

Rural Municipality of St. Andrews St. Andrews South Wastewater Utility Rate Study

Executive Summary

The Rural Municipality of St. Andrews has completed construction of the St. Andrews South Wastewater Utility infrastructure. The new Utility will provide wastewater collection services to St. Andrews residents with wastewater treatment being provided by the City of Winnipeg at the North End Water Pollution Control Centre. As a condition of providing wastewater treatment services, the City of Winnipeg requires that all Utility customers must install water meters on their wells.

The City of Winnipeg and RM of St. Andrews signed a Memorandum of Understanding dated October 14, 2014 indicating their intent to enter into a municipal service-sharing agreement to enable the City to provide wastewater treatment services to the RM. A draft version of the service-sharing agreement has recently been negotiated by municipal staff and the final version of the agreement is scheduled to go to City and RM Councils for ratification in the near future.

St. Andrews South Wastewater Utility is a low pressure wastewater system serving approximately 1,800 parcels of land in St. Andrews. The low pressure wastewater lines discharge into 2 lift stations that flow wastewater into a gravity wastewater main in West St. Paul. The gravity main in West St. Paul is jointly owned by the RMs of West St. Paul and St. Andrews.

Through a local improvement process, the RM of St. Andrews notified affected property owners that the RM proposed to construct a wastewater collection system in St. Andrews South. The estimated local improvement cost of the wastewater system was established at \$7,390 per property. In addition, property owners are responsible for the service line connection costs to connect their septic tank to the curb stop in the boulevard at their property line. There is also a "Utilities Buy-In Charge" payable to the City of Winnipeg that property owners must pay to the RM of St. Andrews on connection to the wastewater system. The Buy-In Charge payable to City of Winnipeg for an existing property with a residential size water meter, is \$2,680 in 2021 and \$3,000 in 2022.

St. Andrews South Wastewater Utility is located within *the Manitoba Conservation Red River Corridor Designated Area* which was established in 2009 by Provincial Regulation. This Regulation prohibits the replacement or modification of existing septic fields or construction of new septic fields in the Corridor.

The RM has not mandated any requirement to connect to the wastewater system and connection requirements are governed by Provincial law. Newly constructed residences must be connected to the wastewater system and existing residences that are sold must also connect.

Current Provincial legislation allows property owners up to 5 years to connect to the wastewater system under the Onsite Wastewater Management System Regulation of *The Environment Act* of Manitoba which states in part as follows:

"Requirement to connect to new wastewater collection system

8.1(1) If a wastewater collection system is installed in an area not previously serviced by a wastewater collection system, an owner of land in that area must

- (a) connect his or her wastewater sources to the wastewater collection system; and
- (b) take any onsite wastewater management system or privy located on the land out of service and decommission it;
before the earlier of
- (c) the passing of a period of five years from the day that the wastewater collection system was installed; or
- (d) the transfer or subdivision of the land."

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Process to Establish Initial Utility Rates

Following is a list of critical path steps required to establish initial utility rates:

- complete service agreement with City of Winnipeg;
- proceed with advertising and public hearing for special service levy by-law for unconnected properties and 1st reading of by-law and submission to Municipal Board;
- proceed with 1st reading of utility rate by-law and submit by-law and utility rate study to the Public Utilities Board;
- provide additional information to potential customers;
- depending on objections and feedback, Municipal Board determines whether or not to hold a Public Hearing in the RM of St. Andrews regarding special service levy for unconnected properties;
- depending on objections and feedback, Public Utilities Board determines whether or not to hold a Public Hearing in the RM of St. Andrews regarding proposed utility rates;
- Municipal Board approves, amends or rejects RM of St. Andrews special service levy by-law;
- if Municipal Board approves or amends the special service levy by-law, RM of St. Andrews may proceed with 2nd and 3rd reading of by-law and unconnected property fee;
- PUB approves, amends or rejects RM of St. Andrews utility rate by-law; and
- if PUB approves or amends the utility rate by-law, RM of St. Andrews proceeds with 2nd and 3rd reading of by-law and implements new rates.

