

May 30, 2022

# Water Rate Update 2022

# Agenda

- Background
- Usage Statistics
- Operating Budget
- Capital Plan
- Financing Strategy
- Reserves
- Summary of Proposed Rates

# Background

- City provides drinking water to 7,372 accounts. This represents an increase of 21 new accounts in 2021
- The City services all properties within its boundaries plus a few accounts outside City limits in Georgian Bluffs and Meaford.
- Both the water treatment plant and the waste water treatment plant are operating at approximately 50% capacity
- There are seven quarterly billing cycles and one bi-monthly cycle for large customers
- We are moving to a modified monthly billing option for customers that would prefer it. This is expected to be operational by 2023-2024.

# Historical Rate Increases

- Water rates did not increase between 2016 and 2019, inclusive in favour of increasing the wastewater surcharge from 102% in 2016 to 124% in 2019 (still in effect in 2021)
- The 2020 water rate did not increase to reflect the financial burden borne by ratepayers as a result of COVID and anticipated higher household use.
- The 2021 rate increased by 4%
- The current recommendation for a rate increase in 2022 is 5%
- The estimated rate increase required in 2023 is 6%

# Background Study and Financial Plan

- The City underwent a comprehensive background study ahead of the 2020 rate increase.
- At the time, the estimated required an annual rate increase after factoring in a year with no increase for 2022 was 5.95%
- The study anticipated an annual increase of connections by around 50 units. We currently realize half of that.
- The study anticipated declining consumption of 0.25% annually. Actual decline in consumption was 3.3% in 2019, 4.8% in 2020 and 2.2% in 2021. The updated rate calculation has been adjusted to reflect the higher declining usage.

# Purpose of Tonight's report

- Approve the rates in effect for the next billing year
- Ensure calculated rates are sufficient to ensure a financially sustainable and fully rate supported water and wastewater service
- Review multi-year operating and capital budgets as well as usage to confirm the base data that is used to calculate the rates

<b>WATER RATES AND SEWER SURCHARGE</b>	<b>TAX RATES</b>
$= \frac{\text{OPERATING BUDGET} + \text{ANNUAL CAPITAL INVESTMENT}}{\text{TOTAL M3 USAGE}}$	$= \frac{\text{OPERATING BUDGET} + \text{ANNUAL CAPITAL LEVY}}{\text{CURRENT VALUE ASSESSMENT}}$

CITY OF OWEN SOUND  
WATER  
DRAFT 2022 OPERATING BUDGET

	2022 DRAFT BUDGET	2021 BUDGET	VARIANCE
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<i><b>Water Distribution and Treatment</b></i>				
		2022	2021	Variance
<b>10 FTE</b> Water Treatment Super Water Dist. Supervisor 9 x Water Cert. Operators	Salaries and Benefits	<b>1,370,763</b>	1,285,372	85,392
	Materials and Supplies	<b>1,487,031</b>	1,419,868	67,163
	Contract Services	<b>120,250</b>	120,250	-
	Debt Payments	<b>192,858</b>	181,678	11,180
	<i>Gross Costs</i>	<b>3,170,903</b>	3,007,167	163,735
<b>Contracts</b> DWQMS Testing	Grants	-	-	-
	Other Revenue	<b>(5,779,907)</b>	(5,878,281)	98,374
	<i>Revenue</i>	<b>(5,779,907)</b>	(5,878,281)	98,374
	Net Cost	<b>(2,609,004)</b>	(2,871,114)	262,110
	Reserve Contribution	<b>713,276</b>	379,131	334,145
	Capital Contribution	<b>975,000</b>	1,723,320	(748,320)
	Internal Cost Allocation	<b>920,730</b>	768,664	152,066
	Division Levy Requirement	<b>1</b>	1	(0)

Water Operating Budget

CITY OF OWEN SOUND  
PWNT WASTE WATER  
DRAFT 2022 OPERATING BUDGET

	2022 DRAFT BUDGET	2021 BUDGET	VARIANCE
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***Waste Water Collection and Treatment***

	2022	2021	Variance
<b>7 FTE</b>			
PW Manager	Salaries and Benefits <b>922,570</b>	930,026	(7,456)
Waste Water Super	Materials and Supplies <b>1,594,704</b>	1,385,374	209,330
5 Certified Operators	Contract Services <b>341,000</b>	306,000	35,000
	Debt Payments <b>1,407,896</b>	2,275,127	(867,231)
	<b>Gross Costs 4,266,170</b>	4,896,527	(630,357)
<b>Contracts</b>			
Violia	Grants -	-	-
Testing	Other Revenue <b>(6,412,529)</b>	(6,595,855)	183,326
	<b>Revenue (6,412,529)</b>	(6,595,855)	183,326
	<b>Net Cost (2,146,359)</b>	<b>(1,699,328)</b>	(447,030)
	Reserve Contribution <b>228,125</b>	(984,392)	1,212,517
	Capital Contribution <b>1,245,000</b>	2,001,760	(756,760)
	Internal Cost Allocation <b>673,234</b>	681,961	(8,727)
	<b>Division Levy Requirement 1</b>	<b>1</b>	(0)

Waste Water Operating Budget



# Water Capital Plan

# Watermain Capital Investment in Support of Other Construction

During the paving program it is desirable to replace some sections of poor-condition watermain in the paving area

To reduce the probability of having to excavate the new asphalt in the future to repair a watermain break.

Concurrent with the Paving Program 2022

\$100,000



# Cross Connection Control/ Backflow Prevention

Ensure that all Commercial, Institutional, and Industrial facilities meet the current backflow preventer requirements for the current Building Code and the City's Bylaw.

To prevent backflow and contamination of the City water system. The Backflow Prevention Coordinator works with landowners to install the required devices.

