

# 2022 Operating and Capital Budget

Water and Sewage

# Overview

In 2019 Municipality of West Elgin retained Scharatt Water Management Ltd. to prepare a Water and Sewer Financial Plan as part of the five submission requirements for the purposes of obtaining a municipal drinking water licence as per the Safe Drinking Water Act, 2002 (S.D.W.A.).



A financial plan requires an indepth analysis of capital and operating needs, a review of current and future demand versus supply, and consideration of available funding sources.



# Legislative Context

The Ministry of Environment (MOE) has responded to the Inquiry recommendations by making legislative changes. One having relevance to the development of rates and financial plans was the passage of the Safe Drinking Water Act, 2002 (SDWA). It requires owners of municipal drinking water systems to apply for and obtain a Municipal Drinking Water License. There are five elements that must be in place in order for the owner of a drinking water system to obtain a license:

1. A Drinking Water Works Permit to establish or alter a drinking-water system;
2. An accepted Operational Plan. The Drinking Water Quality Management Standard (DWQMS) is the standard upon which operational plans are based. The plan documents an operating authority's quality management system (QMS).
3. An Accredited Operating Authority. A third-party audit of an operating authority's QMS will be the basis for accreditation.
4. A Permit to Take Water.
5. A Financial Plan that must be prepared, based on up-to-date rates, and approved in accordance with the prescribed requirements in the Financial Plans Regulation.

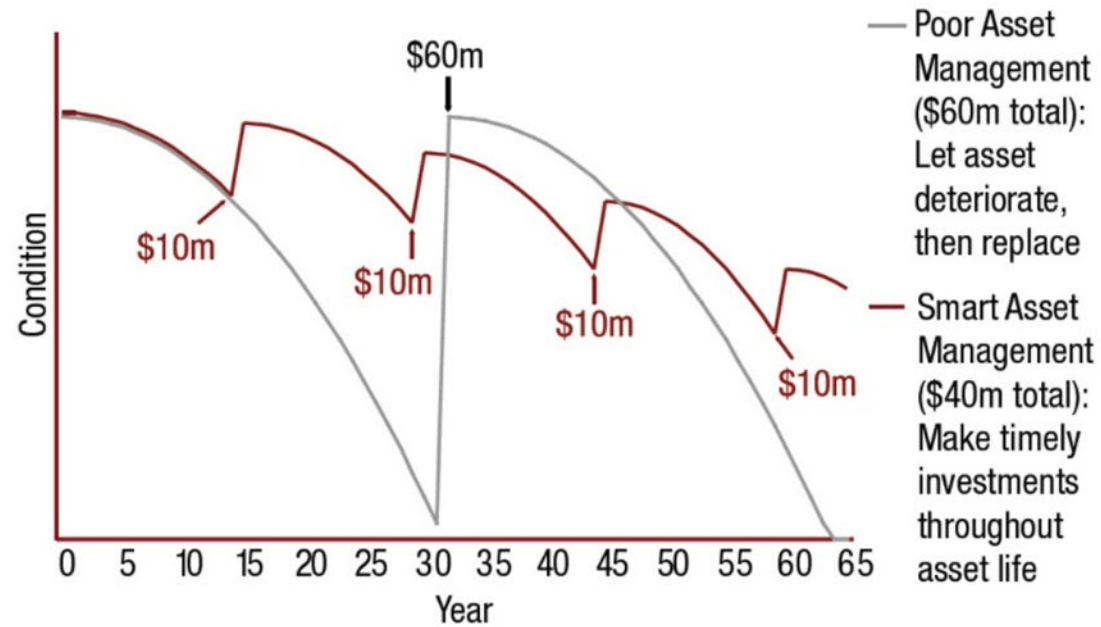
When setting the water rates the following objectives have been considered:

1. Capital Projection - investment needs to replace current aging infrastructure. This has involved a projection of the lifetimes of all current assets to 2095, the life of water mains, the longest current asset, and identifying the funds that are needed now to ensure that funds will be available at the time renewal is required for any asset that requires renewal between 2019 and 2095.
2. Operating Cost Projection - include source protection costs to 2029.
3. Estimation of future water use and the number of users paying the fixed component of the water bill to 2029.
4. Developing a fair two-part rate structure that has a fixed component to cover metering and billing charges and a variable charge placed on every metre of water sold for 2019-29.

