

ECONOMISTS LTD.

### Municipality of Southwest Middlesex Water and Wastewater Rate Study

Council Presentation December 4, 2024

### Areas of Discussion

- Study Purpose
- Legislation for Water and Wastewater;
- Existing and Forecasted Customers and Volumes;
- Capital Needs, Lifecycle Costs, and Financing;
- Operating Expenditures;
- Water Rates;
- Wastewater Rate Options; and
- Next Steps.

### Study Purpose



- Identify all current and future water and wastewater system capital needs;
- Identify cost recovery options for capital;
- Estimate future operating costs over the next 10 years; and
- Recommend new rates to recover the cost of the water and wastewater systems.
- Note: the calculations herein do not address stormwater operating and capital expenditures. As the maintenance and lifecycle requirements of stormwater infrastructure increases due to age, it is recommended that the Municipality undertake a review of the stormwater system to ensure full cost recovery for these expenditures.

### Legislation for Water and Wastewater

- Since Walkerton, new legislation has been passed by the Province to enhance the provision of services. These include the following:
  - Safe Drinking Water Act;
  - Sustainable Water and Sewage Systems Act;
  - O.Reg. 453/07 Safe Drinking Water Act;
  - Clean Water Act; and
  - Water Opportunities Act.
- Further Requirements:
  - Municipal Infrastructure Strategy
  - Infrastructure for Jobs and Prosperity Act, 2015



**Full Cost** 

Recovery

### 2024 Rates



2024 - Water Billing Rates											
Bi-Monthly Fixed Charges											
All Meters - Base Charge	\$ 50.31										
All Meters - Capital charge	\$ 20.00										
Volume Charge											
\$ 2.487	per m <sup>3</sup>										

2024 - Was	tewater E	Billina F	Rates

Bi-Monthly Fixed Charges - Glencoe										
All Meters - Base Charge	\$ 17.7	6								
All Meters - Capital charge	\$ 63.0	0								
Volume Charge										
\$ 1.931	per m <sup>3</sup>									

2024 - Wastewater Billing Rates										
Bi-Monthly Fixed Charges - Wardsville										
All Meters - Base Charge	e \$ 59.76									
Volume Charge										
\$ 4.246	per m <sup>3</sup>									

Anunal Fixed Charges - Wardsville								
Sewer Only Customers	\$	1,056.92						

### **Customer Profile**



Metered	Water	Wastewater - Glencoe	Wastewater - Wardsville (with Water)	Wastewater - Wardsville (No Water)	
Residential	1,733	1,050	183	Λ	
Commercial	26	1,000	105	4	
Total	1,759	1,050	183	4	

### Water Users Forecast

Year	Total Users	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
2025	24		12	24	24	24	24	24	24	24	24	24
2026	24			12	24	24	24	24	24	24	24	24
2027	48				24	48	48	48	48	48	48	48
2028	96					48	96	96	96	96	96	96
2029	120						60	120	120	120	120	120
2030	120							60	120	120	120	120
2031	132								66	132	132	132
2032	132									66	132	132
2033	132										66	132
2034	132											66
Total	960	-	12	36	72	144	252	372	498	630	762	894
m³/user	165	165	165	165	165	165	165	165	165	165	165	165
Annual Flow		-	1,980	5,940	11,880	23,760	41,580	61,380	82,170	103,950	125,730	147,510

Water Customer Forecast	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Existing	1,759	1,759	1,759	1,759	1,759	1,759	1,759	1,759	1,759	1,759	1,759
New - Growth	-	12	36	72	144	252	372	498	630	762	894
Total	1,759	1,771	1,795	1,831	1,903	2,011	2,131	2,257	2,389	2,521	2,653

Water Volume Forecast (m³)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Southwest Middlesex											
Existing - Residential	280,376	280,376	280,376	280,376	280,376	280,376	280,376	280,376	280,376	280,376	280,376
Existing - Non-Residential	5,222	5,222	5,222	5,222	5,222	5,222	5,222	5,222	5,222	5,222	5,222
New	-	1,980	5,940	11,880	23,760	41,580	61,380	82,170	103,950	125,730	147,510
Total	285,598	287,578	291,538	297,478	309,358	327,178	346,978	367,768	389,548	411,328	433,108

Purchased Water Volume Forecast (m³)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Tri-County											
Existing Purchased Volumes	344,53	344,536	344,536	344,536	344,536	344,536	344,536	344,536	344,536	344,536	344,536
New Purchased Volumes		2,389	7,166	14,332	28,663	50,161	74,047	99,127	125,402	151,676	177,951
Subtotal SWM Purchased Water	344,53	346,924	351,702	358,868	373,199	394,697	418,583	443,663	469,938	496,212	522,487
Tri-County Rate (assume 2% increases)	\$ 1.2 <sup>-</sup>	7 1.30	1.33	1.36	1.39	1.42	1.45	1.48	1.51	1.54	1.57
Purchased Water - Tri-County	\$ 437,56	\$ 451,002	\$ 467,763	\$ 488,060	\$ 518,747	\$ 560,469	\$ 606,945	\$ 656,621	\$ 709,606	\$ 764,167	\$ 820,305

Note: Purchased volumes assume 17% non-billable

### Wastewater Users Forecast – Glencoe

Year	Total Users	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
2025	24		12	24	24	24	24	24	24	24	24	24
2026	24			12	24	24	24	24	24	24	24	24
2027	48				24	48	48	48	48	48	48	48
2028	96					48	96	96	96	96	96	96
2029	120						60	120	120	120	120	120
2030	120							60	120	120	120	120
2031	132								66	132	132	132
2032	132									66	132	132
2033	132										66	132
2034	132											66
Total	960	-	12	36	72	144	252	372	498	630	762	894
m³/user	165	165	165	165	165	165	165	165	165	165	165	165
Annual Flow		-	1,980	5,940	11,880	23,760	41,580	61,380	82,170	103,950	125,730	147,510

Wastewater Customer Forecast	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Glencoe											
Existing	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050
New - Growth	-	12	36	72	144	252	372	498	630	762	894
Total	1,050	1,062	1,086	1,122	1,194	1,302	1,422	1,548	1,680	1,812	1,944

