

Public Utilities Board – Hearing

RM St. Andrews, Manitoba

April 26, 2021

April 17, 2021

Written Submission –PUB Hearing

In Opposition to the RM of St. Andrews Rate Application

Andrew H. Dolenuk

19 Davidson Road

St. Andrews, Manitoba

Honoured Board Members:

Upon examination of the Proposed rates in your Notice, I noticed these rates are based on a \$100 levy imposed on the “unconnected” residents of South St. Andrews. I have attached copy of the RM of St. Andrews, Consulting Report completed by “Way to Go Consulting” dated December2020. This report is openly available on the RM website. The document is available for download at:

<https://standrews.municipalwebsites.ca/Editor/images/Merged%20all%20Rate%20Study%20Items%20-%20Feb%2025-2021-without%20by-law.pdf>

The data for the proposed Rates is from Page 4, Option 2 - Rates with \$100 Annual Charge on Unconnected Properties.

I believe the PUB suggests that the projections and estimates used for initial rates are often speculative and this is why the Board will generally set them on an interim basis. However, I will strongly suggest that the projections and estimates offered to you are not speculative as they are based on 500 connected customers with a \$100 levy forced upon the remaining approximately 1300 customers. A levy that has not received 3<sup>rd</sup> reading by the Council and had to go to the Municipal Board because of opposition by the Residents/Taxpayers of South St. Andrews. A date has not been set by the Municipal Board for Public Hearings.

It would be speculation if the RM was 'speculating' on the numbers of customers that would hook up to the wastewater system. It would be speculation if the RM was 'speculating' on the volume of wastewater produced by the customers. However, supplying the Board with data that relies on a \$100 levy being applied to all unconnected customers is not speculation. There is no approval for this levy. The SSA with the City of Winnipeg is not signed so the figures for treatment are not valid as the amount charged per litre of treatment has not, obviously been agreed to, as the Agreement still has not been signed. The SSA with the RM of West St. Paul has not been signed. We have no idea what the Revenue sharing regarding the Force main between St. Andrews and the Gravity System in West St. Paul will be. What effect will this Revenue Sharing have on the Rates. Has the RM supplied the Board with that information? How can they if no SSA is signed with the RM of St. Andrews?

I will not go into comparison of Rates with other RM's in our area as they are far below the suggested Rates by the RM of St. Andrews and the Board will have that data already. However I will mention one rate and that is the RM of West St. Paul (the same System the RM of St. Andrews is attached to) who charge \$3.52 per cubic meter. Adding insult to injury this is a Gravity System which handles both Solids and Wastewater. Surely you are aware that the St. Andrews System just handles wastewater and the residents will

still have to use Septic tanks, their own pumps and pump outs.

This rate application also makes reference requiring all customers to install water meters on their private wells. Surely the Board is aware that where wastewater only services are provided the ERU (Residential Equivalent Units) system or a Flat Rate is applied for usage fees. The RM has no legal authority to force meters or any other modification to our Private Water Systems. I personally will not allow the RM to modify my private water supply without a Court Order which I can challenge.

In conclusion, I feel we should not be having this Hearing by the PUB at this time. The data supplied by the RM of St. Andrews is not verifiable as there are no signed SSA's to support information supplied by RM of St. Andrews or By-laws passed to support a \$100 levy to reduce costs of this poorly planned and managed expenditure known as the South St. Andrews Wastewater System.

Thanking you in advance,

Andrew and Maryanne Dolenuk  
19 Davidson Road

**Andrew Dolenuk**

**Report in Opposition to Rate Application by RM of St Andrews**

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**The City of Winnipeg has the following Expenses and Revenues for its Wastewater Utility. (Based on figures supplied in 2019)**

2018 City of Winnipeg Adopted Budget Operating and Capital Volume 2 – Page 101

\*\*\*the city separates Treatment and Collection for their Budgeting purposes which makes it a lot easier, because we can compare apples with apples.

Wastewater Collection	Wastewater Treatment
Expenses 68.019	87.813 (in millions \$)

Total Expenses for Wastewater Collection and Treatment:  
155.832 (in millions \$)

Wastewater Treatment as a percentage of total Expenses =  
 $(87.813/155.832 \times 100) = 56.35\%$

Wastewater Collection as a percentage of total Expenses =  
 $(68.019/155.832 \times 100) = 43.65\%$

As per the City of Winnipeg 2018 Fees and Surcharges Schedule:

Price charged to City of Winnipeg stakeholder =  
\$ 2.80 per cubic meter.