**Table 1 Proposed Township of West Elgin Proposed Water Rates 2019-2025**

Rate	2019	2020	2021	2022	2023	2024	2025
Fixed Rate Bi-Mon	39.79	41.58	43.45	45.41	47.45	49.59	51.37
Variable Rate Inflated \$	1.45	1.51	1.58	1.65	1.73	1.81	1.87
Variable Rate 2019\$	1.45	1.47	1.49	1.51	1.54	1.56	1.57

**Timely renewal investments save money**



(Source: Adapted from Ontario Ministry of Infrastructure, 2012, Building Together: Guide for Municipal Asset Management Planning)

# Water Financials

- According to the financial plan, the West Elgin water system will have cash reserves available to renew aging capital assets, provided that the Municipality implements the projected rates and the long-range capital renewal and major maintenance plan set out in the **RATE REPORT**.
- It is important to keep in mind that a number of assumptions have been made concerning inflation, interest rates and water use.
- There is a need to monitor the progress of this plan and make adjustments, if warranted.

# Statistics

Rodney Sewage – 445 Residential and Commercial

West Lorne Sewage – 574 Residential and Commercial

Water – 1745 Residential & Commercial

# Water Rates



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# On Average, family of 4 uses 20 cubic meters per month...

That's equal to  
\$1.78 per day



## Current Water Fees

Flat Charge - \$ 43.45

Water Rate – \$ 1.58/m<sup>3</sup>

That's equal to  
\$1.86 per day

Monthly \$55.71  
Increase  
of **\$2.38**

By-Monthly \$111.42  
Increase  
of **\$4.76**

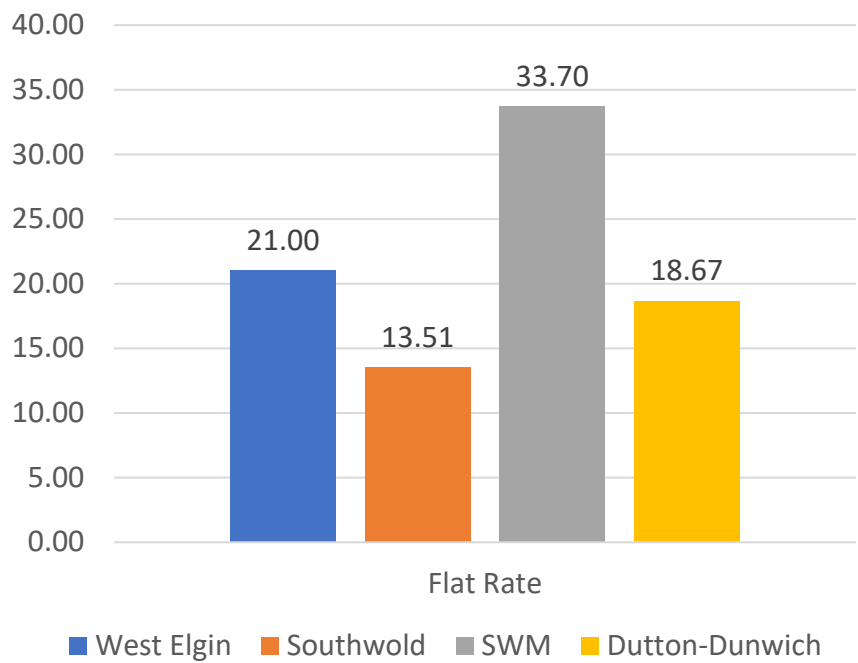
Annually \$668.52  
Increase  
of **\$28.56**