Capital Cost

Total estimated capital cost and funding of the St. Andrews South Wastewater Utility is as follows:

Initial Phase 1 & 2 Construction Cost Estimate	31,160,000
Add: Estimated capital cost increase over initial estimate	2,162,124
Main St. Sewer main jointly owned with West St. Paul; net cost	2,300,000
Total Estimated construction cost	35,622,124
Less: Canada/Mb Infrastructure Funding	(8,500,000)
Mb. Water Services Board Funding	(8,330,000)
St. Andrews Gas Tax Reserve Funding	(1,336,631)
St. Andrews Gas Tax Reserve Funding - Main St. sewer main	(2,300,000)
	15,155,493

Local Improvement Funding

Survey and Customer Input

The RM of St. Andrews advised potential utility customers directly by phone, text, email and Facebook in addition to a direct mail card, newspaper advertising and an insert in the tax bill, that there was a survey and information concerning the new Utility on the RM's website.

655 completed surveys were received and the survey and data analysis are attached as appendices to this report.

Number of Utility Customers

Survey results indicate property owner intent to hook into the wastewater system as follows:

	<u>Survey Results</u>	<u>Extrapolated – 1,800 Customers</u>
As soon as possible	16.84%	303
In a year or two	13.78%	248
Subtotal – Customers in two years		551
In about three or four years	6.80%	122
Total customers in four years		673

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Based on extrapolation of the survey responses over the total potential number of customers results in 551 potential customers in two years. For purposes of the Utility rate study, an estimate of 500 customers within the first 3 years has been used.

Estimated Costs

Cost estimates to operate the wastewater system have been provided by the RM's consultants. In addition, a Request for Proposal has been circulated to obtain more definitive costs for lift station operations. There are amortization and wastewater lift station costs that are fixed in nature and don't vary significantly with volume.

PVC pipe used for the low pressure wastewater system and pressurized wastewater mains were assumed to be amortized over a 75 year time span. Only recently have some new municipal utilities extended the amortization period for pipelines from 50 years to 75 years.

In addition the City of Winnipeg charges an annual Participation Fee per connected customer which is estimated at \$284.46 in 2022 and a 2022 volumetric charge of \$2.91 per cubic meter of wastewater.

Rate calculations are based on RM of St. Andrews estimated costs plus City of Winnipeg charges.

Charge for Unconnected Properties

Based on recent survey information, the RM of St. Andrews is forecasting that 500 customers will connect to the Utility in the first 3 years of operation. The minimum and average utility billing costs per property drop significantly as more customers are connected and start to plateau after 1,200 customers are connected.

With rates significantly higher for the first 1,200 customers to connect, an alternative to increase utility revenues until all customers are connected was explored.

St. Andrews is required to commence providing wastewater services on completion of construction of the wastewater system, sometime in early 2021. With the Municipality's estimate of 500 customers connected within 3 years, the option of instituting a per parcel charge for unconnected customers, is proposed to make the Utility financially viable.

A per parcel annual fee on unconnected properties significantly reduces the utility billing costs for properties connected and makes the Utility viable, especially for the first few years as properties start connecting.

Initial Rates

Two options for establishing initial utility rates were reviewed:

1. Utility rates based on 500 connected customers paying rates calculated to create an annual operating surplus in accordance with PUB rate setting methodologies; and
2. Utility rates based on 500 connected customers with an annual charge for unconnected customers that creates a scenario of minimal reductions in rates as numbers of connected customers increase.

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Option 1 – Rates on Connected Properties Only

Setting utility rates based on assuming 500 connected customers results in minimum quarterly billings of \$165.10. Assuming average quarterly consumption of 36 cubic meters, quarterly billings would be \$297.54.

