2012. (Appendix B, Water Works System Fund and Appendix C, Sewage Disposal System Fund, 10 Year Financial Projection)

Total customer impact, including the daily basic charge, projects an annual increase of $51.07 or 6% from $849.40 in 2011 to $900.47 in 2012. (Appendix D, Customer Impact Analysis Total Bill)



Combined Water and Sewer Cost Categories – 2012

For 2012, the following represents the major cost categories funded by the water and sewer rates. Total costs are forecast at $277.6 million, including $38.6 million for cash funded capital projects.



Reserves

Environmental Projects Reserve: The Environmental Projects Reserve will support the wastewater treatment improvement program as directed by Manitoba Conservation. Federal/Provincial funding of $256 million over eight years has been incorporated into the financing plan. In addition, under this rate plan, the Department will require borrowing authority for up to $442 million in order to fully fund the improvements over the next 10 years.

Contributions are forecasted to increase in order to comply with the City debt strategy as approved by Council on June 22, 2011.

Sewer Utility – Environmental Projects and Financing Schedule ($000s)

Year	Annual Capital	Project Financing					Balance	
	Expenditure	Volume Rate [1]	Fed/Prov	Debt	Retained Earnings	Total	Debt	Reserve
to 2006	44,337	90,944	-	-		90,944	-	46,607
2007	19,430	9,959	8,200	-		18,159	-	45,336
2008	21,789	8,514	3,866	-	3,028	15,408	-	38,955
2009	5,529	9,844	4,795	-		14,639	-	48,065
2010	13,592	12,181	1,904	-	8,415	22,500	-	56,973
2011	16,286	14,452	7,138	-	$2,918	24,508	-	65,195
2012	134,295	15,986	58,862	-	$25,861	100,709	-	31,609
2013	177,355	18,842	67,235	59,670		145,747	59,670	0
2014	196,325	19,057	52,000	125,268		196,325	184,938	0
2015	139,421	18,862	52,000	68,559		139,421	253,497	0
2016	122,313	20,755		101,558		122,313	355,055	0
2017	68,863	20,866		47,996		68,862	403,051	-
2018	30,110	20,660		10,000		30,660	413,051	550
2019	30,110	20,453		10,000		30,453	423,051	893
2020	30,110	20,249		9,000		29,249	432,051	32
2021	30,043	20,045		9,966		30,011	442,017	1
2022	27,000	21,008		5,991		26,999	448,008	-
2023	23,000	21,116		1,884		23,000	449,893	-
2024	21,000	21,116		-		21,116	449,893	116
2025	21,000	21,223		-		21,223	449,893	338
2026	21,000	21,223		-		21,223	449,893	561
2027	21,000	21,223		-		21,223	449,893	784
2028	21,000	21,330		-		21,330	449,893	1,114
2029	21,000	21,437		-		21,437	449,893	1,551
2030	21,000	21,544		-		21,544	449,893	2,095
Total to 2021	1,079,908	341,669	256,000	442,017	40,222	1,079,908	432,051	32
Total to 2030	1,276,908	532,888	256,000	449,893	40,222	1,279,003	449,893	2,095

[1] Includes Interest
[2] Project forecast inlcudes inflation and contingency

Sewer System Rehabilitation and Water Main Renewal Reserves

The Sewer System Rehabilitation and Water Main Renewal reserves have been funded from water and sewer rates since 2009. Maintaining the reserves allows the Department to monitor funds, manage contributions and ensure long term funding availability. Based on the Department's asset management strategy and industry best practices, contributions to the reserves will gradually increase to begin to address the infrastructure deficit. Reserve spending is approved through the capital budget process.

Transfers

Land Drainage Program

In 2012, sewer revenues will fund the $15.4 million land drainage and flood control program ($13.6 million in 2011)

The sewer revenues will also fund the land drainage capital program, which was formerly funded by the frontage levy. Contributions are increasing by $1.3 million in 2012 and will continue to increase over the next few years to address the infrastructure deficit.

Capital Program
The water and sewer funds continue to employ a pay-as-you-go policy for ongoing infrastructure renewal programs. In 2012, the water fund will finance an estimated capital program of $12.6 million. The cash-financed sewer fund capital program in 2012 is estimated at $26 million, not including the contributions to the Environmental Projects Reserve.

Dividends

Based on the recommended rate increase, the Department is expected to pay a dividend of $17.93 million for 2012 – $7.22 million for water ($7.05 million in 2011), and $10.71 million for sewer ($10.14 million in 2011).

A utility dividend policy was introduced during the 2011 budget process and approved by City Council on March 22, 2011, requiring the utilities to pay an annual dividend of 8% to the City of Winnipeg based on budgeted gross water and sewer sales revenue. City Council will review this policy every four years.

Financial Projection Uncertainties

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 forecasted to continue to gradually decline over the next 10 years. The selected consumption forecast methodology applies the prior 5-year rolling average of the percentage changes in consumption per account to determine a forecasted annual value for consumption per account. As conservation potential is realized in Winnipeg, declines experienced historically are less likely over the forecast period. The rolling 5-year average of percentage changes was selected because it captures overall trends in consumption patterns and is least sensitive to single year anomalies. If actual consumption is less than plan, this could cause a rate increase (conversely, actual consumption greater than plan could effect a rate decrease or mitigate future increases). Appendix E, Historical Water Consumption Summary.