Multi Year Program for 5 years in the 10-year capital plan

\$450,000 in 2022 including \$100,000 carry over





# Water Treatment Plant Filter Refurbishment Project

Filter media replacement, underdrain replacement, air scour installation, valve, piping, and other mechanical replacements, instrumentation work, and pump control equipment.

The upgrades will address aged components and increase the useful life of the asset and also improve filter capacity substantially during wet weather events.

Construction in late 2022 and 2023

\$4M, of which \$3M in grant funding



# Water Treatment Plant Transformer

Procure a transformer suitable for the Water Treatment Plant, and also, ideally, suitable as a spare for the Wastewater Treatment Plant

The existing on site transformer at the Water Treatment Plant is original equipment (late 1960's) and is due for replacement. Failure would create a serious issue

Engineering and Procurement in 2022,  
Delivery in 2023

\$420,000





# Ultraviolet Disinfection Unit Replacement WTP

The four Ultraviolet Disinfection units at the Water Treatment Plant have been in operation for 19 years (2003) and it is proposed to replace them in 2023 and 2024

The manufacturer provided a letter in September 2021, stating this older model will be retired from active support. Parts will become less attainable within 3 years.

2023 and 2024

\$600,000 total cost for four units



# Waste Water capital plan

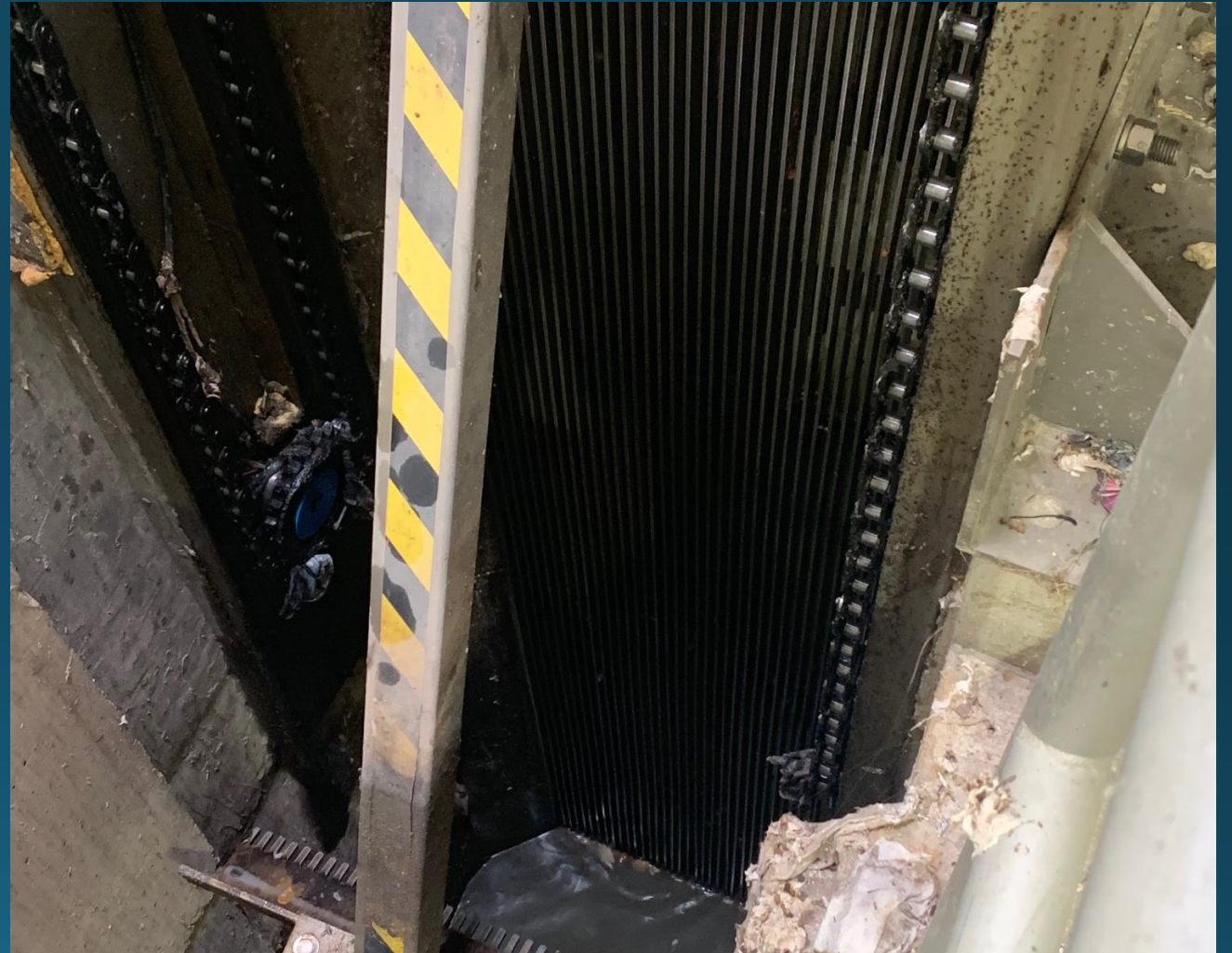
# Intermediate Bar Screens WWTP

Installation of finer gauge intermediate bar screens between the grit removal process and the clarifiers is proposed for improved removal of refuse-type material.

Downstream Processes are adversely affected including biosolids handling and treatment, and in time, this material can affect filter media and performance.