Wastewater Rates	Number of Customers						
	100	200	500	1,000	1,200	1,800	
Quarterly Customer Service Charge	\$94.62	\$85.99	\$80.82	\$79.09	\$78.80	\$78.32	
Wastewater rate per Cubic Meter	\$18.45	\$10.68	\$6.02	\$4.46	\$4.21	\$3.77	
Wastewater rate per 1,000 gallons	\$83.87	\$48.55	\$27.37	\$20.28	\$19.14	\$17.14	
	C.M.						
Minimum Quarterly Billing	14	\$352.92	\$235.51	\$165.10	\$141.53	\$137.74	\$131.10
Minimum Annual Billing (14 CM is 3,080 gallons)	56	\$1,411.68	\$942.04	\$660.40	\$566.12	\$550.96	\$524.40
	C.M.						
Average Quarterly Billing	36	\$758.82	\$470.47	\$297.54	\$239.65	\$230.36	\$214.04
Average Annual Billing (36 CM is 7,919 gallons)	144	\$3,035.28	\$1,881.88	\$1,190.16	\$958.60	\$921.44	\$856.16

However, until the Utility reaches 500 customers, under this scenario, the Utility could incur significant operating deficits. For example, setting the rates based on 500 customers (ie. minimum bill of \$165.10), if only 100 customers connect initially will result in a forecast operating deficit of \$168,000 and with 200 customers connected the deficit is forecast at \$121,000. With 500 customers connected the Utility is forecast to have an operating surplus of \$17,833

Option 2 – Rates with \$100 Annual Charge on Unconnected Properties

Establishing an annual charge of \$100 for unconnected properties and basing utility rates on 500 connected customers results in minimum quarterly billings of \$140.04 and average quarterly billings of \$233.10.

Wastewater Rates	Number of Customers						
	100	200	500	1,000	1,200	1,800	
Quarterly Customer Service Charge	\$94.62	\$85.99	\$80.82	\$79.09	\$78.80	\$78.32	
Wastewater rate per Cubic Meter	\$6.73	\$5.17	\$4.23	\$3.91	\$4.21	\$3.77	
Wastewater rate per 1,000 gallons	\$30.59	\$23.50	\$19.23	\$17.77	\$19.14	\$17.14	
	C.M.						
Minimum Quarterly Billing	14	\$188.84	\$158.37	\$140.04	\$133.83	\$137.74	\$131.10
Minimum Annual Billing (14 CM is 3,080 gallons)	56	\$755.36	\$633.48	\$560.16	\$535.32	\$550.96	\$524.40
	C.M.						
Average Quarterly Billing	36	\$336.90	\$272.11	\$233.10	\$219.85	\$230.36	\$214.04
Average Annual Billing (36 CM is 7,919 gallons)	144	\$1,347.60	\$1,088.44	\$932.40	\$879.40	\$921.44	\$856.16

Under this scenario with the unconnected property charge and rates set assuming 500 customers, if fewer customers initially connect, the deficits are much more manageable. The Utility is forecast to have a deficit of \$24,000 with 100 customers, \$13,000 with 200 customers and a surplus of \$18,058 with 500 customers.

Comparison of Options

With Utility rates only, assuming 500 connected customers, results in the minimum bill dropping from \$165.10 to \$131.10, or 21%, as the Utility grows to 1,800 customers. The average bill is forecast to drop from \$297.54 to \$214.04 or 28%.

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An annual fee of \$100 per unconnected property and assuming 500 connected customers, results in the minimum bill dropping from \$140.04 to \$131.10, or 6%, when 1,800 customers are connected. The average bill is forecast to drop from \$233.10 to \$214.04 or 8%.

With utility rates only, there is potential initially for significant operating deficits until the Utility grows and more customers connect. The addition of a fee for unconnected properties dramatically reduces the risk of the Utility incurring large operating deficits in the first few years.

Recommendation - \$100 Fee for Unconnected Properties

An annual fee of \$100 per unconnected property with utility rates based on assuming 500 properties connected, reduces the operating deficit in the first few years and smooths out utility rates.

With customers identified who must over 5 years connect and who have paid Local Improvement charges, all customers, connected and unconnected, have a stake in the financial viability of the utility and in having utility bills that don't fluctuate dramatically.

It is therefore recommended that an annual fee of \$100 per unconnected property be instituted and the balance of this report provides information on proposed utility rates on that basis.