2. Capital Investment: Capital investment is based upon the Department's current estimate of improvements that are required. Many items can influence the capital program expenditures, including escalation in market price, the introduction of new technology, availability of consultant and contractor resources, mandated improvements and detailed design.

3. Economic Development: The City's economic climate can have significant impact on the 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 large volume users.

4. Service Sharing: Service sharing provides an opportunity to add new customers and take advantage of surplus capacity within the existing water and sewer infrastructure.

5. New Legislation: Environmental and public health concerns are driving more stringent standards in the water and wastewater industry. The Environment Act Licences for the three sewage treatment plants have required large increases in capital and operating costs. The further introduction of new legislation could cause increased rates through the operating and capital costs associated with compliance. It is expected that an environmental licence will be issued for combined sewer overflow mitigation in the near future.

Working Capital

The funds target is to maintain a minimum combined working capital position of 60 days operating and maintenance expenses on an annual basis. The purpose of the working capital is to provide medium-term stability, ensure the Utility has adequate liquidity to sustain operations 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 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. It is prudent to have a larger shock absorber under conditions where change is significant, costs are increasing and consumption is declining.

The water and sewer funds adhere to a set of operating principles that can be found in Appendix F.

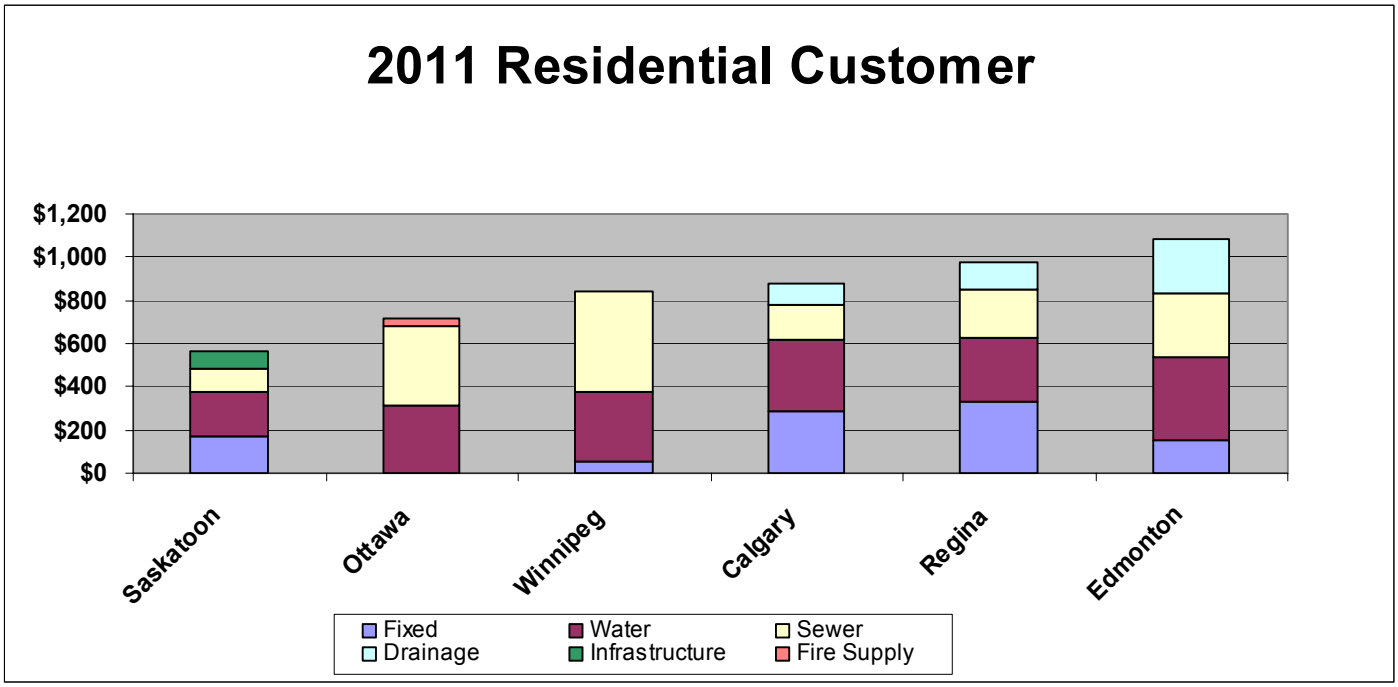
Competitiveness

Winnipeg's combined water and sewer rate remains competitive to other cities of similar size. Rates continue to increase across cities surveyed. Increases in 2011 ranged from 3.2% to 8.9% (Winnipeg was 3.2%). Increases are being driven by more stringent regulatory standards, expansion and declining consumption.