Therefore for every cubic meter of wastewater the costs are:

for Wastewater Treatment  $\$2.80 \times 56.35 \% =$   
\$ 1.58 / cubic meter

for Wastewater Collection  $\$2.80 \times 43.65 \% =$   
\$ 1.22 / cubic meter

We are only shipping South St. Andrews Wastewater for Treatment, we have already collected it, at a Great Expense - over 52 million in total taxpayer dollars

- we are only getting our wastewater treated (whatever that 1937 plant is capable of treating) in the "big city".

The interceptor sewer from the south boundary of West St. Paul starts at Fernbank Ave and ends up at the North End Waste Water Treatment Plant. That is an existing line already collecting the City of Winnipeg's waste water. Part of the \$2.80 the city folks pay pays for that part of their sewer line.

The Gravity line from River Springs Drive in West St. Paul to Fernbank Avenue has been bought, paid for, over-sized and super sized by the hard earned dollars of the West St. Paul and St. Andrews taxpayers. Oh, that's not counting the Provincial and Federal share of the BCF fund we "graciously" gave them.

Then we have the Forcemain from the Southern Boundary of St. Andrews, starting at PTH#9 and HWY#27 (close enough) at the Lift Station and hooking up to the River Springs Drive Gravity Sewer in West St. Paul. The City has nothing to do with that one either, St. Andrews and West St. Paul are sharing the cost for the upkeep and maintenance of that one. I

Therefore, the City of Winnipeg is not at all involved in the collection of the St. Andrews Wastewater. And you ask, why do they want to charge for it?

So far, I do believe that they can only charge St. Andrews \$ 1.58( one dollar and fifty eight cents) per cubic meter.

Let us revisit the financial data supplied by the City of Winnipeg:

2018 City of Winnipeg Adopted Budget Operating and Capital Volume 2 – Page 101

\*\*\*the city separates Treatment and Collection for their Budgeting purposes which makes it a lot easier, because we can compare apples with apples.

	Wastewater Collection	Wastewater Treatment
Expenses	68.019	87.813 (in millions \$)
Revenues	95.935	102.106 (in millions \$)
Total Expenses for Wastewater Collection and Treatment: 155.832 (in millions \$)		

Wastewater Treatment as a percentage of total Expenses =  $87.813/155.832 \times 100 = 43.65\%$

Wastewater Collection as a percentage of total Expenses =  $68.019/155.832 \times 100 = 56.35\%$

Let's go one step farther and see the percentages for Revenues.

Wastewater Collection	Wastewater Treatment
Revenues 95.935	102.106 (in millions \$)

Total Revenues for Wastewater Collection and Treatment: 198.041 (in millions \$)

Wastewater Collection as a percentage of total Revenue =  $95.935/198.041 \times 100 = 48.44\%$

Wastewater Treatment as a percentage of total Revenue =  $102.106/198.041 \times 100 = 51.56\%$

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As per the City of Winnipeg 2018 Fees and Surcharges Schedule:

Price charged to City of Winnipeg stakeholder = \$ 2.80 per cubic meter. Therefore for every cubic meter of wastewater the costs are:

for Wastewater Collection is  $\$2.80 \times 56.35 \% = \$ 1.58 / \text{cubic meter}$  ( this is the amount used for Collection of the Wastewater)

for Wastewater Treatment  $\$2.80 \times 43.65 \% = \$ 1.22 / \text{cubic meter}$  ( this is the amount used for Treatment of the Wastewater)

As proven in the last article, the City of Winnipeg does not occur any expense in regards to collecting South St. Andrew's wastewater. And we have proven that the cost to the City of Winnipeg is \$1.58 / cubic meter, for Treatment at the North End Treatment Facility, as per data supplied in the Budget document.

Let us convert the cubic meters imperial gallons. 1 (one) cubic meter = 219.97 imperial gallons.

St. Andrews wants to charge us City of Winnipeg Rates which are:

\$ 2.80 / cubic meter

or

\$ 0.0127 per imperial gallon (2.80/219.97)

Sure doesn't sound like that's too much! Bear with me please, you may change your opinion.

