

Tackling the global water crisis at home

By Sarah Sobanski

Have you ever considered how many litres of water you use in a day?

Just in your morning routine: do you shower, use the toilet, wash your hands, brush your teeth, drink a coffee or two?

For every two minutes you shower, that's 20 litres. For every toilet flush, that's nine litres.

That's according to a **City of Cape Town web page that helps estimate a person's daily water usage**. The city faces a water crisis and impending "Day Zero" - when city taps will run dry. The day has slowly crept from this summer to 2019, following restrictions on daily water use for residents.

The restriction is 50 litres per person, per day. Fifty litres leaves room for three litres of daily hygiene, two litres each for cooking and drinking water, 18 litres for dishes and laundry, a litre for your pet, a 90 second shower and a single toilet flush at the end of the day.

To put that further in perspective, the average Canadian uses 329 litres per day, according to fall 2016 *Global News Toronto* article "**This is how much water Canadian's waste.**"

I didn't believe it either.

It turns out, however, that my estimated daily use rounds out to about 300 litres including two loads of laundry a week, cleaning surfaces, cooking, drinking and dishes. That doesn't include watering houseplants or washing the floors. Nor does it include anytime I leave the water running to let it get hot or cold, or anytime I dump a glass of water after its been hanging out on my night stand all night. Do you have these bad habits?

Here in Bancroft, we've got our own water and wastewater problems. Our issues may be unique - surrounded by rivers and lakes but unable to afford the cost of flushing our toilets or bringing water to our taps - but they're not uncommon. Across the country and the world people are facing their own water and wastewater issues.

If not at Cape Town, look at the *CBC's* recent "**Water at Risk**" series. In the article "**Shrinking mountain snowpack, drier summers spell trouble for Vancouver water supply**," author Emily Chung suggests, "Vancouver will face its own challenges in the coming decades and local officials already know they need to encourage residents to be more frugal with water. The city must also upgrade its infrastructure, and that means local residents will soon be paying more for water to drink, wash with, and irrigate their gardens... Metro Vancouver's current financial plan shows the wholesale cost of water services (not including sewer services or extra fees added by individual municipalities) increasing from an average of \$165 to \$209 per household annually, a 27 per cent increase, between 2018 and 2022. That's before any major new water projects are even built."

Of countries with the most freshwater, Canada comes in fourth (*WorldAtlas*). Yet, some of our provincial capitals are facing threats to their water availability.

That earlier mentioned 2016 *Global* article graphed Toronto and surrounding area at high risk where more than 40 per cent of the area's water had withdrawn. It sourced Environment Canada and also listed Regina and Calgary at high and medium risk. Vancouver was considered low risk in the same graph.

In June of last year, *Bancroft This Week* published "**Bancroft watersheds at high risk.**" It leads, "Bancroft sits on the border of two of the most threatened watersheds in the country."

Water and wastewater issues are not going away, neither locally nor globally. A single word keeps being hailed as the solution: infrastructure.

If we fix inefficiencies in our water and wastewater plants we can bring rates down. If Vancouver spends hundreds of millions of dollars it can add intake pipes at the bottom of its reservoirs to extend their lives. If Cape Town can install two aquifers, three small-scale augmentation facilities and transfer water from private dams it can bring an additional 120 megalitres to the city ([defeatdayzero.co.za](#).)

But I'm still stuck on 329 litres versus 50 litres a day. New infrastructure aside, rising populations aside, how can we take such advantage of something so precious and crucial to our survival?

Cape Town has limited water usage for irrigation to an hour maximum, two days a week, before 9 a.m. or after 6 p.m. Agriculture and commercial sectors have been asked to reduce their usage by 60 per cent and 45 per cent respectively. Reusing water seems like a logical way to help reduce water consumption. Collecting the water once it has been used and using different treatments, like a [commercial water softener](#), to recycle it can seriously impact the amount of water commercial companies use.

On its water restrictions notice page, the city states, "Residential units using excessive amounts of water will be fined or have water management devices installed on their properties... All residents are strongly encouraged to install water efficient parts, fittings and

technologies to minimize water use at all taps, shower heads and other plumbing mechanisms."

Hosing down paved surfaces, watering, filling portable play pools, washing vehicles, topping up swimming pools or running water features with municipal drinking water is illegal. It's recommended to flush toilets with grey water saved from showering or washing.

I'm struck by a sense that none of these things seem unreasonable, nor do I disagree with any of them. I can't imagine why we've been using drinking water to flush our toilets, water our gardens, top up our pools or any other number of senseless things before now.

Cape Town's population of 3.7 million people is currently averaging 511 million litres of water per day. It's trying to get to 450 million litres.

If Cape Town residents used the same amount of water we do on average, they'd be using 1.2 billion litres per day. If everyone in Bancroft is using as much water as the average Canadian, we're going through more than 1 million litres per day. Why?