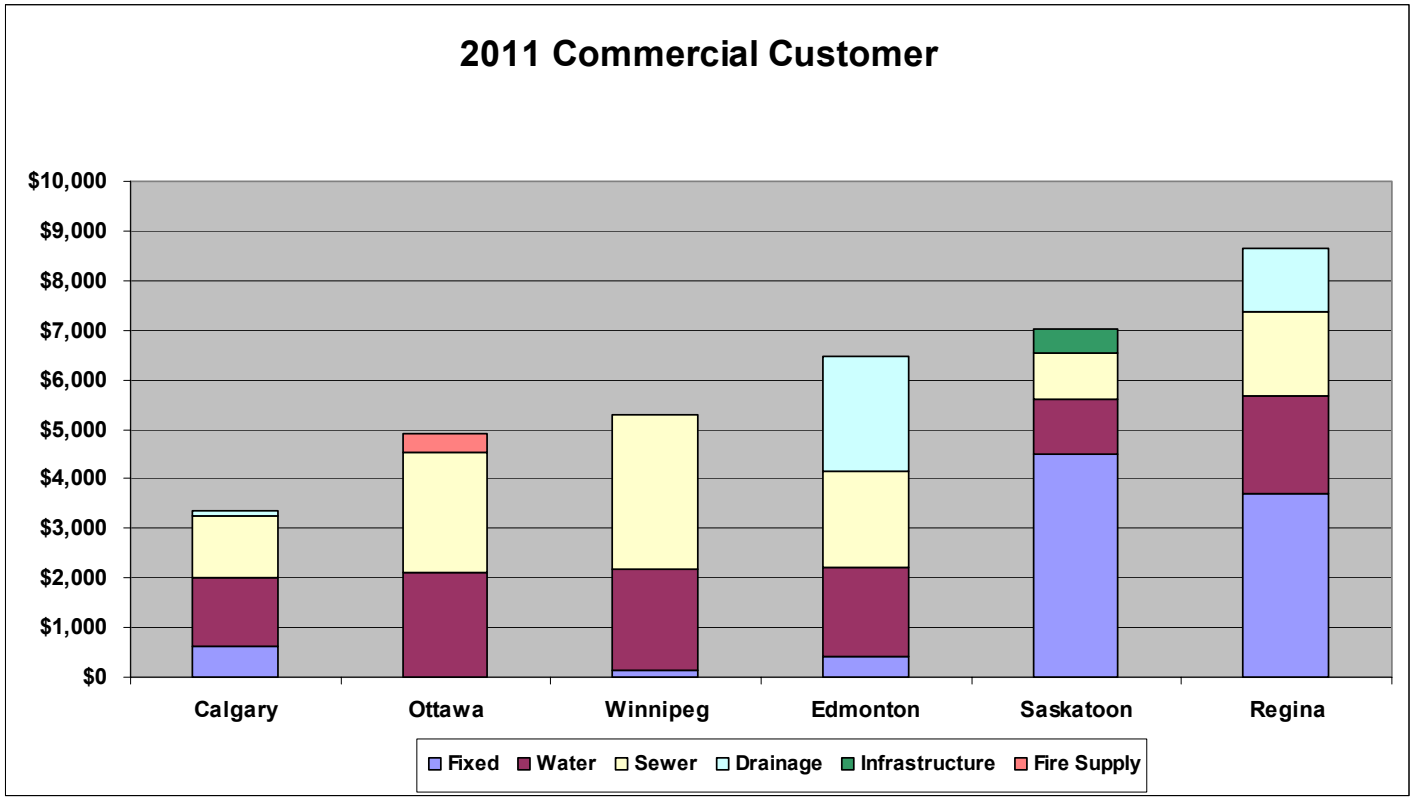
A significant difference between Winnipeg and some other cities is that Winnipeg's water and sewer rates encompass funding for all services including fire supply, land drainage and infrastructure. Some of the cities in our comparison charge separate rates on their water and sewer utility bills for these services. For a more accurate comparison, we have included any fees charged in other cities that are encompassed in Winnipeg's water and sewer rates.

The following tables illustrate 2011 costs in select cities for residential customers (Block 1 rates, consumption of 240 cubic metres), commercial customers (Block 1 and 2 rates, consumption of 1,600 cubic metres) and large users (Block 1, 2 and 3 rates consumption of 254,500 cubic metres) each in 2011 rates.