Authorization for Unconnected Fee

Municipal Utilities exercise authority to charge for utility services under section 252(1) of the Municipal Act.

"A municipality exercising powers in the nature of those referred to in clauses 250(2)(b), (c) and (e) may set terms and conditions in respect of users, including (a) setting the rates or amounts of deposits, fees and other charges, and charging and collecting them;..."

Section 252(1) is very specific in referencing "users" and a fee for unconnected properties does not seem to be permissible under this section.

It appears that the best way to institute an unconnected parcel fee would be as a Special Service levy under Section 312 of the Municipal Act. The process to enact a Special Services levy is similar to a Local Improvement and requires Municipal Board approval.

The RM will require approval from the PUB for utility rates and from the Municipal Board for the unconnected property charge as a Special Service.

Customer Service Charge

Based on 500 utility customers, the Customer Service Charge is comprised of a City of Winnipeg participation fee that is charged to St. Andrews Wastewater Utility customers, plus an amount to cover St. Andrews administration and insurance costs:

<u>Calculation of Customer Service Charge</u>	<u>500</u>
Net Administration costs	161,630
Number of customers	500
Annual consumer service charge	<u>\$323.26</u>
Quarterly consumer service charge	<u>\$80.82</u>

Rural Municipality of St. Andrews
St. Andrews South Wastewater Utility Rate Study

Break down of Customer Service Charge

City of Winnipeg fee	142,230
St. Andrews South Utility Administration costs	19,400
	<u>161,630</u>
Winnipeg portion of Quarterly Customers Service Charge	\$71.12
St. Andrews portion of Quarterly Customers Service Charge	\$9.70
Total Quarterly Customer Service Charge	<u>\$80.82</u>

Wastewater Commodity Rates

Wastewater rates are comprised of a City of Winnipeg wastewater treatment charge and St. Andrews wastewater collection and lift station costs:

Calculation of Wastewater Rates

	500
Total net Wastewater expenses	1,413,026
Less: annual fee to non-connected properties	(130,000)
Less: amortization of capital grants - Wastewater	(295,342)
Less: Debt paid by taxation - Wastewater	(699,058)
Transfer to Utility Reserve	-
Contingency allowance	17,743
	<u>306,370</u>
Wastewater volume Cubic Meters	72,500
Wastewater rate per CM	<u>\$4.23</u>

Break down of Wastewater Rates

City of Winnipeg wastewater treatment rate - 2022	\$2.91
St. Andrews South wastewater conveyance & lift station rate	\$1.32
	<u>\$4.23</u>

Working Capital

The Public Utilities Board requires that water and wastewater utilities have a minimum working capital position equal to 20% of Utility expenditures. Working capital is calculated by deducting the tangible capital asset balance from the Utility's accumulated surplus and adding the Utility reserve balance and the outstanding debt balance.

The St. Andrews South Wastewater Utility is forecast to have a nil balance for Working Capital Surplus on initial start up of the Utility with the capital fully funded through Grants, Gas Tax Reserve and Local Improvement levies.

The first full year of operation of the St. Andrews South Wastewater Utility, based on 500 connected customers, results in a forecast Working Capital Surplus of \$48,278.

Rural Municipality of St. Andrews St. Andrews South Wastewater Utility Rate Study

	Capital Costs	500
<u>Working Capital Surplus/Deficit</u>		
Fund Surplus	\$ 26,528,828	\$ 26,251,544
Less Tangible Capital Assets	(35,622,124)	(35,006,703)
Add Long term debt	9,093,296	8,803,436
Add Utility Reserve	-	-
Working Capital Surplus/Deficit	\$0	\$ 48,278
Minimum working capital surplus = 20% of expenses Proposed to Exclude Winnipeg Fees	\$0	\$244,790

Cost Allocation

As a new Utility with customers connecting voluntarily over the next few years, it is proposed that cost allocation for Administration costs initially be based on \$30 per customer. As the Utility grows, this cost allocation method should be reviewed. Adding in insurance costs and netting out penalty revenue, results in the St. Andrews Utility portion of the customer service charge being \$9.70 per quarter. Adding the City of Winnipeg cost participation fee of \$71.12 (\$284.46 a year) equals the \$80.82 quarterly customer service charge.