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Ok, so lets see what it cost the residents of St. Andrews, using the data and costs per Andrew Weremy (former CAO) who stated we will pay City of Winnipeg Rates which are \$ 2.80 per cubic meter or \$ 0.0127 per imperial gallon. Remember, the final cost to the St. Andrews residents does not include Administration fees charged by the City of Winnipeg and Corporation of St. Andrews or any other "fees" charged by the Corporation of St. Andrews.

BELOW IS THE AMOUNT THE CORPORATION OF ST. ANDREWS WANTS TO CHARGE YOU BECAUSE THEY DIDN'T NEGOTIATE FOR YOU, THE TAXPAYER, WITH THE CITY OF WINNIPEG.

According to City of Winnipeg (one) person consumes 270 L/d (two hundred seventy litres of water/day) or approximately ( 270 / 4.54(liters in a gallon)) = 60.0 imperial gallons of water/day. I felt this estimate a bit high so I've used 221 L/d as my target estimate value. Therefore 221/4.5 (liters in an imperial gallon) = 49.1 imperial gallons of water a day.

Therefore a normal family of 4 people would consume approximately (4 x 49.1) = 196.4 imperial gallons of water a day.

At \$0.0127 cents a gallon for treatment ( \$2.80/cubic meter) you consume approximately (.0127 x 196.4) = \$ 2.494 per day. With 365 days a years, (except leap year which comes 1 in 4 ) your yearly bill, just for wastewater usage

(no administration fees and no taxes) would be ( \$ 2.494 x 365) = \$ 910.31

Let is add GST/PST and we get \$910.31 x 1.13 = \$ 1028.65 yearly.

Of course this amount could be less or it could be more depending on how your

family and you use the water.

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BELOW IS THE AMOUNT THE CORPORATION OF ST. ANDREWS SHOULD CHARGE .

As I have shown, the actual cost of treating South St. Andrews Wastewater is:

\$1.58 / cubic meter or \$ 0.0071 / imperial gallon (1.58/219.97).

Therefore a normal family of 4 people would consume approximately  $(4 \times 49.1) = 196.4$  imperial gallons of water a day.

At \$0.0071 cents a gallon for treatment ( \$1.58/cubic meter) you consume approximately  $(.0071 \times 196.4) = \$ 1.394$  per day. With 365 days in a year, (except leap year which comes 1 in 4 ) your yearly bill, just for wastewater usage (no administration fees and no taxes are included in this figure ) would be

( \$ 1.394 x 365) = \$ 508.81

Let us add GST/PST and we get ( no administration fees are included in this figure)  $\$508.81 \times 1.13 = \$ 574.95$  yearly. Of course this amount could be less or it could be more depending on how your family and you use the water.

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If you reference the following website:

reference: <http://www.mntap.umn.edu/focusareas/water/bodtss/>

(University of Minnesota)

You will find, as I stated in a previous article, the USA EPA states the following:

"When properly installed, septic tanks typically remove about 50 percent of BOD, 75 percent of suspended solids, virtually all grit, and about 90 percent of grease, reducing the likelihood of clogging. Also, wastewater reaching the treatment plant will be weaker than raw sewage.

Typical average values of BOD and TSS are 110 mg/L and 50 mg/L, respectively. BOD or Biological Oxygen Demand (Also known as Biochemical Oxygen Demand) is the main measuring stick for determining the strength of wastewater;



therefore, a lower BOD is an indicator of good quality water, while a higher BOD indicates polluted water.

The strength, or BOD, of wastewater from a home, with a Gravity Sewer System, is around 300 mg/l to 350 mg/l. In a LPS(/STEP) system values of BOD and TSS are 110 mg/L and 50 mg/L, respectively. Total suspended solids (TSS) in a Gravity Sewer System is the total amount of suspended materials (>250 milligrams per liter) as compared to a LPS/STEP of 50mg/L.

Primary sedimentation is not required to treat septic tank effluent. "

reference: <http://www.mntap.umn.edu/focusareas/water/bodtss/> (University of Minnesota) for the following information:

The Minnesota Technical Assistance Program (MnTAP) is an outreach program at the University of Minnesota that helps Minnesota businesses develop and implement industry-tailored solutions that prevent pollution at the source, maximize efficient use of resources, and reduce energy use and costs to improve public health and the environment. Their Article states the following:

The wastewater fees of most publicly owned water treatment plants around the state are based on the amount of waste in the discharged water, otherwise known as the strength of the water. High strength numbers mean lost product and/or water treatment chemicals in the waste water discharge and strength charge assessments on your sewer discharge bill. Companies are subject to this fee if they have continuous or batch discharges or spills of high strength wastewater. The strength is determined by the following factors (the levels in parentheses indicate when they are considered high by MCES).

