



Appendix Q

EPCOR WATER SERVICES INC.

Bill Comparison Report

February 16, 2021

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1.0 DOCUMENT PURPOSE

1. This document will discuss the components of EPCOR Water Services Inc. (EWSI) water rates, wastewater treatment rates, sanitary rates and stormwater rates and provide a comparison to those of surrounding communities and other regions based on monthly water, wastewater and drainage bills.

2.0 OVERVIEW

2.1 Water Rate Comparison

2. For purposes of preparing this document, EWSI compared its rates with the water utilities of Calgary, Regina, Saskatoon, Vancouver and Winnipeg as well as a representative selection of communities surrounding Edmonton. These communities are collectively referred to in this document as the Alberta Capital Region communities and are comprised of St. Albert, Sherwood Park, Sturgeon County and Spruce Grove.

3. Based on its review of water rates in the Alberta Capital Region and the other major cities noted above, EWSI concludes the following with respect to its proposed water rates for 2022:

- When comparing EWSI's water rates with those of other communities, there are a few notable factors related to the level of services provided and the costs incurred by the utility which cause variation in the level of rates. These factors include:
 - **quality of raw water** – the raw water quality treated by EWSI is relatively poor compared to some other communities, requiring additional treatment processes;
 - **franchise fees** – EWSI and water utilities in certain other communities pay franchise fees, whereas some others do not; and
 - **age of the system** – EWSI's distribution system is relatively old compared to other communities (particularly Alberta Capital Region) which requires higher costs to maintain and replace aging infrastructure.
- Even with these upward pressures on rates, the results show that EWSI's water rates are competitive with the other sample utilities surrounding Edmonton and in other jurisdictions.
- The sections below provide a comparison of the monthly water bills of EWSI with the other communities sampled for various customer classes and consumption

levels. The results show that water bills of EWSI's customers generally rank in the middle or low range within the communities sampled.

2.2 Total Wastewater Rate Comparison

4. It is not possible to conduct a direct comparison of EWSI's wastewater treatment rates or EWSI's sanitary and stormwater rates with those of other communities because all other communities combine the wastewater treatment and the operation of the wastewater collection system. In order to provide a meaningful comparison with other communities, EWSI has combined its wastewater treatment rates with its sanitary and stormwater rates for the collection system.

5. The combination of wastewater treatment rates and sanitary and stormwater rates (which collectively comprise the drainage bill for EWSI) is herein referred to as "total wastewater". In order to provide a meaningful comparison with other communities, the comparison is presented on a total wastewater basis.

6. Based on this comparison of EWSI's total wastewater rates with those in other communities, EWSI concludes the following with respect to its proposed rates for 2022:

- Similar to the water rate comparison, when comparing wastewater rates with those of other communities, there are a few key factors which lead to differences in rates including:
 - **franchise fees** – EWSI and certain wastewater utilities in other communities pay franchise fees, whereas some others do not;
 - **investments in resilience** – EWSI's stormwater rates include significant investment in flood protection to ensure Edmonton's resilience. In a February 2021 Report from Intact Centre on Climate Change Adaptation¹, Edmonton received a B+ score for flood preparedness, tied with Regina and Toronto for the top rank of the 16 major Canadian cities included in the report;
 - **ageing Infrastructure** – the drainage system in Edmonton is older than in surrounding communities, requiring a higher level of maintenance and renewal including corrosion and odour reduction (COfE);

¹ <https://www.intactcentreclimateadaptation.ca/wp-content/uploads/2021/02/16-Cities-Flood-Preparedness.pdf>

- **extent of treatment** – while some municipalities apply similar treatment processes as EWSI, others are able to treat wastewater to a less extent; and
- **full cost recovery approach** – while EWSI’s wastewater rates are based on full cost recovery, it is not clear if other communities take this same approach in determining their rates.
- Even with these upward pressures on rates, the results show that the wastewater rates are competitive with the other sampled utilities surrounding Edmonton and in other jurisdictions.