Engineering in 2022, Construction in 2023

\$980,000





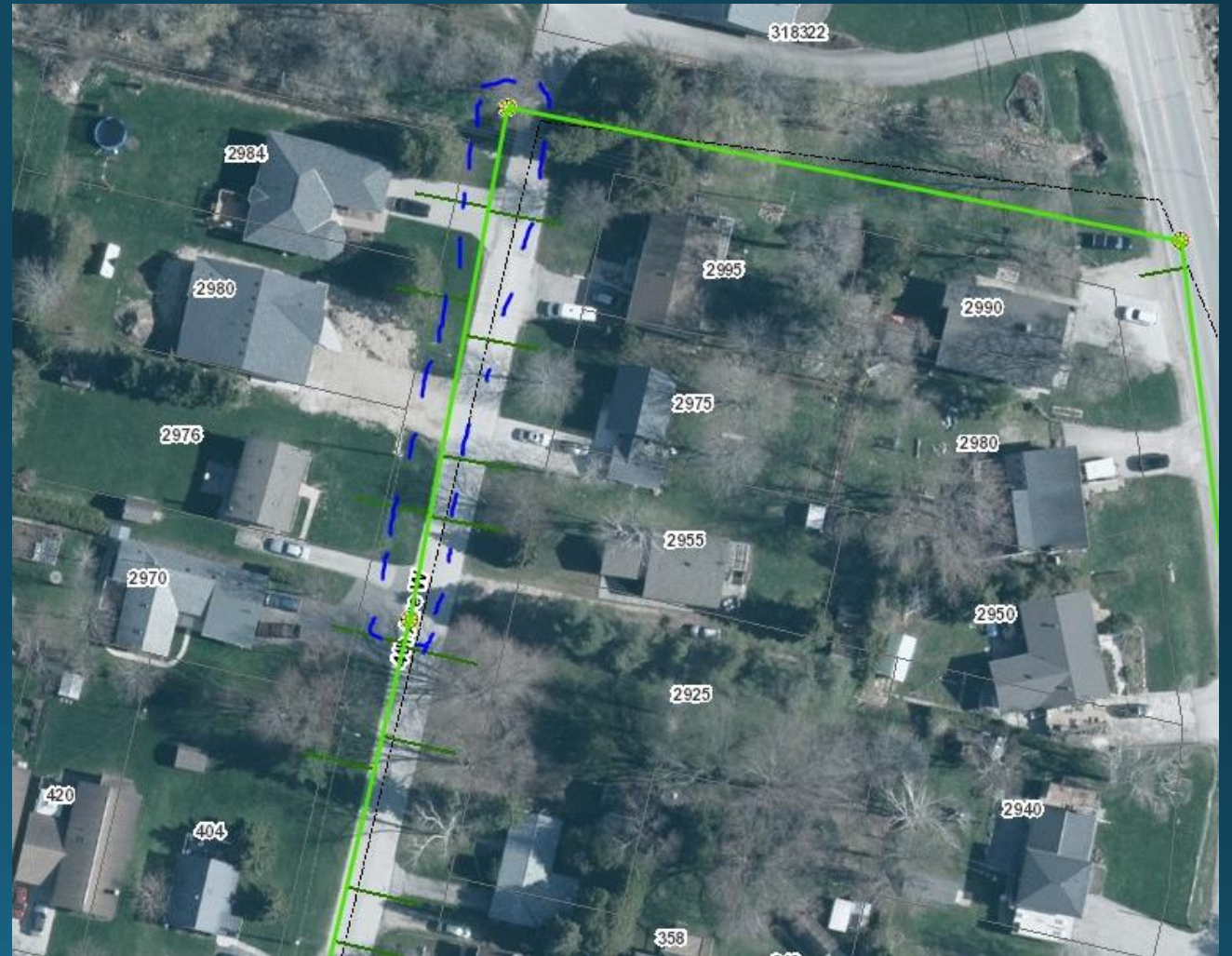
# 4<sup>th</sup> Avenue West Sewer for 28<sup>th</sup> St Apartments

This project is to upgrade 70m of sanitary sewer along 4th Avenue West in the 2900 Block. This sewer upgrade is to accommodate a new apartment development on 28th Street West in the 500 Block.

The capacity and condition of a portion of the existing sewer are marginal for the proposed development.

2022

\$100,000



# Collection System Capital Reinvestment

This project is to continue with the rehabilitation of the sanitary sewer infrastructure via sewer lining and manhole rehab. The city is currently in 2nd year of a 3 year contract to rehabilitate approximately 5km of sanitary sewer.

This process can greatly extend the useful life of the sewers, improve the system hydraulics, and reduce inflow and infiltration.