# Proposed Increase

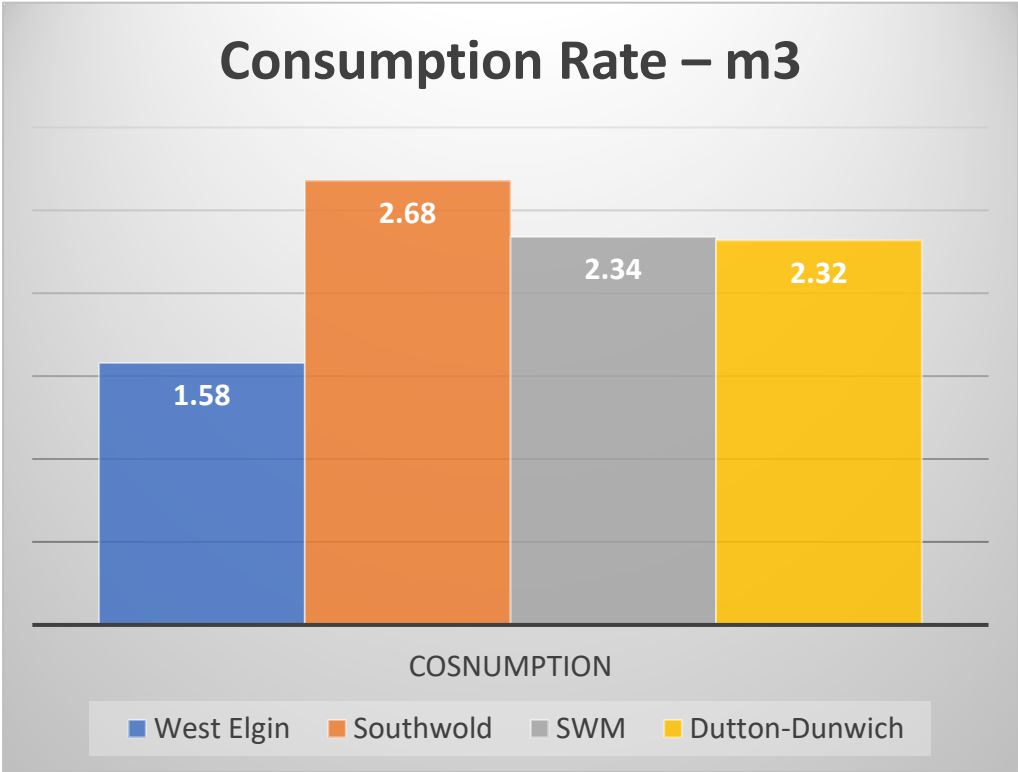
Flat Charge - \$ 45.41

Water Rate – \$ 1.65/m3

# Monthly Water Flat Rate Comparison with Neighboring Municipalities



# Water Consumption Rate Comparison with Neighboring Municipalities





# Major Capital Projects Affecting Water Rates

- 2019 to 2021 cast iron water main replacement
- 2022-26 Water meter replacement & AMR installation
- 2034 water tower refurbishment
- 2045-48 water main replacement
- 2053 water main replacement
- 2069 water main replacement



# WEST LORNE SEWAGE

# West Lorne Sewage Summary

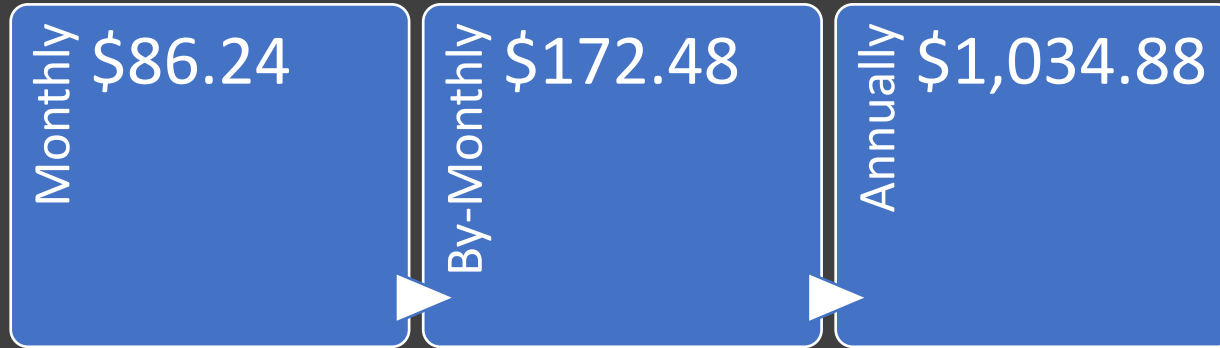
In 2019 Sharratt Water Management Ltd. developed rates for the West Elgin Waste Water System.