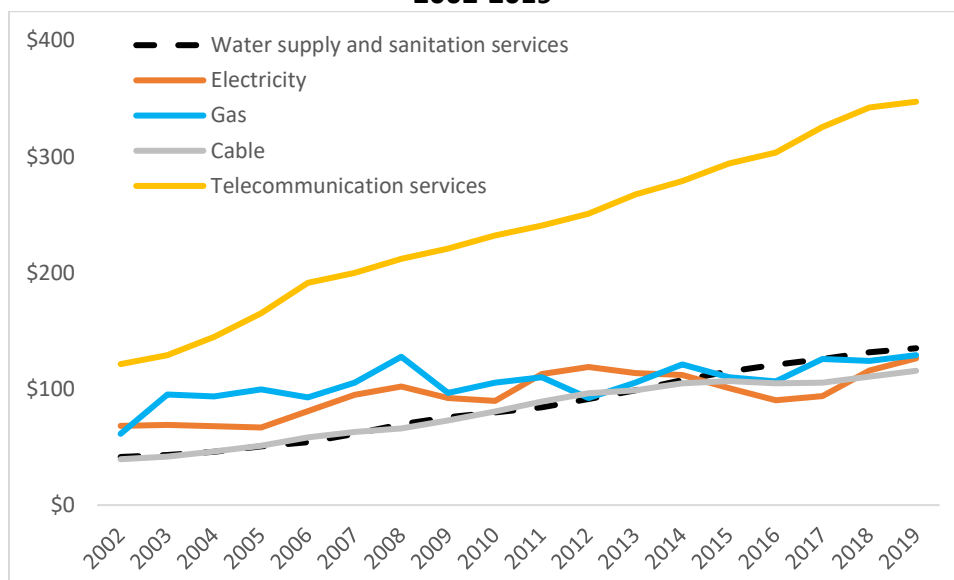
3.0 COMPARISON OF EWSI’S WATER RATES WITH OTHER UTILITY SERVICES

7. Figure 3.0-1 below, taken from Statistics Canada Detailed Household Final Consumption Expenditures in Alberta shows the average residential spending in the following categories since 2002:

- Water supply and sanitation services;
- Electricity;
- Gas;
- Telecommunication services; and
- Cable, satellite and other program distribution services.

8. The graph illustrates that, by comparison, water supply and sanitation rates, which include EWSI’s water and total wastewater rates, have increased at a faster rate than electricity and gas rates, due to the significant investments required to maintain the waterworks system.

Figure 3.0-1
Household Consumption Expenditures, Alberta²
Average Monthly Spending
2002-2019



4.0 WATER BILL COMPARISONS

9. Surrounding communities and other regions' water rates will be compared to EWSI's based on calculated monthly water bills. While a rate comparison of this nature provides a good overview, it has inherent limitations, as discussed in the Canadian Municipal Water Consortium's "2015 Canadian Municipal Water Priorities Report":

... these types of comparisons don't often highlight more complex and variable structures being used to support full cost recovery... When comparing costs between municipalities, there are disparities and local realities for each system. Each municipality has chosen a different way of covering costs and has a unique combination of level of service, treatment processes, maintenance and upgrade requirements, fire protection, average consumption, population size, energy for distribution and collection, type and quality of source water and receiving water.³

² Statistics Canada. Table 36-10-0225-01 Detailed household final consumption expenditure, provincial and territorial, annual (x 1,000,000).

³ Canadian Municipal Water Consortium. "2015 Canadian Municipal Water Priorities Report: Towards Sustainable and Resilient Water Management," page 23.

4.1 Approaches to Water Bill Comparisons

10. The comparative 2022 water bill information is based on the other utilities' water rates as of 2021, escalated by the I factor (2.31%) to determine a 2022 rate. EWSI is generally unable to find published 2022 rates for the utilities used for the comparison and therefore used 2021 rates escalated by the I factor as a conservative measure. The bill comparisons generally reflect 2022 water rates for comparable communities and are based on the total cost to the customer including fixed charges, consumption charges plus any surcharges. The proposed 2022 EWSI rates are utilized as EWSI rates for this comparison.

11. Comparisons of a residential water bill are provided for three levels of water consumption:

- Low use residential consumer (10 m³/month);
- Average use residential consumer (15 m³/month) based on the average consumption for an Edmonton household; and
- High use residential consumer (40 m³/month).

12. Comparisons are not made for the multi-residential customer class because many jurisdictions do not have a similar rate class.

13. Comparisons are made for three sizes of commercial customers:

- A small commercial business representative of a typical car wash (325 m³/month).
- A medium commercial business representative of a large hotel or large shopping center (6,000 m³/month).
- A large commercial business representative of a large-scale commercial enterprise, like a brewery or food processing plant (20,000 m³/month).