2022 and 2023

\$350,000 in each of 2022 and 2023





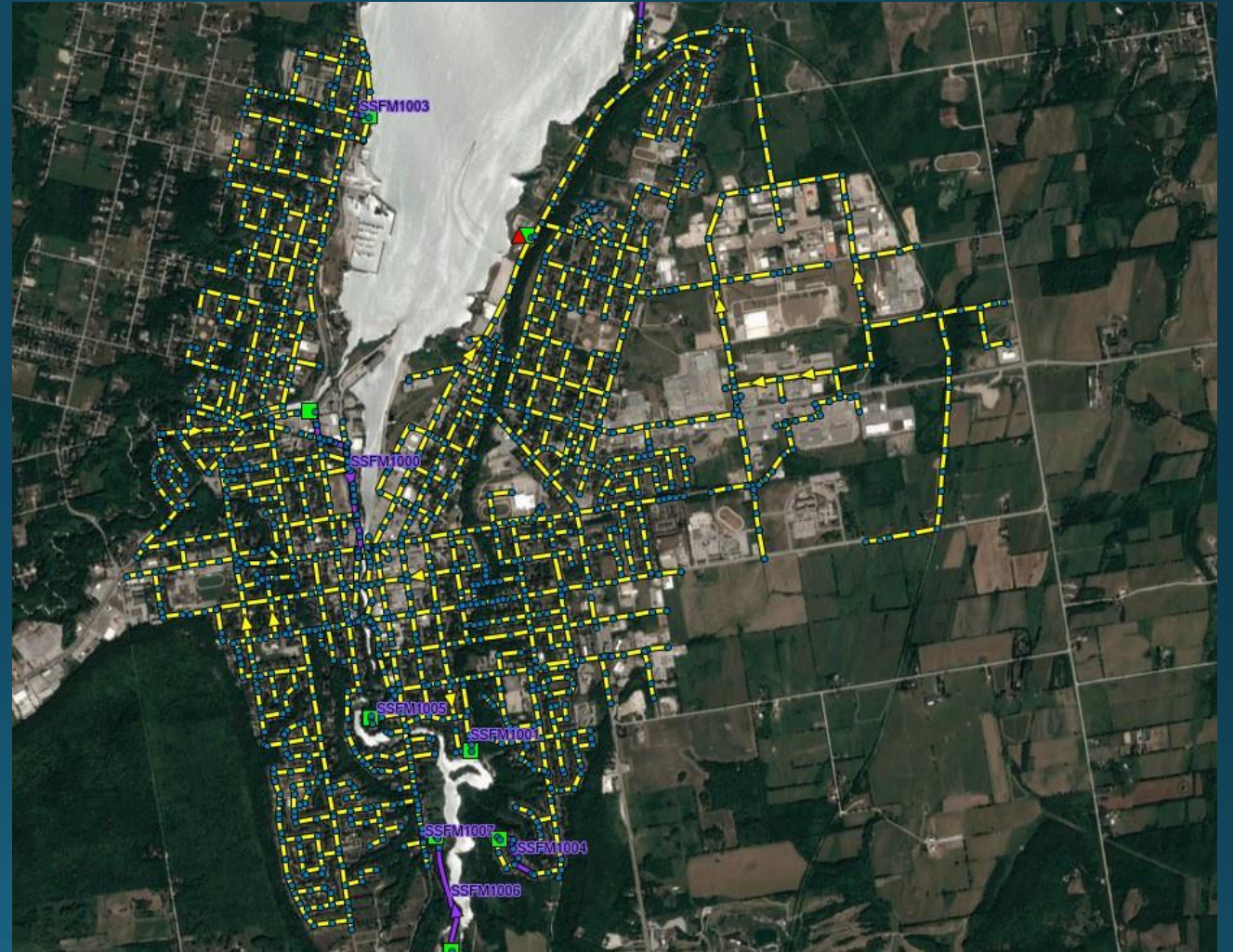
# Grant Projects : Improving Monitoring & Reporting: Wastewater

Under the grant program, it is proposed to improve realtime overflow and precipitation monitoring, and the City's existing sanitary and stormwater models.

Purpose of the program is to provide support to municipalities to improve monitoring/modelling and reporting of sewage overflows and bypasses.

June 2022 to March 2024

\$192,284 Grant Amount



# Combined Engineering Projects



# WATERMAIN LOOPING & REPLACEMENT- 9<sup>th</sup> Ave E – Superior St to 10<sup>th</sup> St E

## What

This project involves construction of a new looping watermain from 8<sup>th</sup> St E to Superior Street (4<sup>th</sup> St E). Pending Connecting Link funding availability, this project would also replace the existing watermain, some sanitary and storm sewer infrastructure on 9<sup>th</sup> Avenue East, construct new sidewalk and rehabilitate the road.

## Why

The watermain on 9<sup>th</sup> Avenue East has exceeded its useful life and requires replacement. The construction of a new looping watermain prior to this will allow the 9<sup>th</sup> Ave E watermain to be replaced and improve supply security to a south-east area of the City.

## When

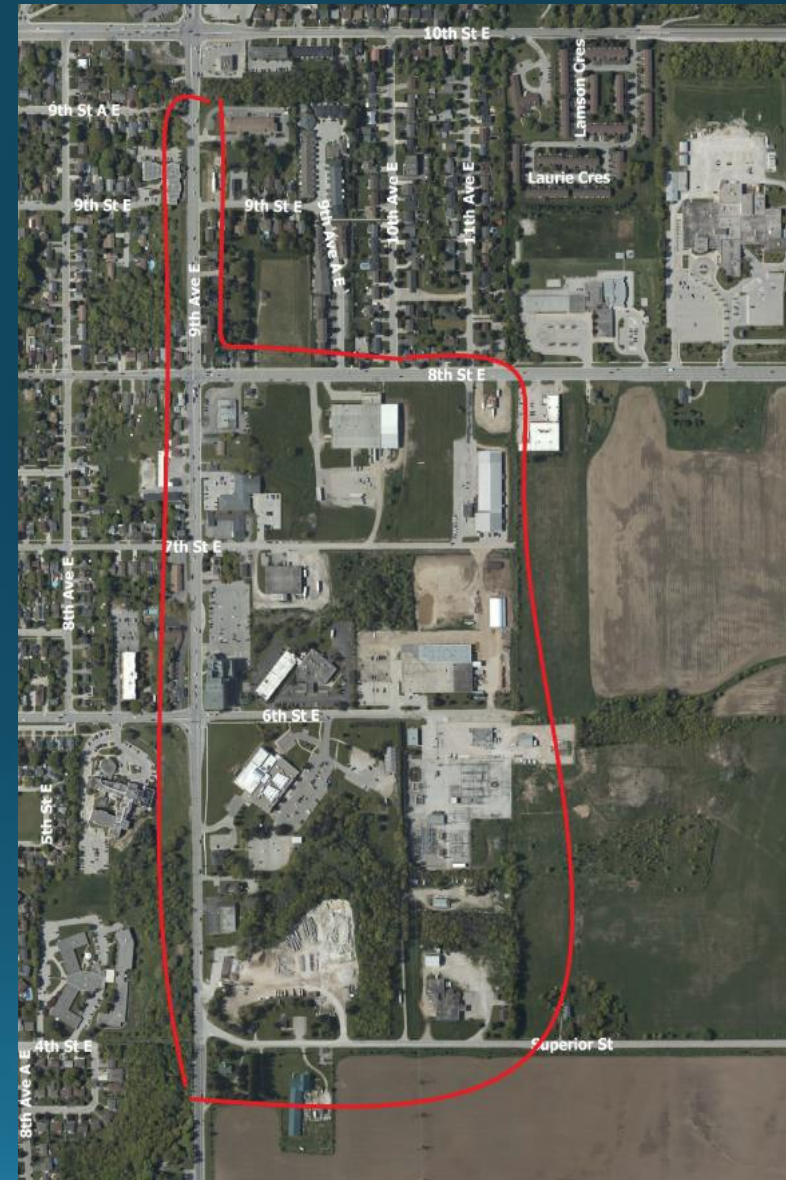
2021 - Commencement of Environmental Assessment, Approvals, Engineering design in order to be tender ready in 2023.