Biochemical oxygen demand (BOD) is the amount of oxygen it takes to degrade organic matter.

Chemical oxygen demand (COD) (>500 milligrams per liter).  
Total suspended solids (TSS) is the total amount of suspended materials (>250 milligrams per liter).

As per the USA/EPA septic tanks typically remove about 50 percent of BOD, 75

percent of suspended solids, virtually all grit, and about 90 percent of grease, reducing the likelihood of clogging. Also, wastewater reaching the treatment plant will be weaker than raw sewage.

Typical average values of BOD and TSS are 110 mg/L and 50 mg/L, respectively.

The wastewater from South St. Andrews, transported to the City of Winnipeg Treatment Plant will require, at a minimum 50% of the treatment as required for West St. Paul and City of Winnipeg sewage.

The Public Utilities Board of Manitoba recognized this fact, and in 2014, M A N I T O B A ) Order No. 103/14 ) THE PUBLIC UTILITIES BOARD ACT ) September 16, 2014 Which stated:

By this Order, the Public Utilities Board (Board) approves the low pressure compensation policy (policy [#UT 2014-01](#)) from the Town of Beausejour (Town).

The policy states that the owners of properties serviced by low pressure sewage systems use about 50% of the service provided by the Town's gravity sewer system.

The Town therefore believes that these utility customers should be rebated 50% of the fees collected from them for the "sewer collection system". The Town shall calculate the customer's rate reduction on an annual basis and will credit their account by that amount.

Let us plug in the 50% reduction ordered by the PUB in the Beausejour Order.

Therefore a normal family of 4 people would consume approximately  $(4 \times 49.1) = 196.4$  imperial gallons of water a day.

At \$0.0071 cents a gallon for treatment ( \$1.58/cubic meter) you consume approximately  $(.0071 \times 196.4) = \$ 1.394$  per day. With 365 days in a year, (except leap year which comes 1 in 4 ) your yearly bill, just for wastewater usage (no administration fees and no taxes are included in this figure ) would be (  $\$ 1.394 \times 365) = \$ 508.81$ .

Let us apply the 50% reduction and we get:  $.50 \times 508.81 = \$ 254.40$

Let us add GST/PST and we get ( no administration fees are included in this figure)  $\$508.81 \times 1.13 = \$ 574.95$  yearly. Of course this amount could be less or it could be more depending on how your family and you use the water.

Let us apply the 50% reduction and we get:  $.50 \times 575.95 = \$ 287.97$ /yearly with

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Public Utilities Board –Hearing

RM St. Andrews, Manitoba

April 26, 2021

April 17, 2021

Written Submission –PUB Hearing

In Opposition to the Rate Application by RM of St. Andrews

Honoured Board Members:

My wife Maryanne and I have lived in the RM of St. Andrews for over 47 years at 19 Davidson Rd. We are both 73 years of age and are retired, living on a fixed income.

Although I am aware that the Honourable Members of this Board are not sitting to comment on or evaluate the Infrastructure costs of this Project, I believe it is imperative that this Board is aware of the hardship this Project, by the RM of St. Andrews, has brought to bear on the Residents of South St. Andrews, especially on the elderly and those living on fixed incomes.

The only increases in our Pensions is the “cost of living” as determined by the Federal Government's cost of living index which varies on a yearly/quarterly bases.

**Note:** Subsequent to the increase in the Consumer Price Index, OAS benefit

amounts will increase by 0.5% for the April to June 2021 quarter. The CPP benefit amounts will increase by 1.0% as of January 2021 and are on yearly bases. My wife Maryanne receives a minimal CPP because she was a “stay at home Mom” and didn't contribute to the CPP.

These Cost of Living increases amount to approximately \$250 on a yearly bases. Therefore any expenses above the \$250 CLI puts us in a deficit situation. So, when if we pay for the local improvement fee of \$504 yearly paid over 20 year period, to the RM, we will already have lowered our Standard of Living by  $504 - 250 = \$250.00$ .

We have worked long and hard to set aside monies for our retirement. We sat that money aside to pay for maintenance/replacement of our car, appliances and other items necessitated by age. However, we have to now go into those reserves for a wastewater system we did not require or asked for.