4.2 Residential Water Bill Comparison

Figure 4.2-1
Low Use Monthly Residential Water Bill
(10 m³/month)

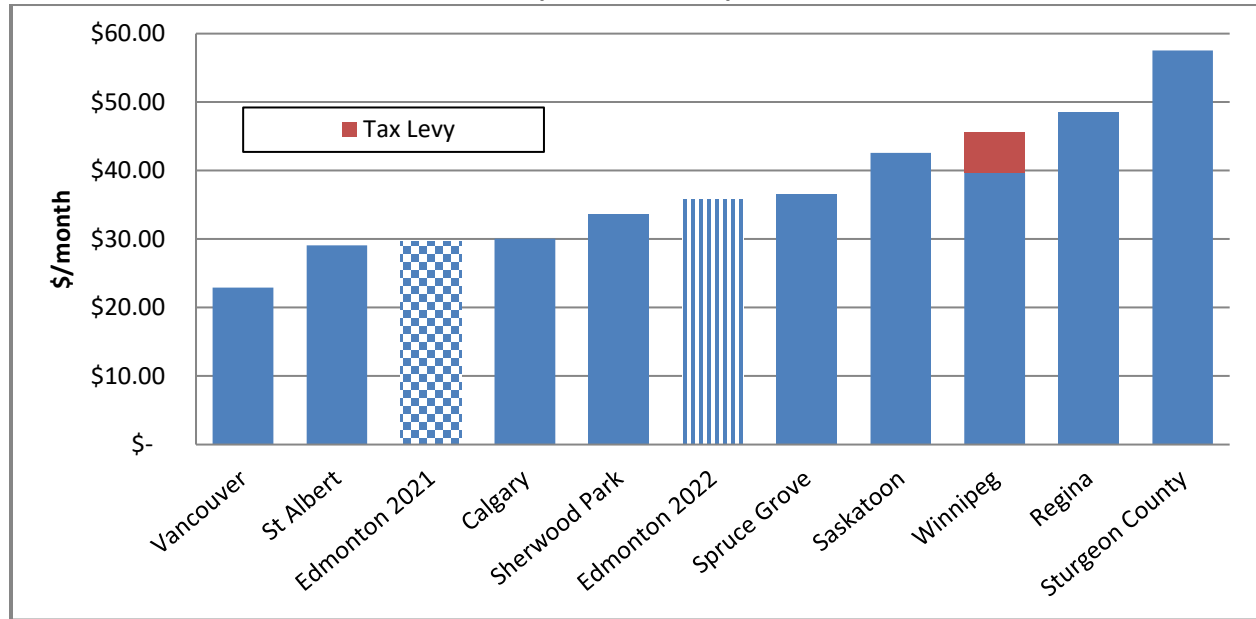
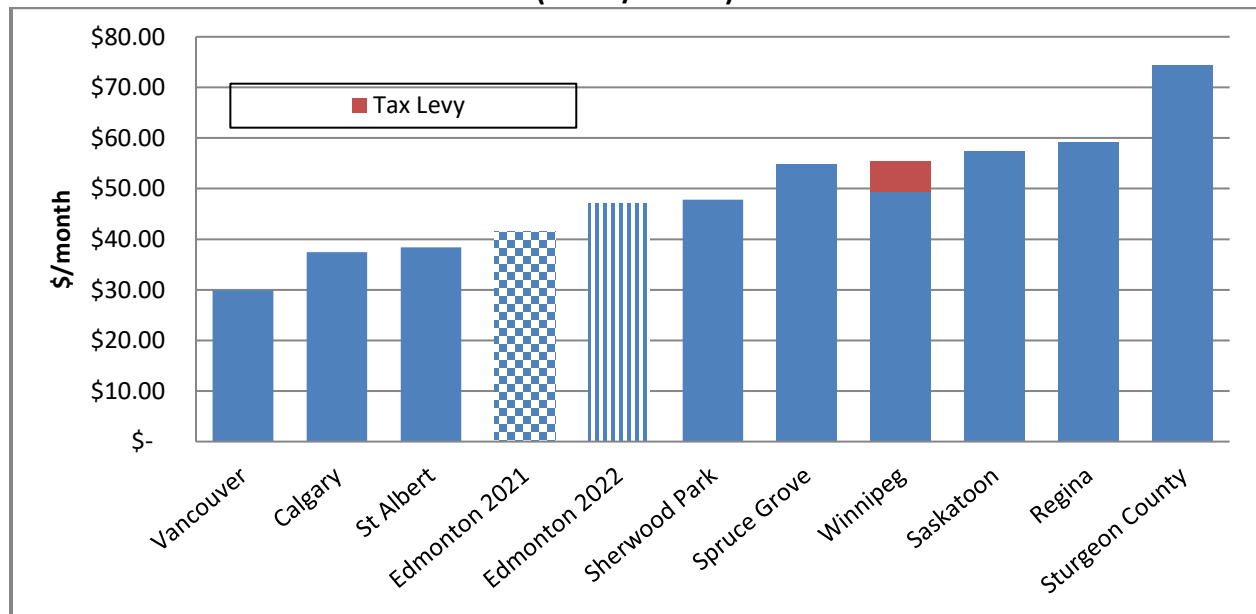
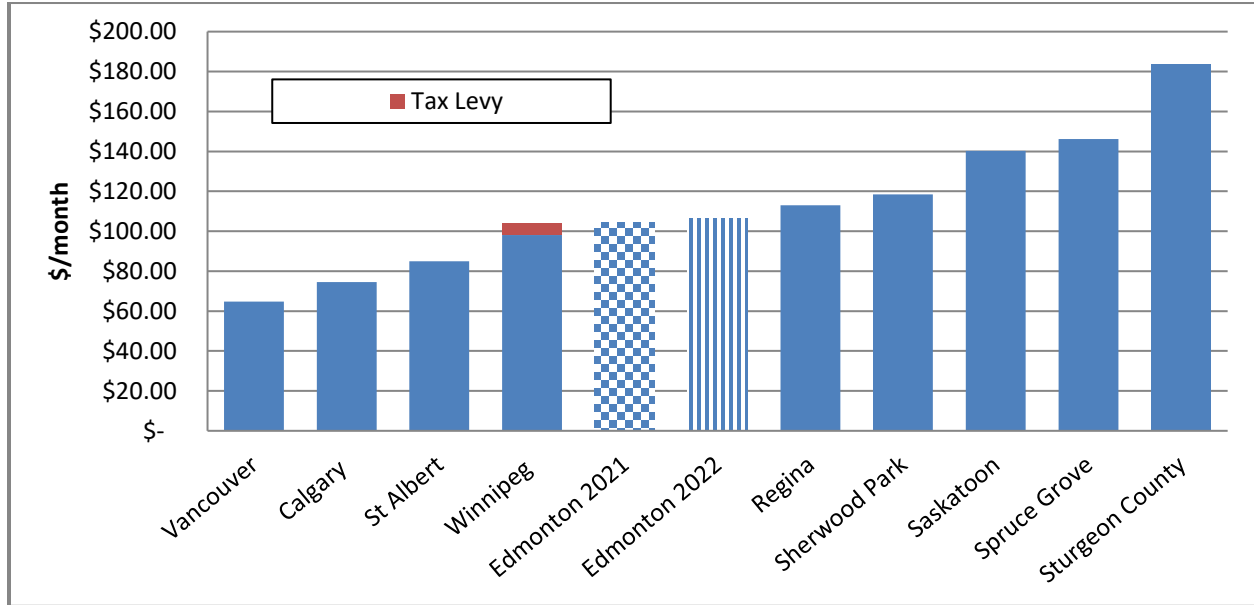