2023/24 - Construction of looping watermain planned.

## How Much

Water - \$2,700,000

Waste Water – \$240,000



# WATERMAIN REPLACEMENT-2<sup>nd</sup> Ave E (Grey Road 5) - Greenwood Area

## What

This project will replace existing watermain on 2<sup>nd</sup> Avenue East/Grey Road 5 from 1<sup>st</sup> St E to 1<sup>st</sup> St SW. This replacement is being coordinated with Grey County's road reconstruction.

## Why

The watermain on 2nd Avenue East has exceeded its useful life and is in need of replacement. Portions of frozen (fractured) watermain in this road segment were replaced in 2015.

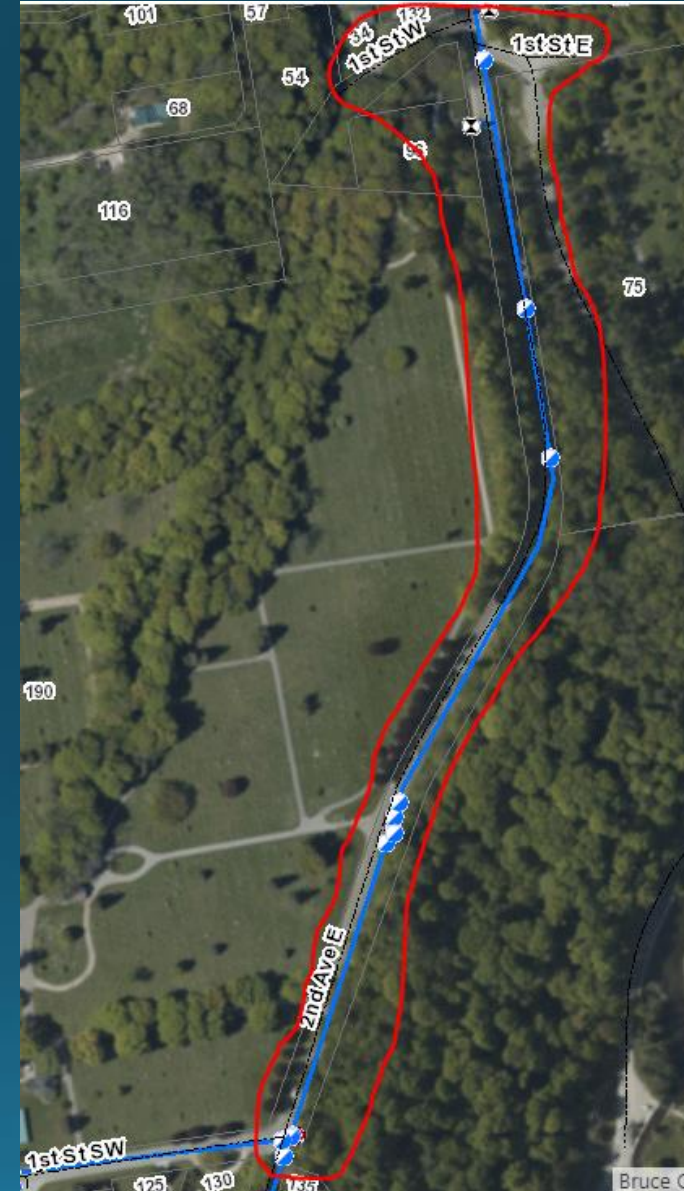
## When

2022 - Engineering design, approvals and tender ready.

2023 – Construction (depends on County)

## How Much

Water - \$890,000



# WATERMAIN & WASTEWATER SEWER REPLACEMENT - 4<sup>th</sup> Ave W - 15<sup>th</sup> St W to 19<sup>th</sup> St W

## What

This project involves full replacement of all existing underground municipal infrastructure (sanitary sewer, storm sewer and watermain). Scope of the project includes road reconstruction, sidewalk replacement, street light upgrading and enhanced street scape.

## Why

The infrastructure on 4<sup>th</sup> Avenue West has exceeded its useful life and is in need of replacement.

## When

Engineering design to be completed in 2024 with first phase of construction started in 2025.

## How Much

Water - \$840,000

Waste Water - \$760,000





# WATERMAIN & WASTEWATER SEWER REPLACEMENT – Alpha St - 6<sup>th</sup> Ave W to 9<sup>th</sup> Ave W

## What

This project involves replacing all of the existing underground municipal infrastructure (sanitary sewer, storm sewer and watermain). Included in the scope of this project is sidewalk replacement, street light upgrading and enhanced street scape .

This project will address the stability of the Alpha Street hill and additional storm sewer upgrading and road rehabilitation to 14<sup>th</sup> St W.

## Why

The watermain, sanitary sewer and storm sewer all have reached the end of their useful life and require replacement. Poor soil conditions on Alpha street has caused movement on the roadway that needs to be addressed.