Wastewater Flows Forecast (m³)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Glencoe											
Existing	141,258	141,258	141,258	141,258	141,258	141,258	141,258	141,258	141,258	141,258	141,258
New	-	1,980	5,940	11,880	23,760	41,580	61,380	82,170	103,950	125,730	147,510
Total	141,258	143,238	147,198	153,138	165,018	182,838	202,638	223,428	245,208	266,988	288,768

Note: Above flows are water flows on which the wastewater billing will be calculated

### Wastewater Users Forecast – Wardsville

Year	Total Users	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
2025	2		1	2	2	2	2	2	2	2	2	2
2026	2			1	2	2	2	2	2	2	2	2
2027	2				1	2	2	2	2	2	2	2
2028	2					1	2	2	2	2	2	2
2029	2						1	2	2	2	2	2
2030	2							1	2	2	2	2
2031	2								1	2	2	2
2032	2									1	2	2
2033	2										1	2
2034	2											1
Total	20	-	1	3	5	7	9	11	13	15	17	19
m³/user	165	165	165	165	165	165	165	165	165	165	165	165
Annual Flow		-	165	495	825	1,155	1,485	1,815	2,145	2,475	2,805	3,135

Wastewater Customer Forecast	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Wardsville											
Existing - with Water	183	183	183	183	183	183	183	183	183	183	183
Existing - No Water	4	4	4	4	4	4	4	4	4	4	4
New - Growth	-	1	3	5	7	9	11	13	15	17	19
Total	187	188	190	192	194	196	198	200	202	204	206

Wastewater Flows Forecast (m³)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Wardsville											
Existing	27,008	27,008	27,008	27,008	27,008	27,008	27,008	27,008	27,008	27,008	27,008
New	-	165	495	825	1,155	1,485	1,815	2,145	2,475	2,805	3,135
Total	27,008	27,173	27,503	27,833	28,163	28,493	28,823	29,153	29,483	29,813	30,143

Note: Above flows are water flows on which the wastewater billing will be calculated

### **Capital Infrastructure**



- Capital needs were identified based on the 2024 capital budget, the Municipality's capital forecast, WSP Servicing Review, and the review of capital infrastructure replacement needs (lifecycle via the Asset Management Plan).
- Capital works were identified by
  - Need;
  - Timing; and
  - Costs.

## Water System Operational & Capital Needs 2024 – 2033 (Inflated \$)



Description	Total	Years
·	2024 to 2033	Undertaken
Capital Expenditures		
Melbourne Standpipe		
Chlorine Pumps	4,000	2026, 2029
Building Replacement	88,000	2028
HVAC Repairs/Service	-	0
Chlorine Dosing System	4,000	2024, 2027
Flow Meter	11,000	2025, 2029
Inspection	7,000	2024, 2029
Chlorine Analyzer	6,000	2027
Contingency Plan(15%)	17,750	2024-2029
Glencoe Elevated Tank		
Inspection/Cleaning	5,000	2026
Flow Meter	10,000	2024
Chlorine Pumps	12,000	2028-2029
Chlorine Analyzers	-	0
HVAC Repairs/Service	6,000	2024-2029
Electical Upgrades	10,000	2025
Communication Upgrades	5,000	2026
Chlorine Dosing System	3,000	2027
Contingency Plan(15%)	8,650	2024-2029
Southwest Middlesex Reservoir and Booster Station		
Small Booster Pump Replacements	-	0
Large Booster Pump Replacements	-	0
Piping Restoration	21,000	2025
Chlorine Pumps	12,000	2028-2029
Electical Overhaul	-	0
Onsite Generator	-	0
SCADA Upgrades	22,000	2027
Flow Control Valve Replacements	12,000	2024-2025
Inspection/Cleaning	22,000	2024, 2029
Contingency Plan(15%)	12,600	2024-2029

Description	Total 2024 to 2033	Years Undertaken
Southwest Middlesex Distribution System		
Hydrant Repairs	33,000	2024-2029
Air Valve Replacement	33,000	2024-2029
Fireflow Testing and Hydrant Painting	30,000	2024
Main Valve Replacement	198,000	2024-2029
Contingency Plan(15%)	43,500	2024-2029
Estimated OCWA	341,000	2030-2033
WSP Recommended Projects (Servicing Report)		
SWM_W1 In-Line Booster Pump Station for Appin	4,653,000	2032
SWM_W2 Adding a 200mm watermain in Appin in a proposed		
easement west of Thames Rd., approximately 1000m in	2,220,000	2033
length.		
SWM_W3 Adding a 250mm watermain (approximately 350m		
in length) on Main St. between Industrial Rd. and Parkhouse	1,579,000	2028
Dr., serving as a second connection to the Village of Glencoe.	.,	
(Recommended)		
SWM_W3 Adding a 200mm watermain (approximately 1100m		
in length) extending the existing watermain on Industrial Dr. to	4,106,000	2029
the south of Main St. and connecting to the existing dead-		
ended watermain on Tanya Dr.		
SWM_W4 Retrofitting the Melbourne Standpipe with an active mixer.	63,000	2030
SWM_W5 Feasibility study of suitable manganese removal technologies	39,000	2031
Industrial Park Servicing	239,000	2025-2026
Total Capital Expenditures	13,876,500	2020 2020