Operating Surplus/(Deficit)

St. Andrews South Wastewater Utility is forecast to have a PSAB, PUB adjusted, net operating deficit of \$13,508 in the first full year of operation, based on 200 connected customers with an annual fee of \$100 for unconnected customers. A surplus of \$18,058 is forecast within the first 3 years as more customers connect.

	200	350	500
Net Operating Surplus (Deficit) with PUB Adjustments	(13,508)	2,275	18,058

The RM of St. Andrews recognizes that the number of customers connected will impact the financial viability of the Utility. The RM will closely monitor financial operation of the Utility and encourage customer connections.

Contingency Allowance and Reserves

There is a Contingency Allowance of \$17,743 representing 10% of net rate costs excluding amortization expenses, interest costs and City of Winnipeg charges, included in the rate study.

As this is a new utility with capital projects being funded through grants and debenture debt, there is no transfer to reserve proposed at this time.

Utility Billing Impact – Minimum and Average Billing

Wastewater Rates

	500
Quarterly Customer Service Charge	\$80.82
Wastewater rate per Cubic Meter	\$4.23
Wastewater rate per 1,000 gallons	\$19.23

	C.M.	
Minimum Quarterly Billing	14	\$140.04
Minimum Annual Billing	56	\$560.16
	C.M.	
Average Quarterly Billing	36	\$233.10
Average Annual Billing	144	\$932.40

St. Andrews South Wastewater Utility
Schedule of Rate Calculations

Wastewater Customers

	Number of Customers					
Subtotal - Customers	100	200	500	1,000	1,200	1,800
Estimated average annual wastewater volume per customer (note 1)	145	145	145	145	145	145
Total estimated average annual wastewater volume; cubic meters	14,500	29,000	72,500	145,000	174,000	261,000
Total estimated average annual wastewater volume; gallons	3,200,000	6,400,000	16,000,000	32,000,000	38,400,000	57,600,000

<u>note 1</u>	Cubic Meters	Imperial Gallons
Estimated Average annual wastewater volume	145	32,000
Estimated Average quarterly wastewater volume	36	8,000

West St. Paul 2017 average annual consumption is 158 CM (35,000 gallons) and includes some multi family residential units. For purposes of this estimate, an annual average of 145 cubic meters was used.

Annual Debenture Cost

Utility Optg. Fund Debenture Debt, Year 1	\$9,093,296
Year 1 Debenture costs	\$699,058

Contingency Allowance

Wastewater Net Rate Costs	1,244,246	200	500	1,000	1,200	1,800
Less Winnipeg wastewater Treatment Costs	(42,195)	1,286,441	1,413,026	1,624,001	1,708,391	1,961,561
Less Wastewater Amortization	(615,421)	(84,390)	(210,975)	(421,950)	(506,340)	(759,510)
Less Wastewater Interest Costs	(409,198)	(615,421)	(615,421)	(615,421)	(615,421)	(615,421)
	177,432	(409,198)	(409,198)	(409,198)	(409,198)	(409,198)
	177,432	177,432	177,432	177,432	177,432	177,432
	10%	10%	10%	10%	10%	10%
Wastewater Contingency Allowance	17,743	17,743	17,743	17,743	17,743	17,743

Calculation of Customer Service Charge

Net Administration costs	100	200	500	1,000	1,200	1,800
Number of customers	\$37,846	68,792	161,630	316,360	378,252	563,928
Annual consumer service charge	100	200	500	1,000	1,200	1,800
Quarterly consumer service charge	\$378.46	\$343.96	\$323.26	\$316.36	\$315.21	\$313.29
	\$94.62	\$85.99	\$80.82	\$79.09	\$78.80	\$78.32