Figure 4.2-2
Average Edmonton Monthly Residential Water Bill
(15 m³/month)



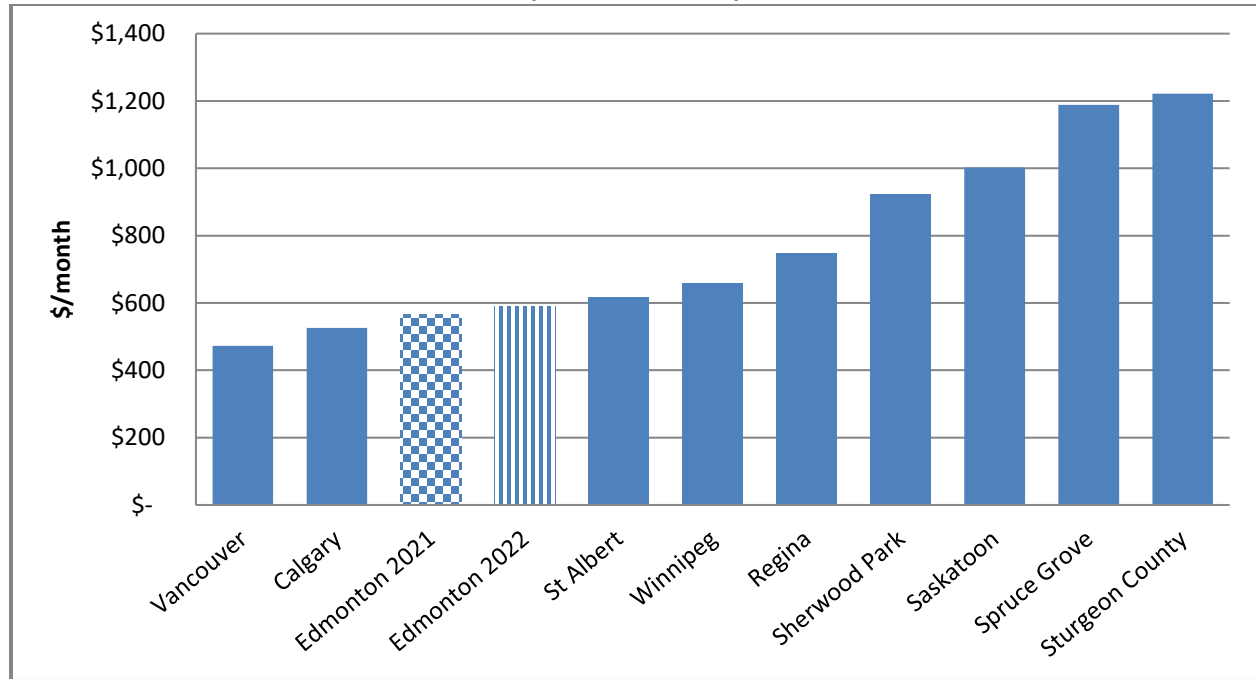
**Figure 4.2-3
High Use Monthly Residential Water Bill
(40 m³/month)**