## Water System Operational & Capital Needs 2024 – 2033 (Inflated \$)



Description	Total 2024 to 2033	Years Undertaken
Glencoe		
Forcemain and Victoria Street Pump Station Upgrade	4,000,000	2025
Industrial Road Sanitary Pump Station and Forcemain Connec	2,093,000	2025-2026
Stella Subdivision Pumpstation (Oversizing Component)	530,000	2025
Industrial Park Servicing	422,000	20205-2026
From OCWA		
Glencoe Sewage Treatment Plant (SAGR) and Glencoe		
Collection System		
Pump Station Clean Outs (Victoria St, South St, Industrial Road	33,000	2024-2029
Pump Station Pump Rebuilds	45,000	2024-2029
Tree/Shrub Removal around Lagoons	11,000	2024, 2029
Chemical Pump Replacement	28,000	2024-2029
Clarifier Pump/Motor Replacement	8,000	2025, 2028
Process Pump/Motor Repair/Replacement	26,000	2024-2029
HVAC Repairs/Service	16,000	2024-2029
Lab Equipment	7,500	2024-2028
Filter Screen Replacement	49,000	2025-2027
Blower/Blower Motor Rebuild	9,000	2024, 2029
Erosion Control around aerated lagoon	624,000	2024-2026
Additon of Third Disk Filter	108,000	2026
Lagoon Airline Maintenance	26,000	2024-2026
Flow Meter Replacement (Raw/Effluent/Pump Stations	20,000	2024-2025
Disk Filter Rebuilds	6,000	2025
Septage/Muffin Monster Rebuilds	17,000	2025-2029
Mixer Rebuild/Replace	10,000	2024, 2026
Media Replacement in SAGR	688,000	2027-2028
Contingency Plan(15%)	264,825	2024-2029
Estimated OCWA Maintenance	1,639,000	2030-2033
Total Capital Expenditures	10,680,325	

Description	Total 2024 to 2033	Years Undertaken
Wardsville		
Sludge Holding Tank clean out	60,000	2024-2033
Alum Transfer Pump	6,000	2026-2032
Alum Dosing Pumps	24,000	2025-2033
Soda Ash Dosing Pumps	23,000	2024-2032
Raw Flow Meter	10,000	2025
Main Pump Station Pump Rebuilds	16,000	2025-2026
Main Pump Station Generator/Fuel Storage Repair	10,000	2025
Diffuser repairs	12,000	2024-2032
Blower Repairs/Replacement	60,000	2025-2033
UV System	21,500	2024-2033
Main Pump Station Pump Controller	27,000	2024
Air Compressor Repair/Replacement	24,000	2024-2033
Contingency Plan(15%)	43,825	2024-2033
Total Capital Expenditures	337,325	

### **Capital Financing Options**

- ✓ Reserves
- ✓ Operating Budget Transfers (Funding Reserves)
- ✓ Debt
- ✓ Development Charges (assuming the Municipality passes a By-law in 2025)
- Grants
- Municipal Act (Part 12)

### Reserve Balances – As of December 31, 2023



Reserve	Dec. 31 2023
Water	
Capital Reserve	3,866,405
Wastewater	
Capital Reserve - Glencoe	887,365
Capital Reserve - Wardsville	(121,698)

### Proposed Capital Financing Programs – Water

2024-2033 (Inflated \$)



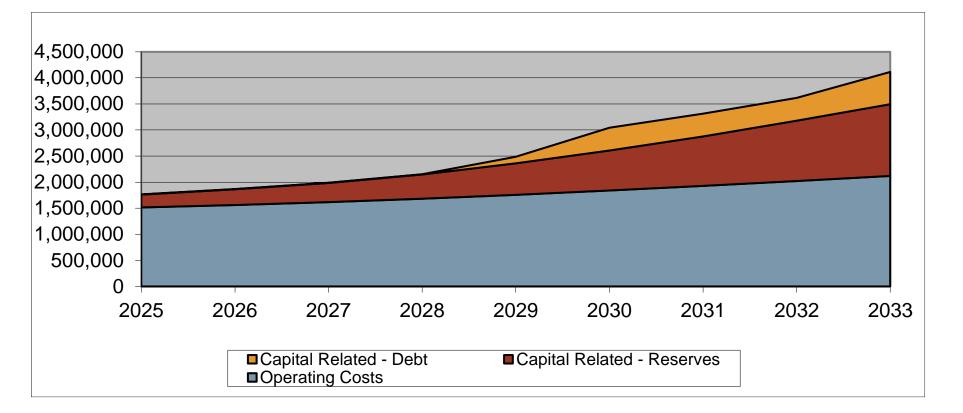
Description	Water
Capital Financing	
Provincial/Federal Grants	-
Non-Growth Related Debenture Requirements	-
Growth Related Debenture Requirements	9,121,500
Operating Contributions	-
Water Reserve	4,755,000
Total Capital Financing	13,876,500

### **Operating Budgets**



- The operating expenditures (for water and wastewater) presented in the rate study have been adjusted to recognize the current rates of inflation. The following adjustments to the operating forecast are assumed:
  - Utilities and Chemicals 7% annual increases
  - OCWA Contract 3% annual increases
  - All other operating expenditures 4% annual increases

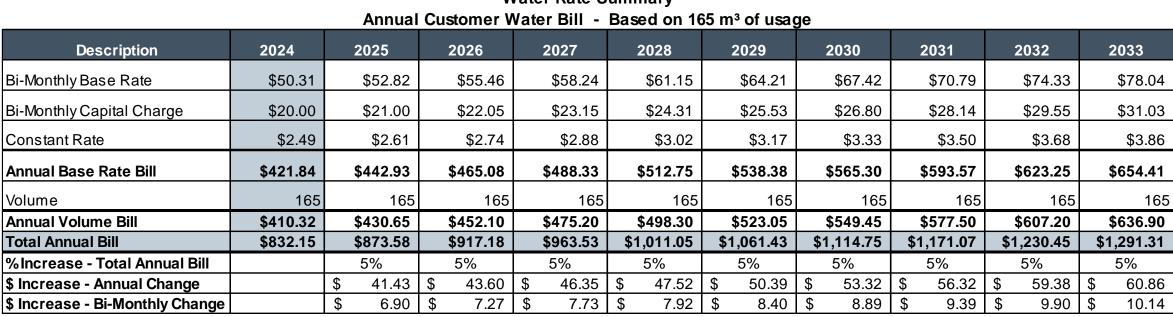
### Water Operating Budget



Description	2025	2026	2027	2028	2029	2030	2031	2032	2033
Operating Costs	1,514,002	1,562,263	1,615,460	1,680,647	1,758,069	1,841,745	1,930,521	2,024,106	2,120,867
Capital Related - Reserves	249,025	302,450	369,563	466,592	604,505	766,591	947,656	1,153,220	1,375,117
Capital Related - Debt	4,883	4,883	4,883	4,883	123,619	436,284	436,284	436,284	614,826
Total	1,767,910	1,869,596	1,989,906	2,152,122	2,486,193	3,044,620	3,314,461	3,613,609	4,110,810

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### Water Rates – Residential Annual Bill Forecast



### Water Rate Summary

### Wastewater Rate Options

Municipality of Southwest Middlesex

Wastewater Rate Options



- Through working with Staff, we have calculated 2 rate Options:
  - 1. Option 1 Maintain the Current Wastewater Rate Structure (Separate Financing)
  - 2. Option 2 Combined Wastewater Financing for Glencoe and Wardsville
- The options provide varying increases to the wastewater rates for Glencoe and Wardsville.
- These options also provide different levels of wastewater debt and reserve fund balances.