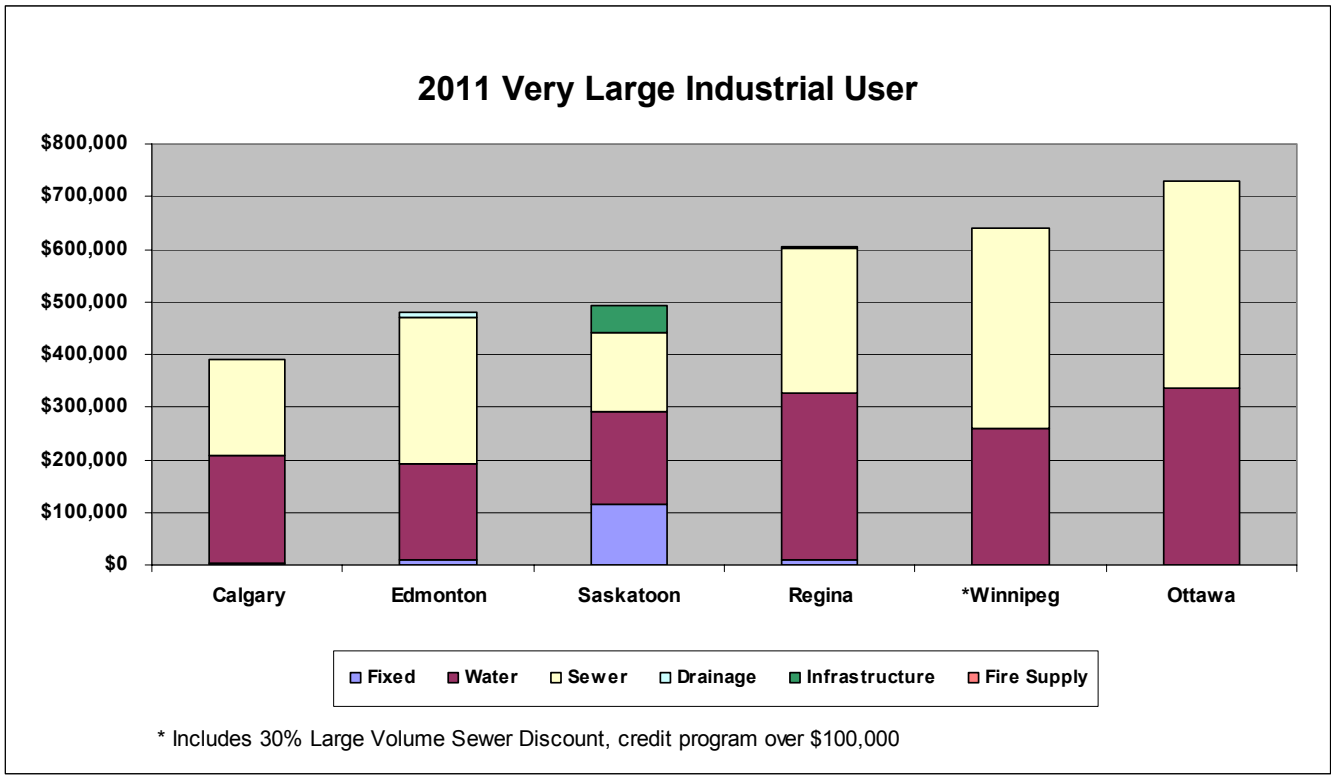
Residential Customers



Commercial Customers


2011 Commercial Customer
$10,000
$9,000
$8,000
$7,000
$6,000
$5,000
$4,000
$3,000
$2,000
$1,000
$0
Calgary
Ottawa
Winnipeg
Edmonton
Saskatoon
Regina
Fixed
Water
Sewer
Drainage
Infrastructure
Fire Supply

Very Large Industrial Users



COMMUNICATION:

The Water and Waste Department will communicate the water and sewer rate increases to customers as follows:

Strategy	Timeline
Briefing session for Water Bill Inquiry Line Representatives	March 2012
Ads in the business section of both daily newspapers	March 2012
Website updated with new rates	March 2012
Update at annual seminar for business customers	Spring 2012
Message imprinted on each water/sewer bill	March – May 2012

The Water and Waste Department will communicate the changes to the overstrength rates as follows:

Strategy	Timeline
Website updated with new rates	March 2012
Update at annual seminar for business customers	Spring 2012
Notices to business customers impacted by rate changes	March 2012 and ongoing

FINANCIAL IMPACT

Financial Impact Statement **Date:** January 27, 2012

Project Name: 2012-2014 WATER AND SEWER RATES

The 2012 rates and financial plans for water and sewer funds are contained in Appendices B and C. These plans are reflected in the current operating and capital estimates and as such, a financial impact statement has not been prepared.

There is no financial impact associated with the overstrength changes discussed in this report. Operating costs and total revenue will not be impacted. The source from which costs are recovered will change, but total cost recovery will not increase.

These proposed rate increases reflect the introduction of a cost of service recovery strategy with the goal of eliminating subsidies by classes of customers and service types.

"Original signed by M. L. Geer, C.A."
Moira Geer CA
Manager of Finance and Administration

CONSULTATION

In preparing this report there was consultation with:

Legal Services Department

SUBMITTED BY

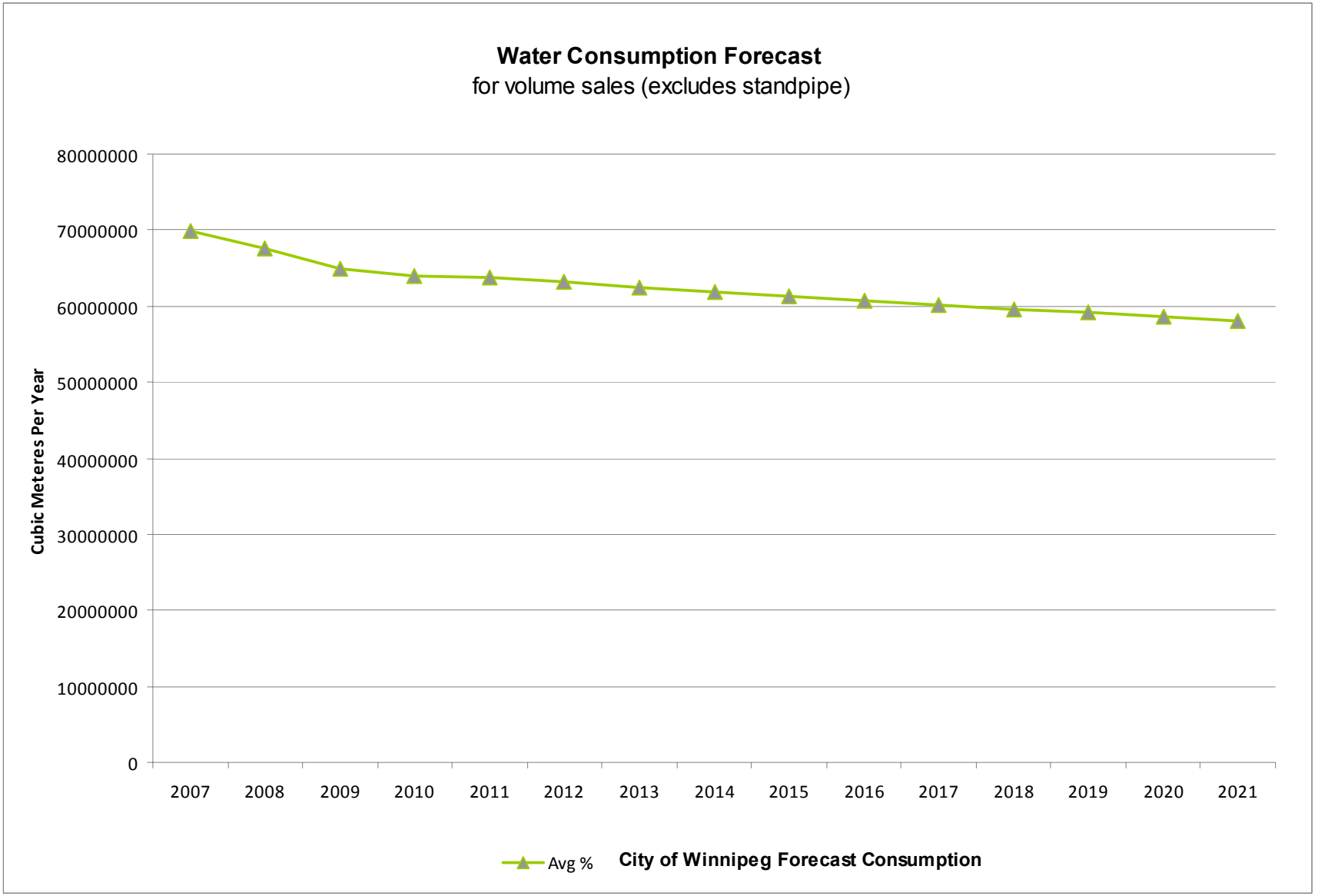
Water and Waste Department
Finance and Administration Division
Prepared by: Darlene Capp CGA
Date: February 16, 2012
File No. 010-07-20-01-00
010-07-20-02-00

APPENDICES:

The following appendices are attached as additional information:

APPENDIX A	Water Consumption Forecast
APPENDIX B	Water Works 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	Customer Impact Analysis Total Bill
APPENDIX E	Historical Water Consumption Summary
APPENDIX F	Water and Sewer Utility Principles of Operation
APPENDIX G	Water Works By-law Amendment

Appendix A
WATER CONSUMPTION FORECAST



Appendix B
WATER WORKS SYSTEM FUND

WATERWORKS SYSTEM FUND
Financial Projection 2012-2021 ($000s)

Waterworks System	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Revenue										
Sales Revenue	90,290	94,554	99,424	104,656	109,883	114,722	117,469	118,641	119,657	120,536
Non Rate Revenue	4,800	4,830	4,561	4,083	3,925	4,252	4,689	5,211	5,812	6,493
Total Revenue	**95,090**	**99,385**	**103,985**	**108,739**	**113,809**	**118,974**	**122,159**	**123,853**	**125,470**	**127,030**
Expenditures										
Operating	59,914	60,640	60,585	62,158	63,773	65,432	67,136	68,885	70,682	72,527
Debt Service	18,851	18,479	17,608	17,452	18,412	19,230	19,562	19,979	20,481	21,071
Transfer to Watermain Renewal Reserve	14,400	15,000	16,000	16,500	17,000	17,000	17,000	17,000	17,000	17,000
Total Expenditures	**93,165**	**94,120**	**94,193**	**96,111**	**99,185**	**101,663**	**103,698**	**105,865**	**108,163**	**110,598**
Surplus(Deficit) for the year	1,925	5,265	9,792	12,629	14,624	17,312	18,460	17,988	17,307	16,432
Opening Working Capital	55,175	36,600	21,931	17,469	14,165	12,448	14,082	16,645	18,642	19,876
Appropriated to Capital	(12,598)	(12,370)	(6,300)	(7,560)	(7,550)	(6,500)	(6,500)	(6,500)	(6,500)	(6,500)
Utility Dividend	(7,223)	(7,564)	(7,954)	(8,372)	(8,791)	(9,178)	(9,398)	(9,491)	(9,573)	(9,643)
Other Changes in Working Capital	(679)	0	0	0	0	0	0	0	0	0
Ending Working Capital	36,600	21,931	17,469	14,165	12,448	14,082	16,645	18,642	19,876	20,165
Working Capital as a % of O&M Costs	**61%**	**36%**	**29%**	**23%**	**20%**	**22%**	**25%**	**27%**	**28%**	**28%**
Water Rate Block 1 ($dollars)	**1.35**	**1.39**	**1.43**	**1.48**	**1.54**	**1.62**	**1.66**	**1.68**	**1.70**	**1.72**
Rate Change Block 1	**1.0%**	**2.7%**	**2.9%**	**3.5%**	**4.1%**	**5.0%**	**2.7%**	**1.3%**	**1.2%**	**1.0%**
Long-Term Debt Summary										
Debt outstanding, closing year end b	**157,497**	**150,783**	**144,553**	**139,276**	**134,989**	**130,510**	**125,829**	**120,938**	**115,826**	**115,582**

Appendix C
SEWAGE DISPOSAL SYSTEM FUND

SEWAGE DISPOSAL SYSTEM FUND
Financial Projection 2012-2021 ($000s)