Break down of Customer Service Charge

City of Winnipeg fee	28,446	56,892	142,230	284,460	341,352	512,028
St. Andrews South Utility Administration costs	9,400	11,900	19,400	31,900	36,900	51,900
	37,846	68,792	161,630	316,360	378,252	563,928
Winnipeg portion of Quarterly Customers Service Charge	\$71.12	\$71.12	\$71.12	\$71.12	\$71.12	\$71.12
St. Andrews portion of Quarterly Customers Service Charge	\$23.50	\$14.88	\$9.70	\$7.98	\$7.69	\$7.21
Total Quarterly Customer Service Charge	\$94.62	\$85.99	\$80.82	\$79.09	\$78.80	\$78.32

Calculation of Wastewater Rates

Total net Wastewater expenses	1,244,246	1,286,441	1,413,026	1,624,001	1,708,391	1,961,561
Less: annual fee to non-connected properties	(170,000)	(160,000)	(130,000)	(80,000)	-	-
Less: amortization of capital grants - Wastewater	(295,342)	(295,342)	(295,342)	(295,342)	(295,342)	(295,342)
Less: Debt paid by taxation - Wastewater	(699,058)	(699,058)	(699,058)	(699,058)	(699,058)	(699,058)
Transfer to Utility Reserve	-	-	-	-	-	-
Contingency allowance	17,743	17,743	17,743	17,743	17,743	17,743
	97,590	149,785	306,370	567,345	731,735	984,905

Wastewater volume Cubic Meters

14,500	29,000	72,500	145,000	174,000	261,000
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Wastewater rate per CM

\$6.73	\$5.17	\$4.23	\$3.91	\$4.21	\$3.77
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Break down of Wastewater Rates

City of Winnipeg wastewater treatment rate - 2022	\$2.91	\$2.91	\$2.91	\$2.91	\$2.91	\$2.91
St. Andrews South wastewater conveyance & lift station rate	\$3.82	\$2.26	\$1.32	\$1.00	\$1.30	\$0.86
	\$6.73	\$5.17	\$4.23	\$3.91	\$4.21	\$3.77

Wastewater Rates

	Number of Customers					
Quarterly Customer Service Charge	100	200	500	1,000	1,200	1,800
Wastewater rate per Cubic Meter	\$94.62	\$80.82	\$80.82	\$79.09	\$78.80	\$78.32
	\$6.73	\$4.23	\$4.23	\$3.91	\$4.21	\$3.77

Minimum Quarterly Billing

Minimum Annual Billing	C.M.	14	\$188.84	\$140.04	\$133.83	\$137.74	\$131.10
	56	\$755.36	\$560.16	\$535.32	\$550.96	\$524.40	

Average Quarterly Billing

Average Annual Billing	C.M.	36	\$336.90	\$233.10	\$219.85	\$230.36	\$214.04
	144	\$1,347.60	\$932.40	\$879.40	\$921.44	\$856.16	