# Option 1 – Maintain Current Wastewater Rate Structure (Separate Financing)



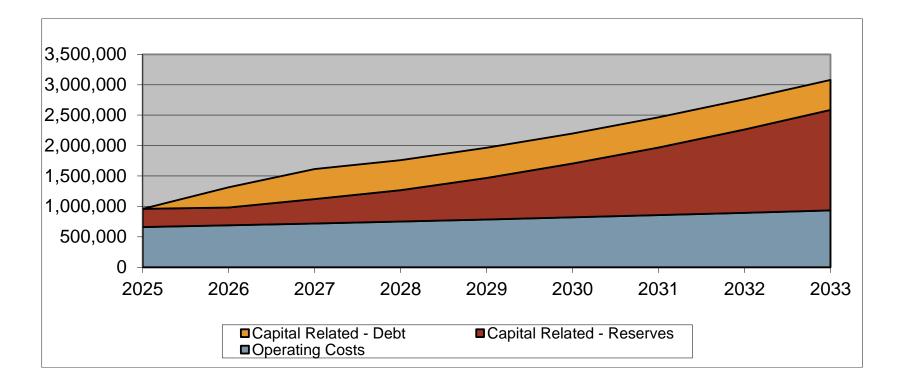
- This scenario assumes that the current financing rate structure for wastewater is continued for Glencoe and Wardsville.
- Glencoe:
  - Based on the operating and capital program, the following increases for fixed bi-monthly charges and volume rates are suggested:
    - Wastewater: 12.5% per year increases from 2025 to 2027 and then decreasing to 5% per year from 2028 to 2033.
- Wardsville:
  - Based on the operating and capital program, the following increases for fixed bi-monthly charges and volume rates are suggested:
    - Wastewater: 25% per year increases from 2025 to 2026, 15% for 2027, and then decreasing to 10% per year from 2028 to 2033.
    - These increases are required to address the deficit in the Wardsville reserve funds which is anticipated to increase from -\$121,698 to -\$480,093 in 2027. The reserves are expected to be positive by 2033.

### Option 1 – Financing



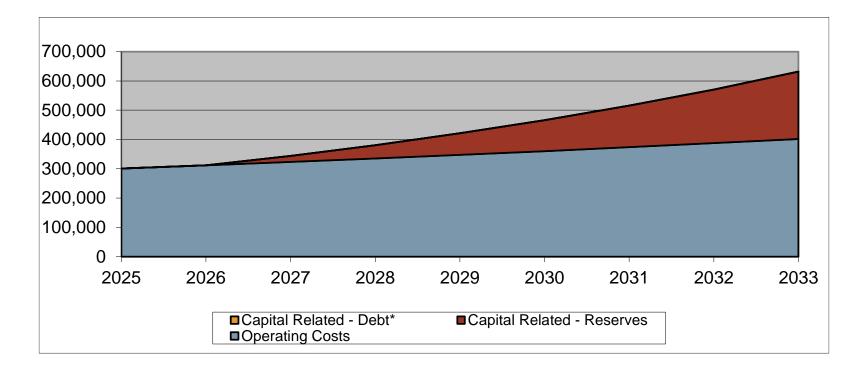
Description	Glencoe	Wardsville
Description	2024-2033	2024-2033
Capital Financing		
Provincial/Federal Grants/Other Contributions	-	-
Non-Growth Related Debenture Requirements	1,903,651	-
Growth Related Debenture Requirements	4,547,349	-
Operating Contributions	-	-
Wastewater Reserve	4,229,325	337,325
Total Capital Financing	10,680,325	337,325
Note: This Wardsville transfer will create a defici	t in the reserves of \$4	80,093 by 2027

### Option 1 – Wastewater Operating Budget – Glencoe



Description	2025	2026	2027	2028	2029	2030	2031	2032	2033
Operating Costs	659,500	688,700	719,300	751,400	785,000	820,100	856,800	895,400	935,700
Capital Related - Reserves	301,350	292,955	400,851	515,365	684,236	884,858	1,112,441	1,369,381	1,649,563
Capital Related - Debt	0	333,295	495,069	495,069	495,069	495,069	495,069	495,069	495,069
Total	960,850	1,314,949	1,615,220	1,761,834	1,964,304	2,200,027	2,464,310	2,759,850	3,080,332

### Option 1 – Wastewater Operating Budget – Wardsville



Description	2025	2026	2027	2028	2029	2030	2031	2032	2033
Operating Costs	300,900	311,900	323,300	335,200	347,500	360,400	373,900	387,700	401,900
Capital Related - Reserves	0	0	20,836	45,411	73,621	105,472	141,764	183,048	229,787
Capital Related - Debt*	0	0	0	0	0	0	0	0	0
Total	300,900	311,900	344,136	380,611	421,121	465,872	515,664	570,748	631,687

\*No debt, however, the reserve fund deficit is in a negative position

### Option 1 – Wardsville Reserve Fund Forecast



#### Wastewater Reserves/ Reserve Funds Continuity - Wardsville

	Inflated \$												
Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033			
Opening Balance	(121,698)	(281,998)	(411,290)	(462,929)	(494,496)	(476,978)	(445,327)	(380,951)	(276,233)	(116,581)			
Transfer from Operating	-	-	-	20,836	45,411	73,621	105,472	141,764	183,048	229,787			
Transfer to Capital	52,325	54,000	24,000	38,000	14,000	29,000	30,000	29,000	20,000	47,000			
Transfer to Operating	99,761	63,312	14,156	-	-	-	-	-	-	-			
Closing Balance	(273,785)	(399,310)	(449,446)	(480,093)	(463,085)	(432,356)	(369,855)	(268,187)	(113,185)	66,207			
Interest	(8,214)	(11,979)	(13,483)	(14,403)	(13,893)	(12,971)	(11,096)	(8,046)	(3,396)	1,986			