Sewage Disposal System	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Revenue										
Sales Revenue	117,868	123,837	131,101	133,623	136,070	146,195	158,778	166,556	173,840	181,432
Non Rate Revenue	10,196	8,685	7,315	7,574	7,866	8,227	8,591	8,962	9,342	9,729
Environmental Projects Reserve	15,986	18,842	19,057	18,862	20,755	20,866	20,660	20,453	20,249	20,045
Total Revenue	**144,050**	**151,364**	**157,474**	**160,058**	**164,692**	**175,288**	**188,028**	**195,972**	**203,432**	**211,207**
Expenditures										
Operating	67,265	59,652	60,810	66,196	71,715	78,388	87,200	89,193	91,230	92,907
Debt Service	14,040	11,417	11,150	16,883	23,345	29,128	31,394	32,157	32,884	33,607
Land Drainage	15,376	15,222	14,712	0	0	0	0	0	0	0
Transfer to Environmental Projects Reserve	15,986	18,842	19,057	18,862	20,755	20,866	20,660	20,453	20,249	20,045
Transfer to Sewer System Rehabilitation Reserve	13,900	13,600	14,300	16,000	16,500	16,500	16,500	16,500	16,500	16,500
Transfer to Sewer System Rehab.Reserve-Land Drainage	1,300	9,300	8,300	0	0	0	0	0	0	0
Total Expenditures	**127,867**	**128,033**	**128,329**	**117,941**	**132,315**	**144,882**	**155,754**	**158,303**	**160,864**	**163,060**
Surplus(Deficit) for the year	16,183	23,331	29,145	42,118	32,376	30,406	32,275	37,669	42,568	48,147
Opening Working Capital	76,910	56,385	42,302	33,434	38,353	33,183	25,224	17,144	13,852	14,892
Appropriated to Capital	(26,000)	(26,000)	(26,000)	(25,000)	(25,000)	(25,000)	(26,000)	(26,000)	(26,000)	(26,000)
Utility Dividend	(10,708)	(11,414)	(12,013)	(12,199)	(12,546)	(13,365)	(14,355)	(14,961)	(15,527)	(16,118)
Other Changes in Working Capital	0	0	0	0	0	0	0	0	0	0
Ending Working Capital	56,385	42,302	33,434	38,353	33,183	25,224	17,144	13,852	14,892	20,921
Working Capital as a % of O&M Costs	**78%**	**65%**	**51%**	**58%**	**46%**	**32%**	**20%**	**16%**	**16%**	**23%**
Sewer Rate	**$2.10**	**$2.22**	**$2.33**	**$2.34**	**$2.40**	**$2.56**	**$2.75**	**$2.90**	**$3.07**	**$3.24**
Long-Term Debt Summary										
New debt, Environmental Projects		**59,670**	**125,268**	**68,559**	**101,558**	**47,996**	**10,000**	**10,000**	**9,000**	**9,966**
Debt outstanding, closing year end balance	**14,197**	**68,109**	**189,914**	**252,595**	**345,795**	**381,644**	**377,043**	**370,834**	**361,651**	**357,888**

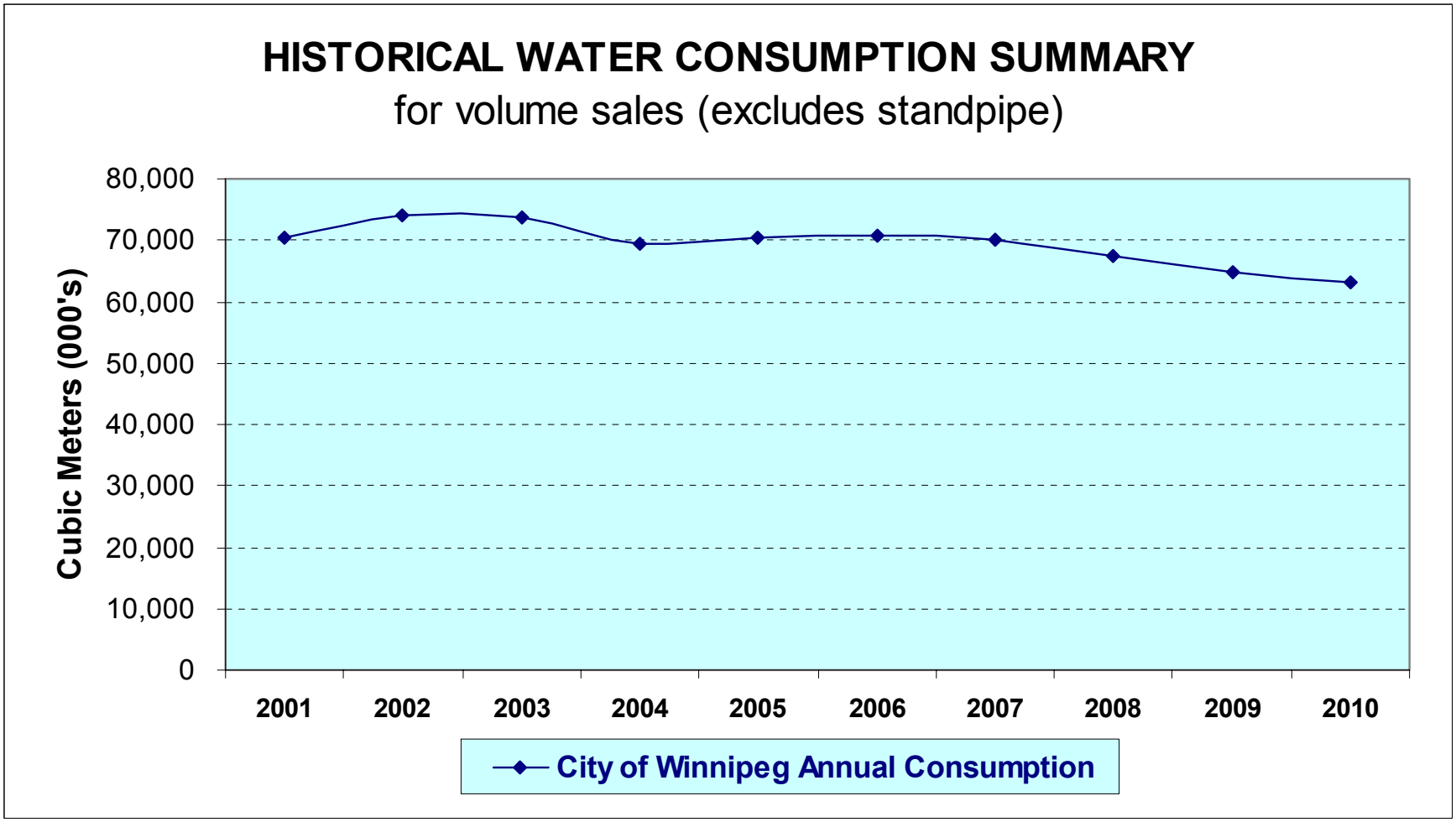
Appendix D
CUSTOMER IMPACT ANALYSIS TOTAL BILL