SCHEDULE OF UTILITY RATE REQUIREMENTS - ST. ANDREWS SOUTH WASTEWATER UTILITY

Based on 2022 costs; full year of operation

	Note	Number of Customers						
		Capital Costs	100	200	500	1,000	1,200	1,800
General								
Expenses:								
Administration for St. Andrews costs; estimated @ \$30 per customer	1		\$3,000	\$6,000	\$15,000	\$30,000	\$36,000	\$54,000
City of Winnipeg Participation fee cost			28,446	56,892	142,230	284,460	341,352	512,028
Insurance			6,900	6,900	6,900	6,900	6,900	6,900
Billing and collection (stationary, office supplies)			-	-	-	-	-	-
Total general expenses			38,346	69,792	164,130	321,360	384,252	572,928
Revenue								
Penalties			500	1,000	2,500	5,000	6,000	9,000
Investment income			-	-	-	-	-	-
Other income			-	-	-	-	-	-
Total general revenues			500	1,000	2,500	5,000	6,000	9,000
Net Costs General			37,846	68,792	161,630	316,360	378,252	563,928
Wastewater								
Expenses								
City of Winnipeg Treatment and disposal cost	2		42,195	84,390	210,975	421,950	506,340	759,510
Main line collection system costs in West St. Paul; cost shared			-	-	-	-	-	-
Low pressure sewer line repair and maintenance			5,000	5,000	5,000	5,000	5,000	5,000
Lift station; West St. Paul staffing contract			103,480	103,480	103,480	103,480	103,480	103,480
Water Well operation			832	832	832	832	832	832
Lift station; odour control system			5,200	5,200	5,200	5,200	5,200	5,200
Lift station; corrosion control system			39,520	39,520	39,520	39,520	39,520	39,520
Emergency generators			5,200	5,200	5,200	5,200	5,200	5,200
Water meter installation & curb stops			1,040	1,040	1,040	1,040	1,040	1,040
Wastewater effluent testing			10,400	10,400	10,400	10,400	10,400	10,400
Lift station grounds maintenance			2,600	2,600	2,600	2,600	2,600	2,600
Preparation of annual report for City of Winnipeg			1,560	1,560	1,560	1,560	1,560	1,560
Water meter reading			1,560	1,560	1,560	1,560	1,560	1,560
Remote monitoring of Flygt SCADA system			1,040	1,040	1,040	1,040	1,040	1,040
Amortization	3		615,421	615,421	615,421	615,421	615,421	615,421
Interest on long term debt	3		409,198	409,198	409,198	409,198	409,198	409,198
Total Wastewater expenses			1,244,246	1,286,441	1,413,026	1,624,001	1,708,391	1,961,561
Revenue								
Other revenue			-	-	-	-	-	-
Total Wastewater revenues			-	-	-	-	-	-
Net rate costs - Wastewater			1,244,246	1,286,441	1,413,026	1,624,001	1,708,391	1,961,561
Wastewater Billing Revenues								
Annual fee to non-connected properties			170,000	160,000	130,000	80,000	-	-
Wastewater billings			135,433	187,326	468,315	883,310	1,110,780	1,547,874
			305,433	347,326	598,315	963,310	1,110,780	1,547,874

	Number of Customers					
	100	200	500	1,000	1,200	1,800
Property Taxes - Local Improvement Debt Payments						
Transfer from Gen. Optg. - Wastewater	699,058	699,058	699,058	699,058	699,058	699,058
Net Revenue/(Expenses)	(277,602)	(308,850)	(277,284)	(277,994)	(276,806)	(278,558)
Capital Grant Amortization						
Amortization of Wastewater capital grants	295,342	295,342	295,342	295,342	295,342	295,342
Net Operating Surplus (Deficit) with PUB Adjustments	17,740	(13,508)	18,058	17,348	18,536	16,784
Transfers						
Transfers from Government - Capital	-	-	-	-	-	-
Local Improvement Connection Fees	6,062,197	-	-	-	-	-
Transfers from/(to) Utility Reserve	-	-	-	-	-	-
Transfers from General Optg.-Gas Tax Reserve; Main St. Sewer	2,300,000	-	-	-	-	-
Transfers from General Optg. - Gas Tax Reserve	1,336,631	-	-	-	-	-
Change in Utility Fund Balance after Surplus Transfers	17,740	(13,508)	18,058	17,348	18,536	16,784
Water and Sewer Billing Deficit Rate Rider Revenues	-	-	-	-	-	-
Reverse PUB Adjustments to Adjust Surplus to PSAB						
Capital Grants - Reverse PUB Adjustments	-	(295,342)	(295,342)	(295,342)	(295,342)	(295,342)
Deduct Amortization of Capital Grants	-	-	-	-	-	-
FUND SURPLUS, BEGINNING OF YEAR	26,528,828	26,528,828	26,528,828	26,528,828	26,528,828	26,528,828
FUND SURPLUS, END OF YEAR	\$ 26,251,226	\$ 26,219,978	\$ 26,251,544	\$ 26,250,834	\$ 26,252,022	\$ 26,250,270
Working Capital Surplus/Deficit						
Fund Surplus	\$ 26,251,226	\$ 26,219,978	\$ 26,251,544	\$ 26,250,834	\$ 26,252,022	\$ 26,250,270
Less Tangible Capital Assets	(35,006,124)	(35,006,703)	(35,006,703)	(35,006,703)	(35,006,703)	(35,006,703)
Add Long term debt	9,093,296	8,803,436	8,803,436	8,803,436	8,803,436	8,803,436
Add Utility Reserve	-	-	-	-	-	-
Working Capital Surplus/Deficit	\$ 47,960	\$ 16,712	\$ 48,278	\$ 47,568	\$ 48,756	\$ 47,004
Minimum working capital surplus = 20% of expenses						
Proposed to Exclude Winnipeg Fees	\$ 242,390	\$ 242,990	\$ 244,790	\$ 247,790	\$ 248,990	\$ 252,590
note 1						
City of Winnipeg Participation Fee						
Estimated # of customers	100	200	500	1,000	1,200	1,800
Winnipeg Participation fee 2020 rate \$263 + 4% per year for 2021 & 2022	\$284.46	\$284.46	\$284.46	\$284.46	\$284.46	\$284.46
Estimated Participation Fee	\$28,446	\$56,892	\$142,230	\$284,460	\$341,352	\$512,028