#### Wardsville Reserve Continuity 200,000 100,000 0 2032 2025 2026 2028 2029 2030 2031 2024 2027 2033 -100,000 -200,000 -300,000 -400,000 -500,000 -600,000 Reserve Balance

### Option 1 – Residential Annual Wastewater Bill Forecast

#### Based on Annual Volumes 165 m<sup>3</sup>



#### Wastewater Rate Summary - Glencoe Annual Customer Wastewater Bill - Based on 165 m<sup>3</sup> of usage

#### Wastewater Rate Summary - Wardsville

Annual Customer Wastewater Bill - Based on 165 m<sup>3</sup> of usage

							<u> </u>			
Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Bi-Monthly Base Rate	\$59.76	\$74.69	\$93.37	\$107.37	\$118.11	\$129.92	\$142.91	\$157.21	\$172.93	\$190.22
Constant Rate	\$4.25	\$5.31	\$6.64	\$7.64	\$8.40	\$9.24	\$10.16	\$11.18	\$12.30	\$13.53
Annual Base Rate Bill	\$358.53	\$448.17	\$560.21	\$644.24	\$708.66	\$779.53	\$857.48	\$943.23	\$1,037.55	\$1,141.31
Volume	165	165	165	165	165	165	165	165	165	165
Annual Volume Bill	\$700.62	\$876.15	\$1,095.60	\$1,260.60	\$1,386.00	\$1,524.60	\$1,676.40	\$1,844.70	\$2,029.50	\$2,232.45
Total Annual Bill	\$1,059.16	\$1,324.32	\$1,655.81	\$1,904.84	\$2,094.66	\$2,304.13	\$2,533.88	\$2,787.93	\$3,067.05	\$3,373.76
%Increase - Total Annual Bill		25%	25%	15%	10%	10%	10%	10%	10%	10%
\$ Increase - Annual Change		\$ 265.16	\$ 331.49	\$ 249.03	\$ 189.82	\$ 209.47	\$ 229.75	\$ 254.05	\$ 279.12	\$ 306.71
\$ Increase - Bi-Monthly Change		\$ 44.19	\$ 55.25	\$ 41.51	\$ 31.64	\$ 34.91	\$ 38.29	\$ 42.34	\$ 46.52	\$ 51.12

### Option 1 – Residential Annual Bill Forecast



Based on Annual Volumes 165 m<sup>3</sup>

Glencoe	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Water Bill	\$832.15	\$873.58	\$917.18	\$963.53	\$1,011.05	\$1,061.43	\$1,114.75	\$1,171.07	\$1,230.45	\$1,291.31
Wastewater Bill	\$803.14	\$903.15	\$1,015.84	\$1,143.64	\$1,201.24	\$1,260.56	\$1,323.34	\$1,389.67	\$1,459.65	\$1,533.37
Total Annual Bill	\$1,635.29	\$1,776.73	\$1,933.01	\$2,107.17	\$2,212.28	\$2,321.99	\$2,438.09	\$2,560.74	\$2,690.09	\$2,824.68
% Increase - Total Annual Bill		9%	9%	9%	5%	5%	5%	5%	5%	5%
\$ Increase - Annual Change		\$ 141.44	\$ 156.28	\$ 174.16	\$ 105.11	\$ 109.71	\$ 116.10	\$ 122.65	\$ 129.36	\$ 134.59
\$ Increase - Bi-Monthly Change		\$ 23.57	\$ 26.05	\$ 29.03	\$ 17.52	\$ 18.28	\$ 19.35	\$ 20.44	\$ 21.56	\$ 22.43

Wardsville	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Water Bill	\$832.15	\$873.58	\$917.18	\$963.53	\$1,011.05	\$1,061.43	\$1,114.75	\$1,171.07	\$1,230.45	\$1,291.31
Wastewater Bill	\$1,059.16	\$1,324.32	\$1,655.81	\$1,904.84	\$2,094.66	\$2,304.13	\$2,533.88	\$2,787.93	\$3,067.05	\$3,373.76
Total Annual Bill	\$1,891.31	\$2,197.90	\$2,572.98	\$2,868.37	\$3,105.71	\$3,365.56	\$3,648.64	\$3,959.00	\$4,297.50	\$4,665.07
% Increase - Total Annual Bill		16%	17%	11%	8%	8%	8%	9%	9%	9%
\$ Increase - Annual Change		\$ 306.59	\$ 375.09	\$ 295.39	\$ 237.34	\$ 259.85	\$ 283.07	\$ 310.36	\$ 338.50	\$ 367.57
\$ Increase - Bi-Monthly Change		\$ 51.10	\$ 62.51	\$ 49.23	\$ 39.56	\$ 43.31	\$ 47.18	\$ 51.73	\$ 56.42	\$ 61.26

### Option 1 – Observations



- The level of increases identified in the prior slides provide for the following:
  - Glencoe:
    - The reserves drop to a low of \$56,946 in 2027
    - The ending balance is anticipated to be \$4.4 million in 2033
    - Non-Growth-related debt is estimated at \$1.9 million
  - Wardsville:
    - The reserves drop to a low of negative \$480,093 in 2027
    - The ending balance is anticipated to be positive \$66,207 in 2033