14. Overall in the residential segment, EWSI’s proposed rates are competitive compared to the other utilities.

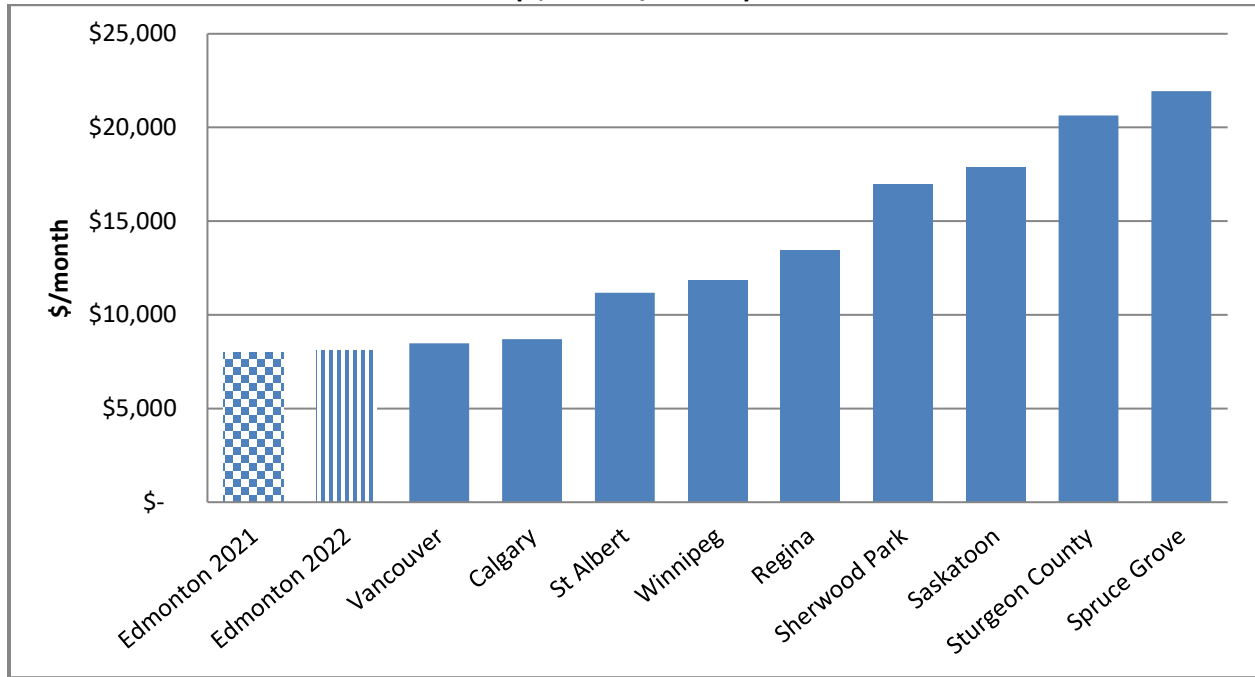
4.3 Commercial Water Bill Comparison

**Figure 4.3-1
Small Commercial Monthly Water Bill
(325 m³/month)**



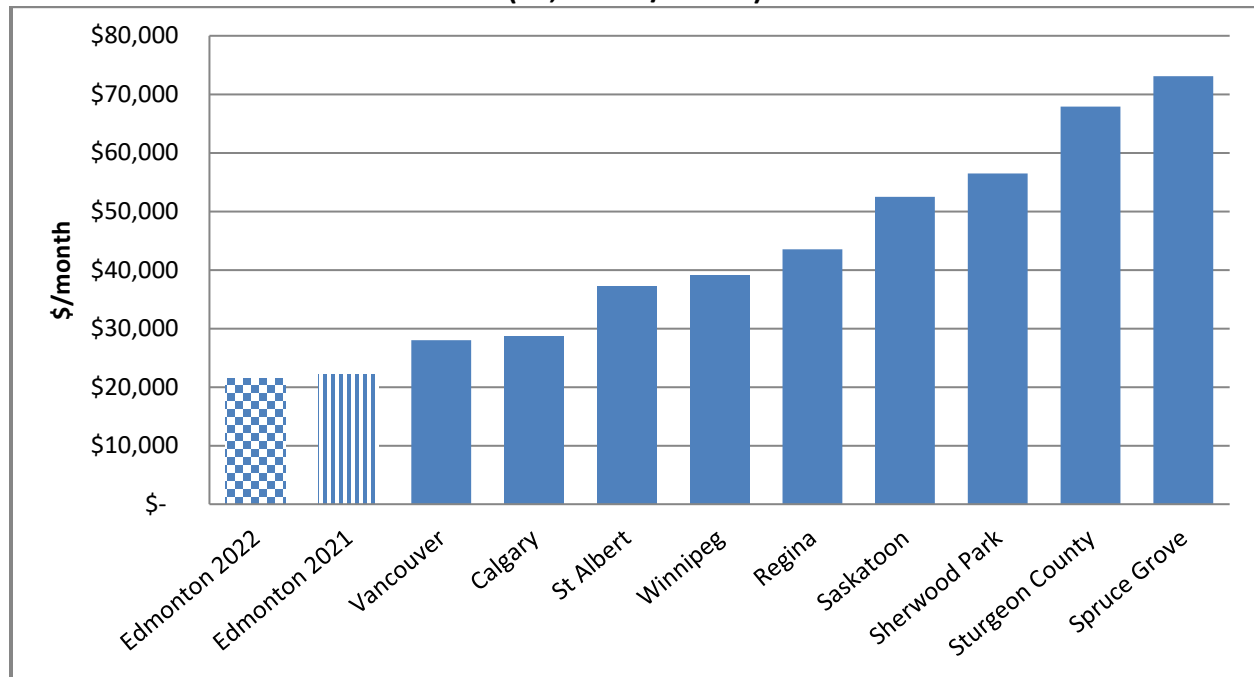
15. Figure 4.3-1 provides a comparison of the monthly water bill for small commercial customers consuming 325 m³ per month, which is representative of a typical car wash. In this category, the Edmonton 2022 water bill is one of the lowest when comparing with surrounding communities.

**Figure 4.3-2
Medium Commercial Monthly Water Bill
(6,000 m³/month)**



16. Figure 4.3-2 provides a comparison of the monthly water bill for medium commercial customers consuming 6,000 m³ per month, which is intended to represent a large hotel or large shopping center. In this category, the Edmonton 2022 water bill is the lowest when comparing with surrounding communities.

Figure 4.3-3
Large Commercial Monthly Water Bill
(20,000 m³/month)



17. Figure 4.3-3 provides the comparison of the monthly water bill for large commercial customers consuming 20,000 m³ per month, which is representative of a large scale commercial or industrial enterprise, like a brewery or food processing plant. In this category, the Edmonton 2022 water bill is the lowest cost when compared to all other communities.

18. Overall in the commercial segment EWSI's charges are one of the lowest when compared to the other utilities.

5.0 TOTAL WASTEWATER BILL COMPARISONS

5.1 Approach to Total Wastewater Bill Comparisons

19. Using the same approach as was used for the water bill comparison, comparative total wastewater bill information is based on the other utilities' wastewater collection and treatment rates as of the 2016, escalated by the I factor (2.31%) to determine a 2022 rate. The rate comparisons are based on the total cost to the customer and include fixed charges, consumption charges plus any surcharges.