If we want to pay for the local improvement infrastructure it will cost us \$7,264.37 + \$2680.00 for the Winnipeg Connection fee + a minimum of \$6500.00 for the piping from the curb stop to our septic tank + other charges of inspection fees etc., for a minimum of \$16,444.37. Our Retirements savings will be depleted. Bearing in mind that we will still have to pay for yearly pump out of our septic tank and pay for maintenance of the pumps etc as this is not a Gravity system but a Low Pressure System which can only handle wastewater not solids.

We have no means of replacing those funds. My wife is Asthmatic and a Diabetic; I have COPD which limits my mobility. We can no longer make up those monies

by getting a part time job or working overtime! So each grab for monies to implement and maintain this Wastewater System lowers our Standard of Living. I will stress again, a System that was not required or asked for by the majority of Residents of South St. Andrews.

The RM of St. Andrews is proposing a \$100 levy for unconnected customers in South St. Andrews, the SSL (Special Service Levy). If this levy should be approved by the Municipal Board that would add another \$100 deficit to our financial bottom line. The RM of St. Andrews is suggesting a Quarterly billing, for usage, between \$200 to \$250 or an annual billing of \$800 to \$1000 dollars on a yearly bases. Not counting the \$16,444.37 for infrastructure costs, my wife Maryanne and I are looking a minimum reduction of approximately \$1300 in our yearly income and standard of living. I will stress that this is a \$50,000,000.00 (infrastructure costs and costs for Residents to hook up to the System) Wastewater System.

In fact, the Rates and Data supplied to the PUB is based on a \$100 levy (SSL) that has not been approved by the Municipal Board or for that matter not by the Council because Third Reading has not been given by the RM of St. Andrews Council. It appears that CAO Sigmundson and Administration is assuming that the levy will be approved by the Municipal Board and the Council. By looking at Mr. Sigmundson's record, I allege he has been proven to make the wrong decision in the past. For example the \$464 payment over twenty years and the April 01/2021 startup of the System, just to name a few.

Andrew and Maryanne Dolenuk

19 Davidson Road, St. Andrews Mb

## 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."



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

### 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 1<sup>st</sup> reading of by-law and submission to Municipal Board;
- proceed with 1<sup>st</sup> 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 2<sup>nd</sup> and 3<sup>rd</sup> 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 2<sup>nd</sup> and 3<sup>rd</sup> 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
<b>Total Estimated construction cost</b>	<b>35,622,124</b>
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)
<b>Local Improvement Funding</b>	<b>15,155,493</b>

### 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

## **Rural Municipality of St. Andrews**

### **St. Andrews South Wastewater Utility Rate Study**

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.

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

### 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.

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

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

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

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:

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

**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
<b><u>Working Capital Surplus/Deficit</u></b>		
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	-	-
<b>Working Capital Surplus/Deficit</b>	<b>\$0</b>	<b>\$ 48,278</b>
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
<b>Net Operating Surplus (Deficit) with PUB Adjustments</b>	<b>(13,508)</b>	<b>2,275</b>	<b>18,058</b>

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.	
<b>Minimum Quarterly Billing</b>	14	\$140.04
<b>Minimum Annual Billing</b>	56	\$560.16
	C.M.	
<b>Average Quarterly Billing</b>	36	\$233.10
<b>Average Annual Billing</b>	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
<b>General</b>								
<b>Expenses:</b>								
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
<b>Revenue</b>								
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
<b>Net Costs General</b>			37,846	68,792	161,630	316,360	378,252	563,928
<b>Wastewater</b>								
<b>Expenses</b>								
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
<b>Revenue</b>								
Other revenue			-	-	-	-	-	-
Total Wastewater revenues			-	-	-	-	-	-
<b>Net rate costs - Wastewater</b>			1,244,246	1,286,441	1,413,026	1,624,001	1,708,391	1,961,561
<b>Wastewater Billing Revenues</b>								
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