CUSTOMER IMPACT ANALYSIS TOTAL BILL
Annual Basis

	Current	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Residential 5/8" meter											
240 m3/yr Water	$321.60	$324.67	$332.00	$343.20	$355.20	$370.56	$387.84	$398.70	$403.48	$408.33	$412.41
Sewer	$472.80	$502.80	$531.10	$559.20	$561.60	$574.94	$613.34	$659.96	$696.92	$735.94	$777.16
Total Volume Rate	$794.40	$827.47	$863.10	$902.40	$916.80	$945.50	$1,001.18	$1,058.66	$1,100.40	$1,144.27	$1,189.56
Daily Basic Service Charge [1]	$55.00	$73.00	$91.25	$109.50	$127.75	$146.00	$164.25	$186.15	$189.80	$193.45	$197.10
Land Drainage Rate	$0.00	$0.00	$0.00	$0.00	$33.00	$56.55	$57.12	$57.15	$57.17	$57.20	$57.23
Total Annual Bill	**$849.40**	**$900.47**	**$954.35**	**$1,011.90**	**$1,077.55**	**$1,148.05**	**$1,222.55**	**$1,301.95**	**$1,347.37**	**$1,394.92**	**$1,443.90**
Overall $ Change		$51.07	$53.88	$57.55	$65.65	$70.50	$74.50	$79.40	$45.42	$47.55	$48.97
Overall % Change		6.0%	6.0%	6.0%	6.5%	6.5%	6.5%	6.5%	3.5%	3.5%	3.5%
Commercial 2" meter											
1,600 m3/yr Water	$2,056.96	$2,086.25	$2,216.00	$2,288.00	$2,368.00	$2,470.40	$2,585.60	$2,658.00	$2,689.89	$2,722.17	$2,749.39
Sewer	$3,152.00	$3,352.00	$3,544.00	$3,728.00	$3,744.00	$3,832.93	$4,088.96	$4,399.72	$4,646.11	$4,906.29	$5,181.04
Total Volume Rate	$5,208.96	$5,438.25	$5,760.00	$6,016.00	$6,112.00	$6,303.33	$6,674.56	$7,057.72	$7,336.00	$7,628.46	$7,930.43
Daily Basic Service Charge [1]	$127.20	$148.56	$174.94	$205.94	$232.96	$253.50	$276.57	$299.70	$305.70	$311.81	$318.05
Land Drainage Rate 25,000	$0.00	$0.00	$0.00	$0.00	$111.22	$189.43	$191.33	$191.42	$191.52	$191.61	$191.71
Total Annual Bill	**$5,336.16**	**$5,586.80**	**$5,934.94**	**$6,221.94**	**$6,456.19**	**$6,746.25**	**$7,142.46**	**$7,548.84**	**$7,833.21**	**$8,131.88**	**$8,440.19**
		$250.64	$348.14	$287.00	$234.25	$290.07	$396.20	$406.38	$284.37	$298.67	$308.31
		4.7%	6.2%	4.8%	3.8%	4.5%	5.9%	5.7%	3.8%	3.8%	3.8%
Large Restaurant 3" meter											
17,700 m3/yr Water	$19,734.56	$20,860.65	$22,271.88	$23,483.68	$25,033.16	$26,763.99	$28,603.20	$29,404.09	$29,756.94	$30,114.02	$30,415.16
Sewer	$34,869.00	$37,081.50	$39,205.50	$41,241.00	$41,418.00	$42,401.77	$45,234.12	$48,671.91	$51,397.54	$54,275.80	$57,315.25
Total Volume Rate	$54,603.56	$57,942.15	$61,477.38	$64,724.68	$66,451.16	$69,165.76	$73,837.32	$78,076.00	$81,154.48	$84,389.82	$87,730.41
Daily Basic Service Charge	$437.80	$463.16	$531.34	$615.80	$679.76	$712.28	$751.88	$784.52	$800.21	$816.21	$832.54
Land Drainage Rate 38,600	$0.00	$0.00	$0.00	$0.00	$171.73	$292.48	$295.41	$295.56	$295.71	$295.85	$296.00
Total Annual Bill	**$55,041.36**	**$58,405.31**	**$62,008.72**	**$65,340.48**	**$67,302.65**	**$70,170.52**	**$74,884.61**	**$79,156.08**	**$82,250.39**	**$85,501.89**	**$88,858.95**
		$3,363.95	$3,603.41	$3,331.76	$1,962.17	$2,867.87	$4,714.09	$4,271.47	$3,094.31	$3,251.50	$3,357.06
		6.1%	6.2%	5.4%	3.0%	4.3%	6.7%	5.7%	3.9%	4.0%	3.9%
Food Processing 8" meter											
254,500 m3/yr Water	$256,534.56	$286,076.65	$318,271.88	$336,059.68	$358,921.16	$384,331.99	$411,272.00	$422,787.62	$427,861.07	$432,995.40	$437,325.35
* Adj. Sewer	$380,955.50	$403,224.25	$424,602.25	$445,089.50	$446,871.00	$456,772.58	$485,280.14	$519,881.43	$547,314.79	$576,284.42	$606,876.35
Total Volume Charge	$637,490.06	$689,300.90	$742,874.13	$781,149.18	$805,792.16	$841,104.57	$896,552.14	$942,669.05	$975,175.86	$1,009,279.82	$1,044,201.70
Daily Basic Service Charge [1]	$1,142.80	$1,162.28	$1,323.34	$1,526.60	$1,672.64	$1,731.80	$1,808.12	$1,861.88	$1,899.12	$1,937.10	$1,975.84
Land Drainage Rate 150,000	$0.00	$0.00	$0.00	$0.00	$667.35	$1,136.59	$1,147.96	$1,148.54	$1,149.11	$1,149.69	$1,150.26
Total Annual Bill	$638,632.86	$690,463.18	$744,197.47	$782,675.78	$808,132.15	$843,972.95	$899,508.22	$945,679.47	$978,224.09	$1,012,366.61	$1,047,327.81
[1] Average cost per year		$51,830.32	$53,734.29	$38,478.31	$25,456.37	$35,840.81	$55,535.27	$46,171.24	$32,544.62	$34,142.52	$34,961.20
		8.1%	7.8%	5.2%	3.3%	4.4%	6.6%	5.1%	3.4%	3.5%	3.5%