The rate has been prepared as follows:

- The renewal costs have been inflated to reflect the replacement or rehabilitation costs at the future date and funding levels have been determined that need to be set aside now to have sufficient funds available when renewal is needed.
- Future operating costs have been projected to 2030 and include inflation.

# On Average, family of 4 uses 20 cubic meters of water per month...

That's equal to  
\$2.87 per day



## Current West Lorne Sewage Fees

Flat Charge - \$ 68.88

Water Rate - \$ 2.59/m<sup>3</sup>





That's equal to \$3.05 per day

Monthly \$91.44  
Increase of **\$5.20**

By-Monthly \$182.88  
Increase of **\$10.40**

Annually \$1,097.28  
Increase of **\$62.40**

# West Lorne Sewer Proposed Increase

Flat Charge - \$ 74.47

Water Rate – \$ 2.71/m3

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# Primary Goals

- Avoid large fluctuations in rates from year to year
- Keep debt within a sustainable level
- Avoid depleting cash reserves
- Build up reserves to reflect future capital needs



# West Lorne Reserves

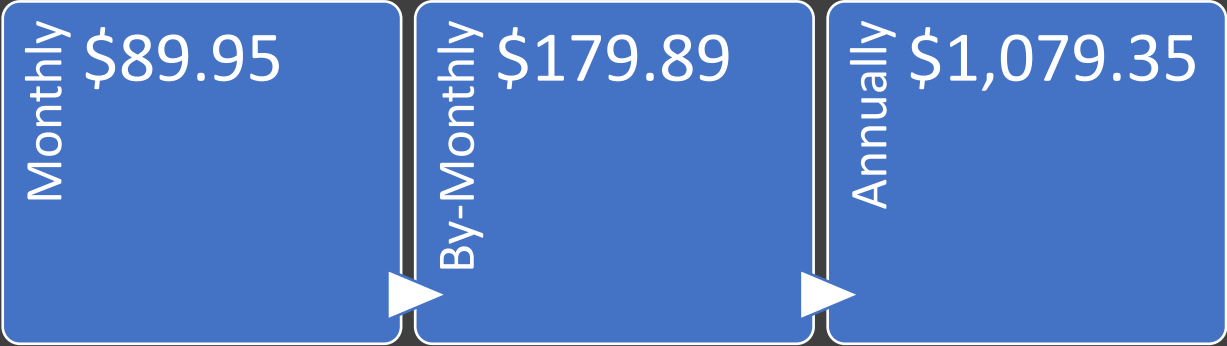
- The Sewage System Reserve Fund allows us to accumulate capital in order to afford large capital projects or fund unexpected equipment repairs.
- West Lorne's Sewage Reserve Fund as of Jan 1, 2022 is estimated to be \$67,423.62.
- West Lorne Sewage Plant still has an outstanding loan of \$54,000, for the partial refurbishment of the plant that was done in 2020.
- Proposed sewage rate increase will provide additional \$25,000 required for capital replacement scheduled for this year and ability to put money aside for future capital needs.