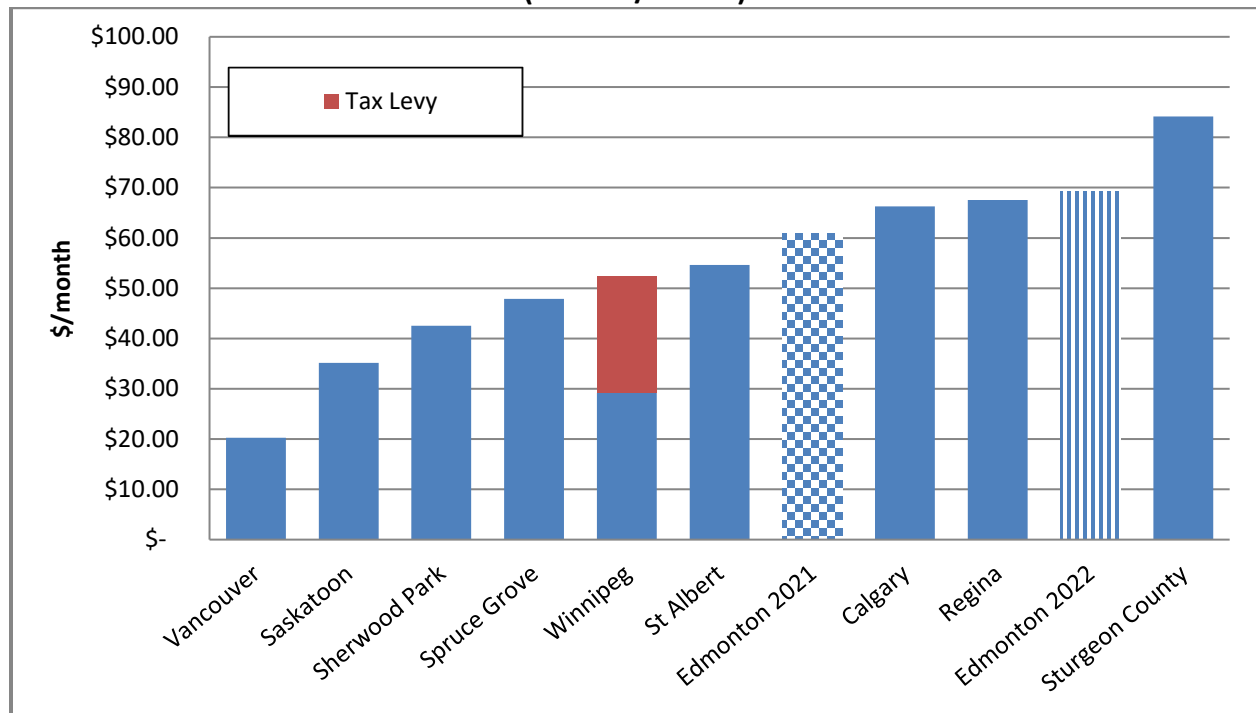
20. The residential wastewater bill comparisons are based on a residential customer consuming 15.0 m³ per month, reflecting an average Edmonton wastewater residential consumer.

21. Comparisons for commercial customers are provided for two sizes:

- A small commercial business representative of a typical car wash.
- A large commercial business representative of a large-scale commercial enterprise, like a brewery or food processing plant.

5.2 Residential Total Wastewater Bill Comparison

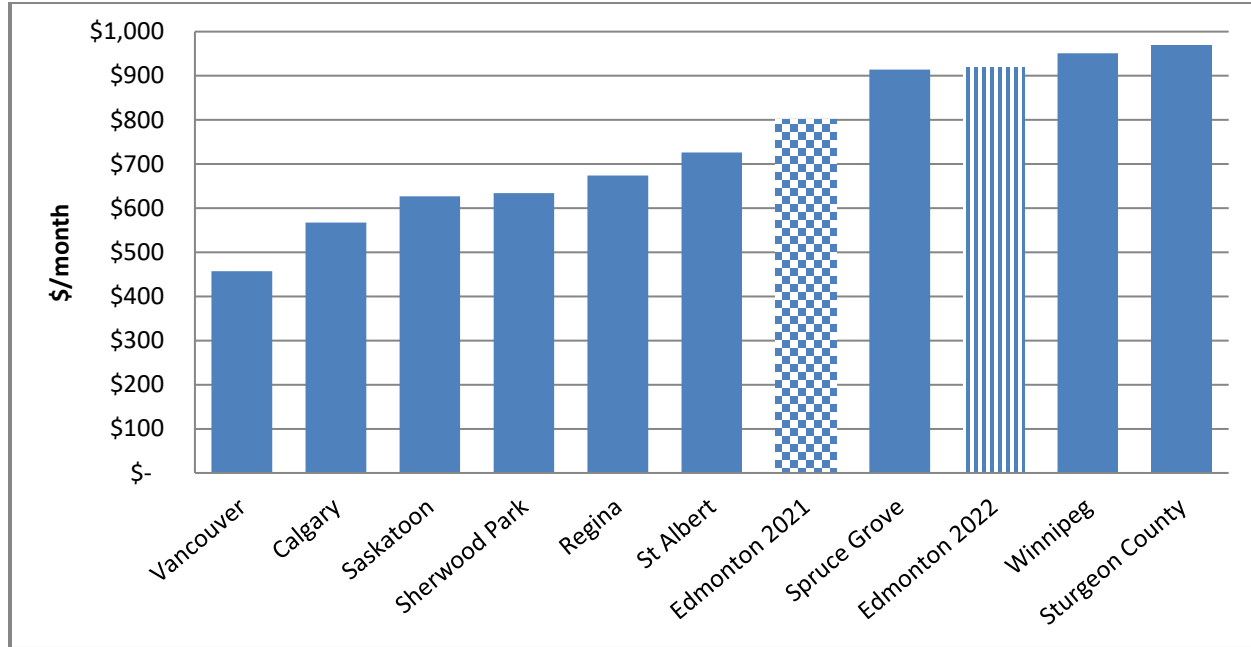
**Figure 5.2-1
Average Edmonton Residential Monthly Wastewater Bill
(15.0 m³/month)**