* 30% Large Volume Sewer Discount, credit over $100,000, applies according to conditions in section 89 of Sewer By-Law 92/2010

Appendix E
HISTORICAL WATER CONSUMPTION SUMMARY



Appendix F
WATER AND SEWER UTILITY PRINCIPLES OF OPERATION

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 17% of the combined Water and Sewer operating and Maintenance (O&M).

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. Infrastructure Renewal: The Water Main Renewal and Sewer System Rehabilitation Reserves were established to provide a consistent approach to financing infrastructure renewal. Maintaining the reserves ensures this approach continues. Reserve contributions by the Utilities are based on an asset management strategy developed by the Utilities and approved through the capital and operating budget processes.

7. Transfers to the General Revenue Fund: The Water and Sewer Utilities transfer funds to the General Revenue Fund in the form of support to the Land Drainage program which funds 100% of the costs of this program.

8. 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 G
WATER WORKS BY-LAW AMENDMENT

THE CITY OF WINNIPEG

BY-LAW NO.

A By-law of THE CITY OF WINNIPEG to replace Schedule A of the Water Works By-law

THE CITY OF WINNIPEG, in Council assembled, enacts as follows:

Schedule A of Water Works By-law amended

1. Schedule A of the Water Works By-law No. 504/73 is replaced with the following:

SCHEDULE A

1(1) Subject to subsection (2), the following rates apply to delivered on April 1, 2012 and thereafter.

Domestic $1.35 per cubic metre from 0 to 272 cubic metres per quarter

Intermediate $1.20 per cubic metre from 272.1 to 2,720 cubic metres per quarter

Industrial $1.12 per cubic metre over 2,720 cubic metres per quarter

1(2) If April 1, 2012 occurs part-way through a billing period, the rates in effect prior to and after April 1, 2012 are applicable on a pro-rated basis to the entire amount of water delivered.

2(1) The following Daily Basic Service Charges for City-owned meters apply after April 1, 2012 (see clause 14(a)):

Meter Size	*Daily Basic Charge*
5/8"	*$0.20*
3/4"	*$0.21*
1"	*$0.25*
1 1/2"	*$0.29*
2"	*$0.40*
3"	*$1.27*
4"	*$1.60*
6"	*$2.36*

8"	*$3.22*
10"	*$4.09*

2(2) The following Daily Basic Service Charges for privately-owned meters apply after April 1, 2012 (see clause 14.1(a)):

Both water and sewer service	*$0.15*

3. The following interest rate is applicable on Overdue Accounts for each month that the account is overdue *1.5%*

Effective date
2. This By-law takes effect on April 1, 2012.

DONE AND PASSED, this day of , 2012.

_____
Mayor

_____
City Clerk

Approved as to content:

_____
Director of Water and Waste

Approved as to form:

_____
For Director of Legal Services/City Solicitor