## When

Construction:

Phase I - 2023

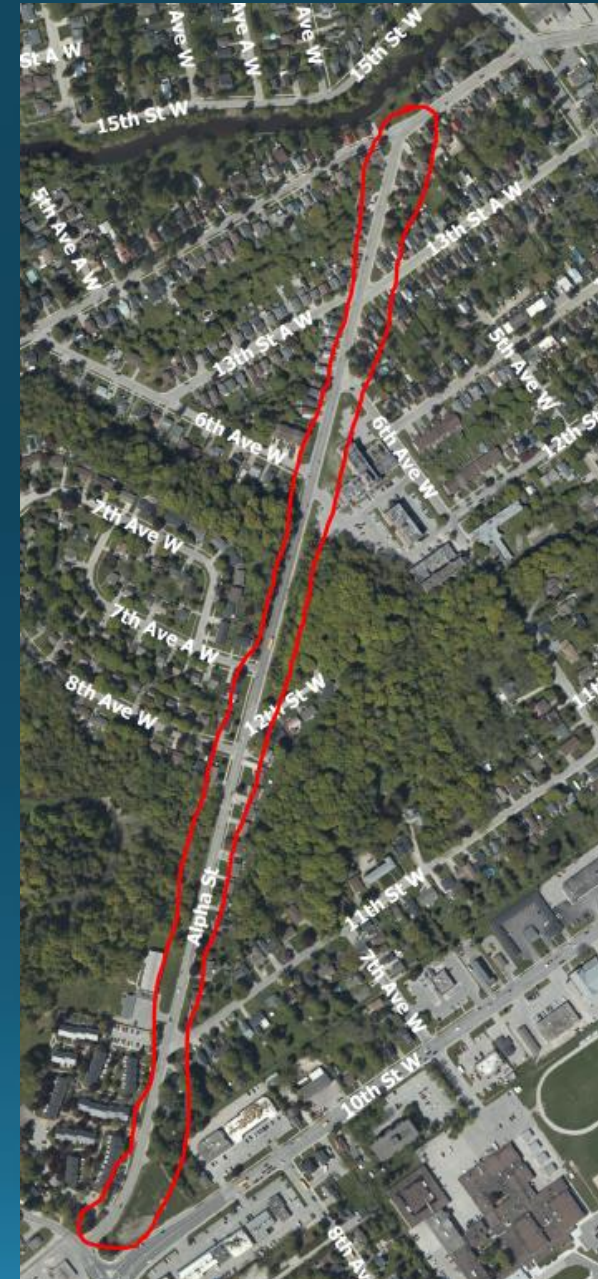
Phase II - 2024

Phase III – 2025

## How Much

Water – Phase 1- \$500,000, Phase II - \$700,000, Phase III - \$400,000

Waste Water – Phase 1- \$400,000, Phase II - \$600,000, Phase III - \$350,000

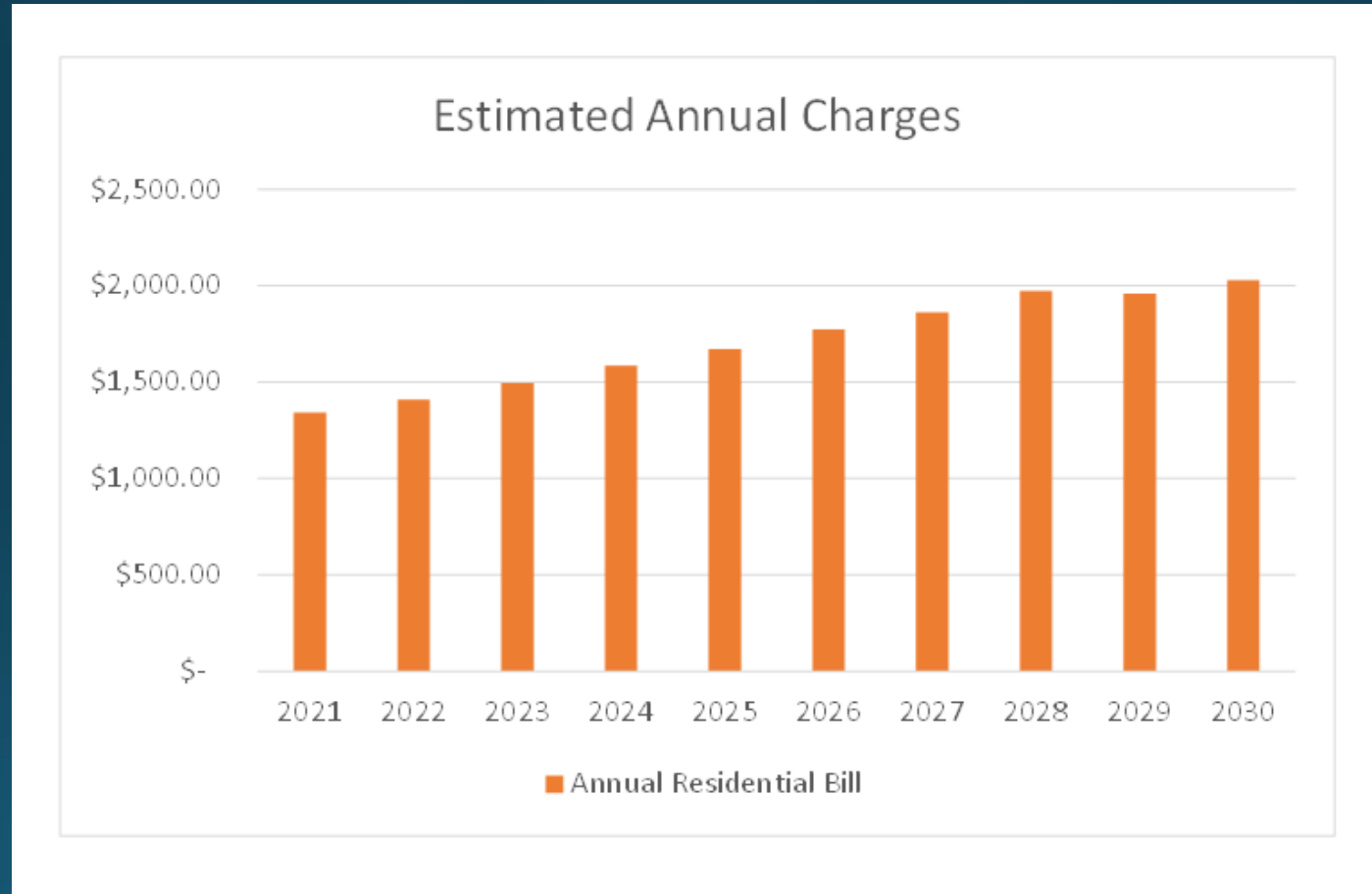




# Future Estimated Annual Water Charges

	2021	2022	2023	2024	NEW STUDY					
					2025	2026	2027	2028	2029	2030
<b>water rate increase</b>	4%	5.0%	6%	6.0%	6%	6%	6%	6%	6%	6%
<b>waste water surcharge</b>	124%	124%	124%	124%	124%	124%	124%	124%	110%	105%
<b>Estimated annual bill 200m<sup>3</sup></b>	\$1,343.82	\$1,411.01	\$1,495.67	\$1,585.41	\$1,672.61	\$1,772.97	\$1,861.62	\$1,973.30	\$1,960.98	\$2,029.15
<b>Monthly increase over prior year</b>	\$ 4.31	\$ 5.60	\$ 7.06	\$ 7.48	\$ 7.27	\$ 8.36	\$ 7.39	\$ 9.31	-\$ 1.03	\$ 5.68