22. Figure 5.2-1 provides a comparison of the monthly wastewater bill for residential customers consuming 15.0 m³ per month, which is representative of an average Edmonton household. In this category, the Edmonton 2022 wastewater bill has increased relative to surrounding communities and other regions.

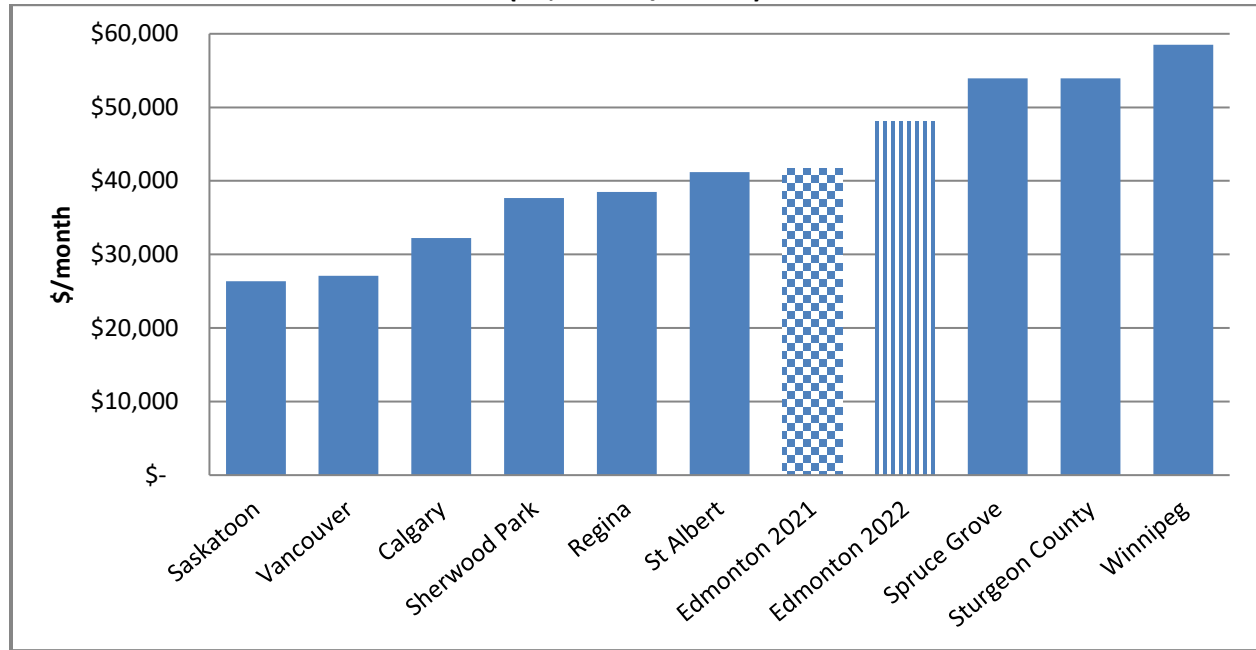
5.3 Commercial Total Wastewater Bill Comparison

**Figure 5.3-1
Small Commercial Monthly Wastewater Bill
(325 m³/month)**



23. Figure 5.3-1 provides a comparison of the monthly total wastewater bill for small commercial customers consuming 325 m³ per month, which is representative of a typical car wash. In this category, the Edmonton 2022 total wastewater bill is comparable with surrounding communities and other regions.

**Figure 5.3-2
Large Commercial Monthly Wastewater Bill
(20,000 m³/month)**



24. Figure 5.3-2 provides a comparison of the monthly total wastewater bill for large commercial customers consuming 20,000 m³ per month, which is representative of a large scale commercial or industrial enterprise, like a brewery or food processing plant.

25. The relative rankings of the wastewater utilities reflect the differences in costs associated with the differences identified in Section 2.2.

26. Overall in the commercial segment, Edmonton wastewater rates are competitive compared to the other sampled utilities.