# Option 2 – Combined Wastewater Financing for Glencoe and Wardsville



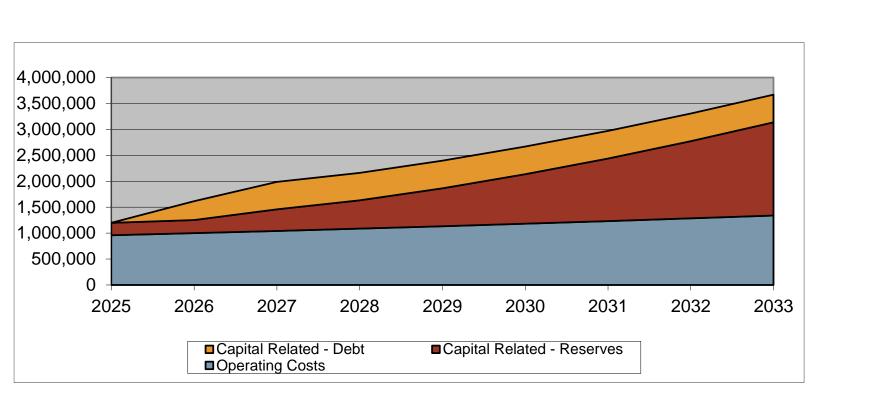
- This scenario assumes that the wastewater financing rate structures for Glencoe and Wardsville are combined.
- Historically, the Glencoe wastewater system has been assisting with the Wardsville expenditures due to the smaller number of customers and volumes required for revenue recoveries.
- This option also allows for immediately addressing the reserve fund deficit in Wardsville, by combining it with Glencoe's positive reserve fund balance.
- Combined Systems:
  - Based on the operating and capital program, the following increases for fixed bi-monthly charges and volume rates are suggested:
    - Wastewater: 15% per year increases from 2025 to 2027 and then decreasing to 5% per year from 2028 to 2033.

### Option 2 – Financing



Description	Glencoe and Wardsville 2024-2033
Capital Financing	
Provincial/Federal Grants/Other Contributions	-
Non-Growth Related Debenture Requirements	2,371,651
Growth Related Debenture Requirements	4,547,349
Operating Contributions	-
Wastewater Reserves	4,098,650
Total Capital Financing	11,017,650

### Option 2 – Wastewater Operating Budget



Description	2025	2026	2027	2028	2029	2030	2031	2032	2033
Operating Costs	960,400	1,000,600	1,042,600	1,086,600	1,132,500	1,180,500	1,230,700	1,283,100	1,337,600
Capital Related - Reserves	239,559	250,274	414,928	543,616	732,247	954,863	1,206,326	1,489,508	1,797,795
Capital Related - Debt	0	363,531	530,985	530,985	530,985	530,985	530,985	530,985	530,985
Total	1,199,959	1,614,405	1,988,512	2,161,200	2,395,732	2,666,348	2,968,011	3,303,593	3,666,380

### Option 2 – Wastewater Residential Annual Bill Forecast

#### Based on Annual Volumes 165 m<sup>3</sup>



#### Wastewater Rate Summary - Glencoe Annual Customer Wastewater Bill - Based on 165 m³ of usage

#### Wastewater Rate Summary - Wardsville

Annual Customer Wastewater Bill - Based on 165 m<sup>3</sup> of usage

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Bi-Monthly Base Rate	\$59.76	\$68.72	\$79.03	\$90.88	\$95.42	\$100.20	\$105.21	\$110.47	\$115.99	\$121.79
Constant Rate	\$4.25	\$4.88	\$5.62	\$6.46	\$6.78	\$7.12	\$7.48	\$7.85	\$8.24	\$8.65
Annual Base Rate Bill	\$358.53	\$412.31	\$474.16	\$545.28	\$572.55	\$601.18	\$631.23	\$662.80	\$695.94	\$730.73
Volume	165	165	165	165	165	165	165	165	165	165
Annual Volume Bill	\$700.62	\$805.72	\$926.57	\$1,065.56	\$1,118.84	\$1,174.78	\$1,233.52	\$1,295.19	\$1,359.95	\$1,427.95
Total Annual Bill	\$1,059.16	\$1,218.03	\$1,400.73	\$1,610.84	\$1,691.39	\$1,775.96	\$1,864.75	\$1,957.99	\$2,055.89	\$2,158.68
%Increase - Total Annual Bill		15%	15%	15%	5%	5%	5%	5%	5%	5%
\$ Increase - Annual Change		\$ 158.87	\$ 182.70	\$ 210.11	\$ 80.54	\$ 84.57	\$ 88.80	\$ 93.24	\$ 97.90	\$ 102.79
\$ Increase - Bi-Monthly Change		\$ 26.48	\$ 30.45	\$ 35.02	\$ 13.42	\$ 14.09	\$ 14.80	\$ 15.54	\$ 16.32	\$ 17.13

### Option 2 – Residential Annual Bill Forecast



Based on Annual Volumes 165 m<sup>3</sup>

Glencoe	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Water Bill	\$832.15	\$873.58	\$917.18	\$963.53	\$1,011.05	\$1,061.43	\$1,114.75	\$1,171.07	\$1,230.45	\$1,291.31
Wastewater Bill	\$803.14	\$923.61	\$1,062.15	\$1,221.48	\$1,282.55	\$1,346.68	\$1,414.01	\$1,484.71	\$1,558.95	\$1,636.89
Total Annual Bill	\$1,635.29	\$1,797.19	\$1,979.33	\$2,185.01	\$2,293.60	\$2,408.11	\$2,528.76	\$2,655.78	\$2,789.39	\$2,928.20
%Increase - Total Annual Bill		10%	10%	10%	5%	5%	5%	5%	5%	5%
\$ Increase - Annual Change		\$ 161.90	\$ 182.14	\$ 205.68	\$ 108.59	\$ 114.51	\$ 120.65	\$ 127.02	\$ 133.61	\$ 138.81
\$ Increase - Bi-Monthly Change		\$ 26.98	\$ 30.36	\$ 34.28	\$ 18.10	\$ 19.09	\$ 20.11	\$ 21.17	\$ 22.27	\$ 23.13

Wardsville	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Water Bill	\$832.15	\$873.58	\$917.18	\$963.53	\$1,011.05	\$1,061.43	\$1,114.75	\$1,171.07	\$1,230.45	\$1,291.31
Wastewater Bill	\$1,059.16	\$1,218.03	\$1,400.73	\$1,610.84	\$1,691.39	\$1,775.96	\$1,864.75	\$1,957.99	\$2,055.89	\$2,158.68
Total Annual Bill	\$1,891.31	\$2,091.61	\$2,317.91	\$2,574.37	\$2,702.43	\$2,837.39	\$2,979.51	\$3,129.06	\$3,286.34	\$3,449.99
% Increase - Total Annual Bill		10%	10%	10%	5%	5%	5%	5%	5%	5%
\$ Increase - Annual Change		\$ 200.30	\$ 226.30	\$ 256.46	\$ 128.06	\$ 134.96	\$ 142.12	\$ 149.55	\$ 157.28	\$ 163.66
\$ Increase - Bi-Monthly Change		\$ 33.38	\$ 37.72	\$ 42.74	\$ 21.34	\$ 22.49	\$ 23.69	\$ 24.93	\$ 26.21	\$ 27.28