# Rodney Sewage

# On Average, family of 4 uses 20 cubic meters of water per month...

That's equal to \$2.99 per day



## Current Rodney Sewage Fees

Flat Charge - \$ 71.82

Water Rate – \$ 2.70/m3



That's equal to \$3.15 per day

Monthly \$94.44  
Increase of **\$4.50**

By-Monthly \$188.89  
Increase of **\$9.00**

Annually \$1,133.32  
Increase of **\$53.97**

# Proposed Increase

Flat Charge - \$ 75.41

Water Rate – \$ 2.84/m3

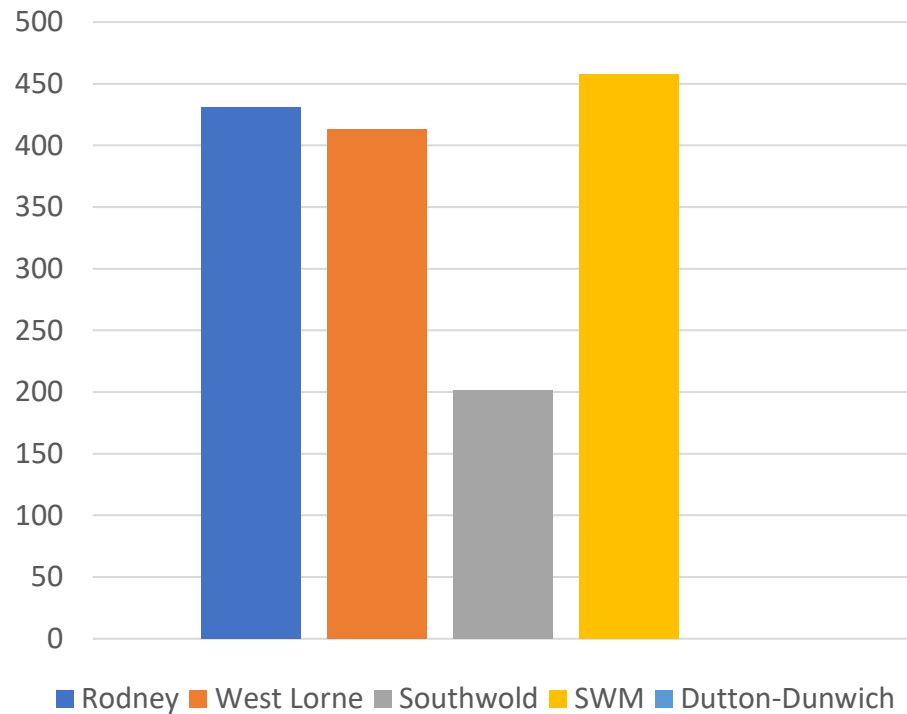
# Rodney Reserves

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- The Sewage System Reserve Fund allows us to accumulate capital in order to afford large capital projects or fund unexpected equipment repairs.
- Rodney's Sewage Reserve Fund as of Jan 1, 2022 is estimated to be \$358,153.84.
- Proposed sewage rate increase will provide additional \$19,140.00 required for capital replacement scheduled for this year.

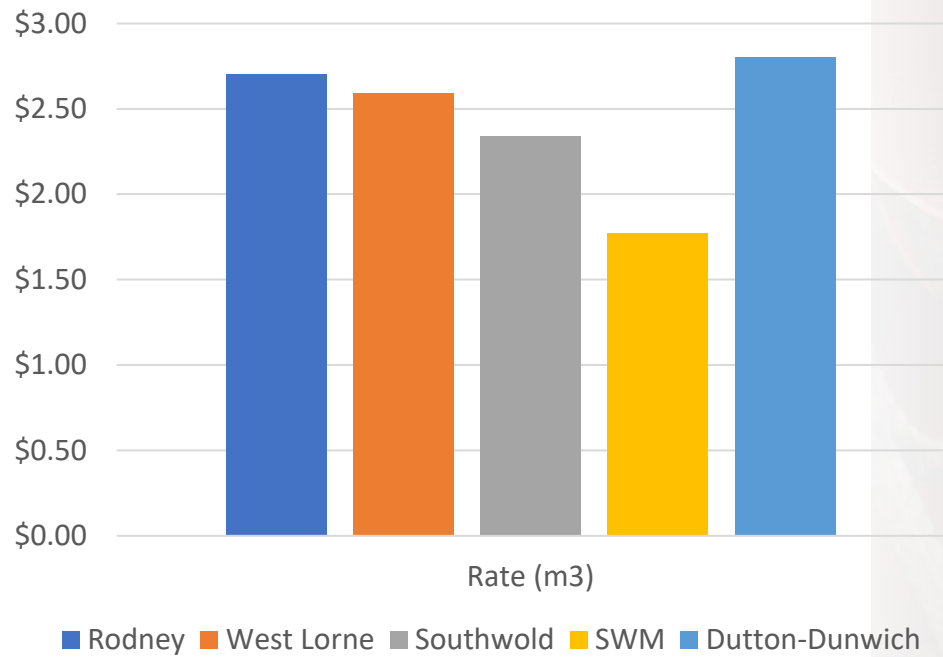


# Sewage Flat Rate in relation to Neighboring Municipalities





## Sewage Consumption Rate in relation to Neighboring Municipalities



# Overall Comparison of Utility bills

