

Town of Parry Sound
52 Seguin Street
Parry Sound, ON P2A 1B4
Attn: Ms. S. Phillips, Director of Finance

January 13, 2021

Re: Water and Wastewater Rate Study, Town of Parry Sound, November 9, 2020

Ms. Phillips,

I have had an opportunity to review the Water and Wastewater Rate Study - Town of Parry Sound dated November 9, 2020 (Report) and subsequent information (Letter) provided by the report preparers Watson & Associates Economists Ltd. (Company). I have serious concerns that the methodology and the assumptions used for the study are sufficiently flawed that the report needs to be revised and reissued. A particular issue concerns the assumptions made in the Water and Wastewater Customer Forecast (Page 2-1 & Table 2-1). It appears that the report is mixing terminology and 'counts' in a manner that is not appropriately defined and seems to be incorrect. I explain my observations and concerns below.

By way of background, my professional experience in the pharmaceutical industry has been leading forecasting groups and providing estimates of sales and profitability for new products that range from annual sales of millions to billions. One important principle of forecasting is GIGO - Garbage In, Garbage Out. Perhaps the most important aspect of forecasting is properly defining and validating the underlying assumptions.

In Table 2-1, Water and Wastewater Customer Forecast, it is stated that the Town currently has some 1,925 Residential Customers and 421 Non-Residential Customers. The Residential Customer number is expected to rise by an average of three new customers per year for the next decade, reaching 1,954 customers by 2020. The Non-Residential number is expected to remain static. These numbers seem suspiciously low.

The total of 1,925 Residential Customers seems reasonable. With a population about 6,500 this suggests that there are about $6,500/1,925 = 3.4$ persons per residence, i.e., Residential Customer. This suggests that a Residential Customer as defined in the Report is pretty much what we consider to be a water consuming household (Household). The Company in their Letter states that the Town has added approximately 47 customers over the period 2012 to the present. The Company then labeled this as 7 "net new" customers annually. This was a period that we saw the building of a number of new condominium buildings and the public school retrofit, in addition to a large number of build outs that resulted in more than what we would consider 47 Households. Unless houses were being abandoned, which has not been the case, it is clear that some sort of change in the counting of new customers is being used. It would appear then that the Company considers high-density buildings to be a single customer. That may well be the how the Town bills these customers but they in fact represent a larger number of 'customers' and Households from the perspective of use.

The forecast annual growth of Residential Customers, 0.3% (3/1925), is translated into a total 10-year increase in water consumption of 1.6%. Unless the Town has some undisclosed plans to restrict water use, I am at a loss to understand how water consumption is expected to rise by less than 0.2% annually. Just adding in the Lighthouse, Thunder Creek, and Mall developments will surely exceed this increase with some 120 or so new Households, regardless of whether they are billed as 3 or 120 Residential Customers. These 120 units alone represent an increase of 4% over the current residential numbers and would be expected to increase water demand by some 4% in the next two years alone.

The Company in their Letter said that the Town had on the books some 31 units registered but not built. They took this figure and translated this into 3 new customers per year for the next 10 years. This obviously ignores past building trends and eliminates any possibility of future growth.

The Report also assumes that there will be no new Non-Residential customers over the next decade. Are they planning on stopping construction on the new Best Western? Is no business growth forecast for the Town? It seems very pessimistic rather than conservative and perhaps requires a look at the Town budget in terms of those functions that are dedicated to economic development. The report is forecasting no growth in Non-Residential water usage despite a suggestion that at least one company that will be arriving requires water as part of their business product.

I could go on with arguments regarding the forecast of growth in customers and water consumption, but I think the point is made that the figures do not reflect the reality of the current and future of the Town of Parry Sound whether that be customer count or water usage. It would suggest that despite the Town investing thousands of dollars and hundreds of hours of Staff time on an Aquatic Centre proposal there is little belief that it will actually be realized. I believe that this type of public facility consumes a rather large amount of water.

The Company report labels their Report as being "conservative". My experience is that that conservative is a term that can be used interchangeably with 'sandbagging'. In general, forecasts are presented with Pessimistic, Realistic, and Optimistic scenarios. Often a Monte Carlo analysis is developed using management's best estimate of the likelihood of each scenario. That would probably be overkill in this situation, but the presented "conservative" usage estimate has potential downsides.

Assuming a lower customer base and water consumption and the associated revenue with fixed and very significant capital casts, about \$28 million over the next decade, means that capital costs and the expected inflationary increase in operational expenses will be spread over a smaller 'forecast' customer base with the net impact of increasing water bills more than necessary. There is also a possibility that the Town's water capacity will be stretched beyond what it is preparing for based on this forecast.

I am not sure who is responsible for the underlying water consumption information used in the preparation of the Report, but it has the net effect of resulting in a report that is unreliable as an estimate of future usage and for use in developing any water rate recommendations. I am unqualified to analyze the whole issue of infrastructure capital costs, but if these figures have the same discrepancies as seen with the usage and customer estimates then the whole report is suspect.

My suggestion is that the report be returned to the Company for a revision of the consumption forecast portion. This will not be a major undertaking; the numbers all tumble out of the existing spreadsheets. I also believe that a revised report will not materially change the outlined recommendations. The costs are the costs, more customers and increased water consumption will only minimally change the proposed rates, but:

1. GIGO, and trust is lost in Town Staff and their recommendations.
2. The saving of even a few dollars per month on a water bill can make a difference for folks who are on a fixed income.

I will refrain from offering my opinion on the work done in the preparation and review of the Report. I am interested in ensuring that Town Council and Town Residents are presented with the best possible information and analysis to make decisions.

Addendum:

I would have been most helpful for the Report to include historical annual data on customer numbers and water consumption to assist in reviewing and commenting on the report's recommendations.

Sincerely,

A handwritten signature in blue ink that reads "J Bossart". The signature is written in a cursive style with a large, stylized initial "J".

Josef Bossart