### Option 2 – Observations



- The level of increases identified in the prior slides provide for the following:
  - Glencoe and Wardsville Combined:
    - The reserves drop to a low of \$36,542 in 2027
    - The ending balance is anticipated to be \$4.6 million in 2033
    - Non-Growth-related debt is estimated at \$2.4 million
    - This option addresses the deficit in the Wardsville wastewater reserve immediately

### **Comparison of Residential Bills**

#### Based on Annual Volumes of 165 m<sup>3</sup> for Residential



2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 **Option 1** Glencoe Water Bill \$832.15 \$873.58 \$917.18 \$963.53 \$1,011.05 \$1,061.43 \$1,114.75 \$1,171.07 \$1,230.45 \$1,291.31 Wastewater Bill \$803.14 \$903.15 \$1,015.84 \$1,143.64 \$1,201.24 \$1,260.56 \$1,323.34 \$1,389.67 \$1,459.65 \$1,533.37 \$2,212.28 \$2,824.68 **Total Annual Bill** \$1,635.29 \$1,776.73 \$1,933.01 \$2,107.17 \$2,321.99 \$2,438.09 \$2,560.74 \$2,690.09 % Increase - Total Annual Bill 9% 9% 9% 5% 5% 5% 5% 5% 5% \$ 156.28 \$ 174.16 105.11 \$ \$ 116.10 \$ 122.65 129.36 \$ 134.59 \$ Increase - Annual Change \$ 141.44 \$ 109.71 \$ \$ Increase - Bi-Monthly Change 23.57 \$ 26.05 29.03 17.52 \$ 18.28 19.35 \$ 20.44 21.56 \$ \$ \$ \$ \$ \$ 22.43

Wardsville	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Water Bill	\$832.15	\$873.58	\$917.18	\$963.53	\$1,011.05	\$1,061.43	\$1,114.75	\$1,171.07	\$1,230.45	\$1,291.31
Wastewater Bill	\$1,059.16	\$1,324.32	\$1,655.81	\$1,904.84	\$2,094.66	\$2,304.13	\$2,533.88	\$2,787.93	\$3,067.05	\$3,373.76
Total Annual Bill	\$1,891.31	\$2,197.90	\$2,572.98	\$2,868.37	\$3,105.71	\$3,365.56	\$3,648.64	\$3,959.00	\$4,297.50	\$4,665.07
% Increase - Total Annual Bill		16%	17%	11%	8%	8%	8%	9%	9%	9%
\$ Increase - Annual Change		\$ 306.59	\$ 375.09	\$ 295.39	\$ 237.34	\$ 259.85	\$ 283.07	\$ 310.36	\$ 338.50	\$ 367.57
\$ Increase - Bi-Monthly Change		\$ 51.10	\$ 62.51	\$ 49.23	\$ 39.56	\$ 43.31	\$ 47.18	\$ 51.73	\$ 56.42	\$ 61.26

Option 2	2
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Glencoe	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Water Bill	\$832.15	\$873.58	\$917.18	\$963.53	\$1,011.05	\$1,061.43	\$1,114.75	\$1,171.07	\$1,230.45	\$1,291.31
Wastewater Bill	\$803.14	\$923.61	\$1,062.15	\$1,221.48	\$1,282.55	\$1,346.68	\$1,414.01	\$1,484.71	\$1,558.95	\$1,636.89
Total Annual Bill	\$1,635.29	\$1,797.19	\$1,979.33	\$2,185.01	\$2,293.60	\$2,408.11	\$2,528.76	\$2,655.78	\$2,789.39	\$2,928.20
%Increase - Total Annual Bill		10%	10%	10%	5%	5%	5%	5%	5%	5%
\$ Increase - Annual Change		\$ 161.90	\$ 182.14	\$ 205.68	\$ 108.59	\$ 114.51	\$ 120.65	\$ 127.02	\$ 133.61	\$ 138.81
\$ Increase - Bi-Monthly Change		\$ 26.98	\$ 30.36	\$ 34.28	\$ 18.10	\$ 19.09	\$ 20.11	\$ 21.17	\$ 22.27	\$ 23.13