	Number of Customers					
	100	200	500	1,000	1,200	1,800
Capital Costs						
100	100	200	500	1,000	1,200	1,800
100	14,500	29,000	72,500	145,000	174,000	261,000
	\$2.91	\$2.81	\$2.91	\$2.91	\$2.91	\$2.91
	\$42,195	\$84,390	\$210,975	\$421,950	\$506,340	\$759,510

Note

note 2
 City of Winnipeg Sewage Treatment & Disposal Cost
 Estimated # of customers
 Estimated flow volume in Cubic Meters (see Schedule of Rate Calculations)
 Winnipeg wastewater treatment fee 2022 rate; per cubic meter

note 3
 Initial Phase 1 & 2 Construction Cost Estimate
 Add: Estimated capital cost increase over initial estimate
 Main St. Sewer main jointly owned with West St. Paul; net cost
Total Estimated construction cost
 Less: Canada/Mb Infrastructure Funding
 Mb. Water Services Board Funding
 St. Andrews Gas Tax Reserve Funding
 St. Andrews Gas Tax Reserve Funding - Main St. sewer main
Local Improvement Funding

Percentage of Local Improvement charges prepaid by property owners
 Percentage of Local Improvement charges to be paid by debt issuance
 note - RM of St. Clements for East Selkirk sewer project had 31% prepaid and 69% on property taxes.

Amortization expense	Amortization Period	Annual Amortization	Capital Grant Amortization Based on Percentages
Lift Station & Odour Control	40	230,270	116,302
Water meters	20	45,000	22,728
PVC Lines	75	309,485	156,311
Sewer trunk main in West St. Paul; net cost	75	584,754	285,342
		30,667	295,342
		615,421	

31,160,000
 2,162,124
 2,300,000
35,622,124
 (8,500,000)
 (8,330,000)
 (1,336,631)
 (2,300,000)
15,155,493

6,062,197
 9,093,296

**St. Andrews South Wastewater Utility
Schedule of Billing Revenues**

Customer Service Charge Revenues

Number of Customers	100	200	500	1,000	1,200	1,800
Annual Customer Service Charge	378.48	343.96	323.28	316.36	315.20	313.28
	<u>37,848</u>	<u>68,792</u>	<u>161,640</u>	<u>316,360</u>	<u>378,240</u>	<u>563,904</u>

Sewer Fees

Number of Customers	<u>100</u>	<u>200</u>	<u>500</u>	<u>1,000</u>	<u>1,200</u>	<u>1,800</u>
Sewer Volume in cubic meters	14,500	29,000	72,500	145,000	174,000	261,000
Sewer Rate per cubic meter	6.73	5.17	4.23	3.91	4.21	3.77
	<u>97,585</u>	<u>149,930</u>	<u>306,675</u>	<u>566,950</u>	<u>732,540</u>	<u>983,970</u>

Total Billing Revenues	<u>135,433</u>	<u>218,722</u>	<u>468,315</u>	<u>883,310</u>	<u>1,110,780</u>	<u>1,547,874</u>
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