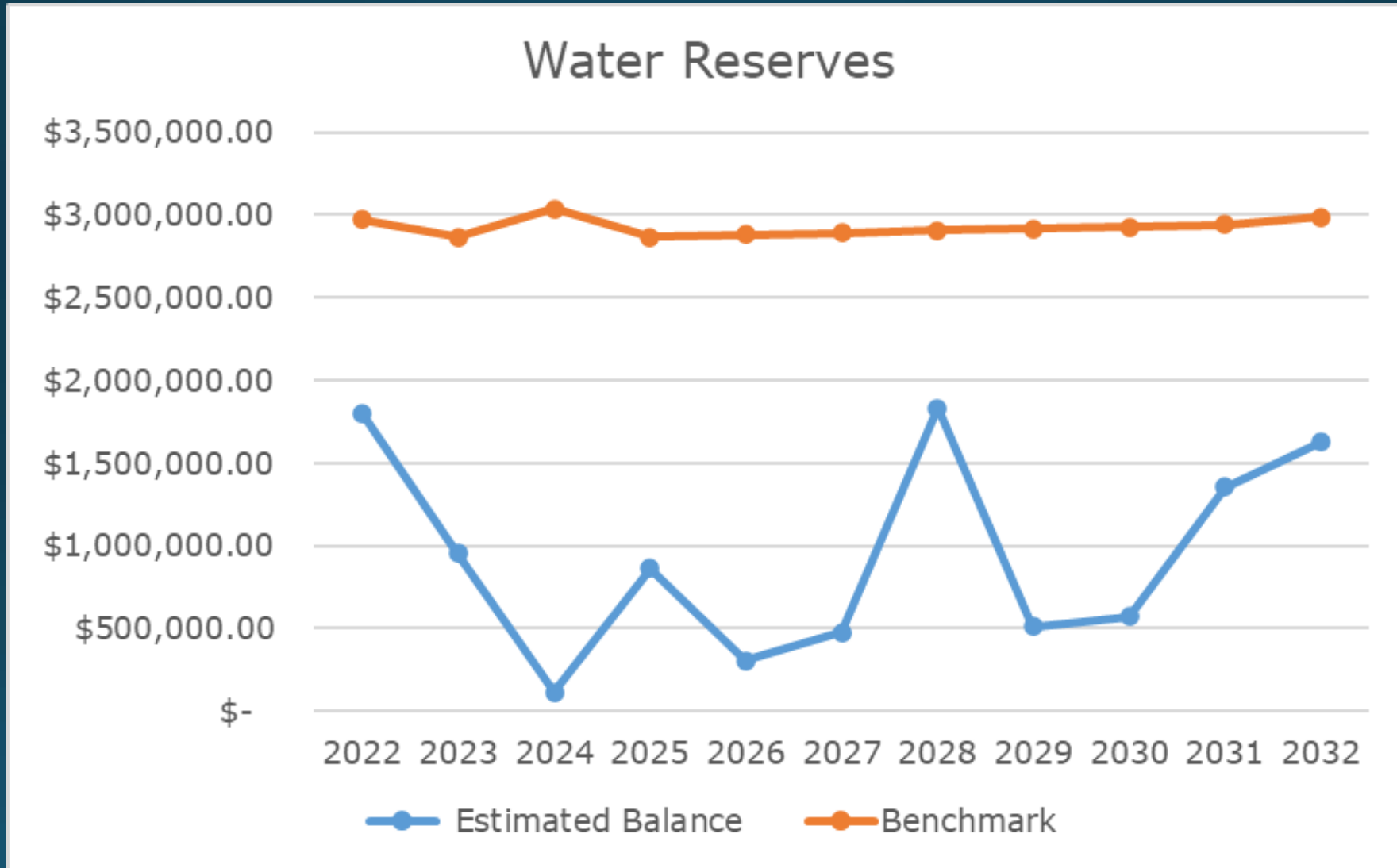
# Annual Residential Water Bill



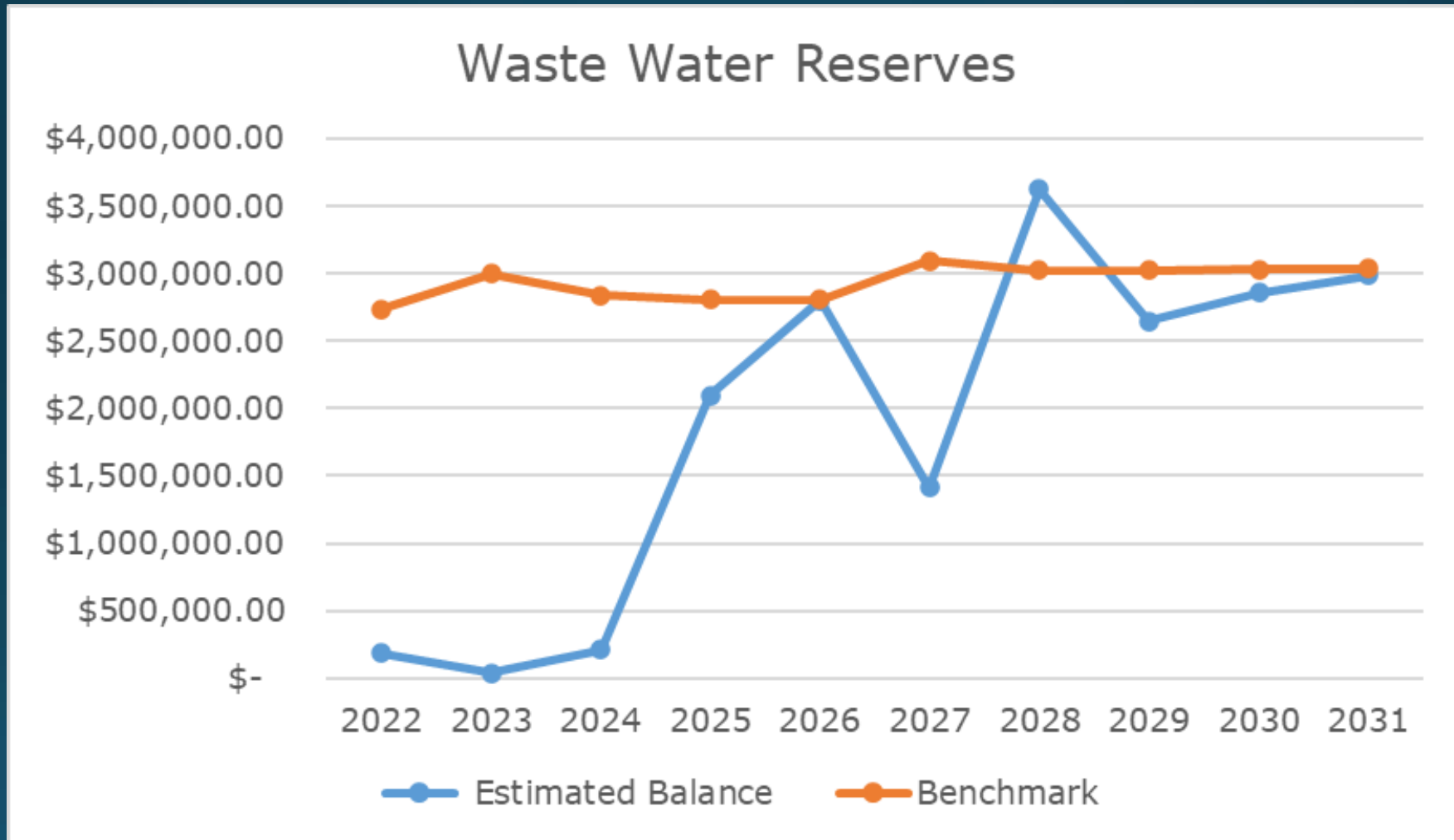
# BMA Study

Volume Meter Size	Residential 200 m <sup>3</sup> 5/8"	
Chatsworth		N/A
Georgian Bluffs		N/A
Grey Highlands	\$	1,393
Hanover	\$	782
Kincardine	\$	1,046
Meaford	\$	1,958
Owen Sound	\$	1,344
Saugeen Shores	\$	1,230
South Bruce Peninsula	\$	1,946
Southgate	\$	1,467
The Blue Mountains	\$	1,093
West Grey	\$	1,449
<b>Bruce/Grey Avg.</b>	<b>\$</b>	<b>1,371</b>
<b>Bruce/Grey Median</b>	<b>\$</b>	<b>1,369</b>

# Water Reserve



# Waste Water Reserve



# Summary

Service or Activity	Fee	Unit	Applicable Tax	Notes
Water Monthly Consumption Charges	\$ 1.52	Usage 0 - 110 m <sup>3</sup>	Exempt	1 Cubic Metre (m <sup>3</sup> ) = 1,000 Litres (L)
	\$ 1.71	Usage > 110 m <sup>3</sup>		
Water Monthly Service Charges	\$ 27.05	15 mm (5/8 in) <i>per month</i>	Exempt	Based on Water Meter Diameter
	\$ 32.94	18 mm (3/4 in) <i>per month</i>		
	\$ 42.65	25 mm (1 in) <i>per month</i>		
	\$ 62.22	38 mm (1 1/2 in) <i>per month</i>		
	\$ 121.25	50 mm (2 in) <i>per month</i>		
	\$ 199.25	75 mm (3 in) <i>per month</i>		
	\$ 297.09	100 mm (4 in) <i>per month</i>		
	\$ 394.93	150 mm (6 in) <i>per month</i>		
	\$ 590.61	200 mm (8 in) <i>per month</i>		
Wastewater Charges	124%	of Total Water Charges (water monthly consumption charges + water monthly service charges)	Exempt	
<p>All Rates shown are for properties within the boundaries of the City of Owen Sound. <b>Rates for properties outside the City of Owen Sound boundaries are double the amounts shown above.</b></p> <p>The monthly service charge plus applicable wastewater charges will constitute a minimum bill during a month without water consumption.</p>				