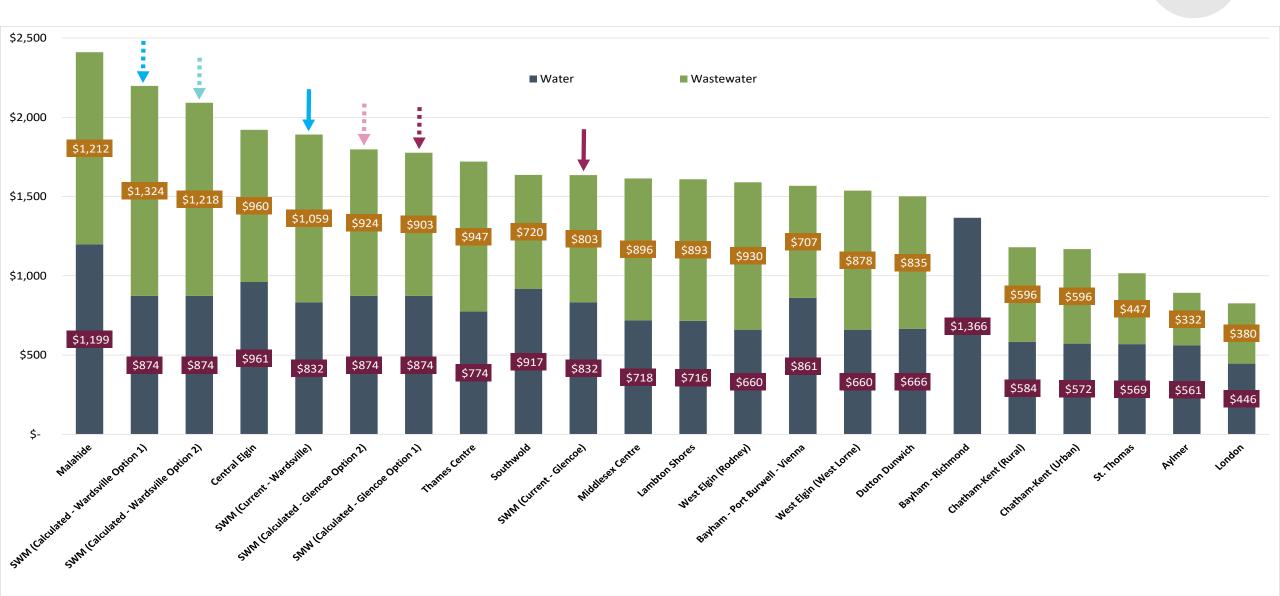
Wardsville	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Water Bill	\$832.15	\$873.58	\$917.18	\$963.53	\$1,011.05	\$1,061.43	\$1,114.75	\$1,171.07	\$1,230.45	\$1,291.31
Wastewater Bill	\$1,059.16	\$1,218.03	\$1,400.73	\$1,610.84	\$1,691.39	\$1,775.96	\$1,864.75	\$1,957.99	\$2,055.89	\$2,158.68
Total Annual Bill	\$1,891.31	\$2,091.61	\$2,317.91	\$2,574.37	\$2,702.43	\$2,837.39	\$2,979.51	\$3,129.06	\$3,286.34	\$3,449.99
%Increase - Total Annual Bill		10%	10%	10%	5%	5%	5%	5%	5%	5%
\$ Increase - Annual Change		\$ 200.30	\$ 226.30	\$ 256.46	\$ 128.06	\$ 134.96	\$ 142.12	\$ 149.55	\$ 157.28	\$ 163.66
\$ Increase - Bi-Monthly Change		\$ 33.38	\$ 37.72	\$ 42.74	\$ 21.34	\$ 22.49	\$ 23.69	\$ 24.93	\$ 26.21	\$ 27.28

### Comparison of Wastewater Options



Description	Option 1	Option 2		
Rate Increases - Glencoe	12.5% per year increases from 2025 to 2027	15% per year increases from 2025 to 2027		
	5% per year from 2028 to 2033	5% per year from 2028 to 2033		
Rate Increases - Wardsville	25% per year increases from 2025 to 2026	15% per year increases from 2025 to 2027		
	15% in 2027	5% per year from 2028 to 2033		
	10% per year from 2028 to 2033			
Lowest Year Reserve Fund Balance	\$56,946 in 2027 for Glencoe -\$480,093 deficit in 2027 for	\$36,542 in 2027 for Glencoe/Wardsville (no deficit identified in the forecast)		
	Wardsville	,		
Ending Reserve Fund Balance (2033)	\$4.3 million	\$4.7 million		
Debt Requirements	\$1.9 million	\$2.4 million		

## Comparison of Residential Annual Combined Water and Wastewater Bill (Based on 165 m<sup>3</sup>)



### Water Financial Plan O.Reg. 453/07

Municipality of Southwest Middlesex

### 5 Requirements for the Municipal Drinking Water Licence



- 1. Drinking Water Works Permit (DWWP)
- 2. Accepted Operational Plan, based on the Drinking Water Quality Management Standard (DWQMS)
- 3. Accreditation of the Operating Authority

### 4. Financial Plan

5. Permit to Take Water (PTTW)

### Ontario Regulation 453/07 Water Financial Plan



- All municipalities providing water service are required to be licensed to operate the water system(s)
- Part of the licensing requirement is for the municipality to submit a Financial Plan to the Province
- The Financial Plan will be prepared based on the approved rate forecast selected by Council

### Summary of O.Reg. 453/07 Requirements



- The plan is considered a living document but will need to be undertaken at a minimum every five years
- The plans are generally consistent with the "Watson" Approach in forecasting the capital, operating and reserve fund positions, providing detailed inventories, forecasting future volumes and calculation of the rates.
- The additional requirements include the PSAB information for each year of the forecast (i.e. total non-financial assets, tangible capital assets acquisitions, tangible capital asset construction, betterments, write downs, disposals, total liabilities and net debt)
- The financial plans must be made available upon request to the public (without charge) and on the municipality's web site. The availability of this information must also be advertised

### What Does All of This Mean?



- Reporting is mandatory for Water and encouraged for Wastewater services (for this process, we are undertaking the water financial plan)
- The intent of the legislation is for:
  - 1. municipalities to project future activities for capital (including inventory renewal), operating, reserves and customers (and usage) and then
  - 2. report it to the Province in PSAB 3150 financial statement format (projected into the future)
- The Rate study forms the basis of the financial information on which the O. Reg. 453/07 financial plan will be prepared

### Rate Study vs. O.Reg 453.07 Reporting Format



Significant Revision Areas	Rate Study	O.Reg 453.07 Financial Plan		
Approach	"Modified Cash Basis"	"Full Accrual Basis"		
Capital Requirements	Capital Forecast	Tangible Capital Assets		
Previously acquired assets	Lifecycle Cost Analysis (Future Replacement)	Tangible Capital Assets (Historical Cost)		
Debt Payments	Principal & Interest Expense	Interest Expense Principal: Debt reduction		
Amortization	Not Applicable	Included in Operating Expenses		
Reserve Transfers	Included as an expense	Part of "Accumulated Surplus"		
Development Charge Reserve Fund Balances	Reserve Fund Continuity Schedule	Deferred Revenue		

### Matters for Council's Consideration

- 1. Consider the Capital Program
- 2. Consider the Operating Program
- 3. Consider the Proposed Water Rates
- 4. Consider the Proposed Wastewater Rates
- 5. Finalize the Rate Study and Financial Plan based on the rate option approved by Council
- 6. Approve and submit the 2025-2033 Financial Plan to the Province as part of the Municipality's Water Licence Renewal

### Questions