	Note	Number of Customers					
		100	200	500	1,000	1,200	1,800
<b>Property Taxes - Local Improvement Debt Payments</b>							
Transfer from Gen. Optg. - Wastewater		699,058	699,058	699,058	699,058	699,058	699,058
<b>Net Revenue/(Expenses)</b>		<b>(277,602)</b>	<b>(308,850)</b>	<b>(277,284)</b>	<b>(277,994)</b>	<b>(276,806)</b>	<b>(278,558)</b>
<b>Capital Grant Amortization</b>							
Amortization of Wastewater capital grants	3	295,342	295,342	295,342	295,342	295,342	295,342
<b>Net Operating Surplus (Deficit) with PUB Adjustments</b>		<b>17,740</b>	<b>(13,508)</b>	<b>18,058</b>	<b>17,348</b>	<b>18,536</b>	<b>16,784</b>
<b>Transfers</b>							
Transfers from Government - Capital	3	16,830,000	-	-	-	-	-
Local Improvement Connection Fees	3	6,062,197	-	-	-	-	-
Transfers from/(to) Utility Reserve		-	-	-	-	-	-
Transfers from General Optg.-Gas Tax Reserve; Main St. Sewer	3	2,300,000	-	-	-	-	-
Transfers from General Optg. - Gas Tax Reserve	3	1,336,631	-	-	-	-	-
<b>Change in Utility Fund Balance after Surplus Transfers</b>		<b>17,740</b>	<b>(13,508)</b>	<b>18,058</b>	<b>17,348</b>	<b>18,536</b>	<b>16,784</b>
<b>Water and Sewer Billing Deficit Rate Rider Revenues</b>		-	-	-	-	-	-
<b>Reverse PUB Adjustments to Adjust Surplus to PSAB</b>							
Capital Grants - Reverse PUB Adjustments		-	(295,342)	(295,342)	(295,342)	(295,342)	(295,342)
Deduct Amortization of Capital Grants		-	-	-	-	-	-
<b>FUND SURPLUS, BEGINNING OF YEAR</b>		<b>-</b>	<b>26,528,828</b>	<b>26,528,828</b>	<b>26,528,828</b>	<b>26,528,828</b>	<b>26,528,828</b>
<b>FUND SURPLUS, END OF YEAR</b>		<b>\$ 26,251,226</b>	<b>\$ 26,219,978</b>	<b>\$ 26,251,544</b>	<b>\$ 26,250,834</b>	<b>\$ 26,252,022</b>	<b>\$ 26,250,270</b>
<b>Working Capital Surplus/Deficit</b>							
Fund Surplus		\$ 26,252,828	\$ 26,219,978	\$ 26,251,544	\$ 26,250,834	\$ 26,252,022	\$ 26,250,270
Less Tangible Capital Assets	3	(35,622,124)	(35,006,703)	(35,006,703)	(35,006,703)	(35,006,703)	(35,006,703)
Add Long term debt	3	9,093,296	8,803,436	8,803,436	8,803,436	8,803,436	8,803,436
Add Utility Reserve		-	-	-	-	-	-
<b>Working Capital Surplus/Deficit</b>		<b>\$0</b>	<b>\$ 16,712</b>	<b>\$ 48,278</b>	<b>\$ 47,568</b>	<b>\$ 48,756</b>	<b>\$ 47,004</b>
Minimum working capital surplus = 20% of expenses							
Proposed to Exclude Winnipeg Fees		\$0	\$242,390	\$244,790	\$247,790	\$248,990	\$252,590
<b>note 1</b>							
<u>City of Winnipeg Participation Fee</u>							
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						
200						
500						
1,000						
1,200						
1,800						
Estimated flow volume in Cubic Meters (see Schedule of Rate Calculations)	100	200	500	1,000	1,200	1,800
Winnipeg wastewater treatment fee 2022 rate; per cubic meter	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 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 40%  
 Percentage of Local Improvement charges to be paid by debt issuance 60%  
 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	

9,210,784 28%  
 900,000 3%  
 23,211,339 70%  
 33,322,124  
 2,300,000  
 35,622,124

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	<b>500</b>	1,000	1,200	1,800
Annual Customer Service Charge	378.48	343.96	<b>323.28</b>	316.36	315.20	313.28
	<u>37,848</u>	<u>68,792</u>	<u><b>161,640</b></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><b>500</b></u>	<u>1,000</u>	<u>1,200</u>	<u>1,800</u>
Sewer Volume in cubic meters	14,500	29,000	<b>72,500</b>	145,000	174,000	261,000
Sewer Rate per cubic meter	6.73	5.17	<b>4.23</b>	3.91	4.21	3.77
	<u>97,585</u>	<u>149,930</u>	<u><b>306,675</b></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><b>468,315</b></u>	<u>883,310</u>	<u>1,110,780</u>	<u>1,547,874</u>
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