



Cowichan Watershed Board

Media Release

May 7, 2018

Cowichan Water Conservation Challenge Annual "Report Card" released for BC Water Week

(Duncan, BC) As the spring weather beckons Cowichan residents out to their gardens, the Cowichan Watershed Board has been eagerly soaking up the 2017 water data reports of the Cowichan Water Conservation Challenge, hoping for signals that all the collective efforts to save water are paying off!

The Challenge is a five-year initiative to track and reduce residential water use by 20%, measured across seven participating water districts. Launched in July 2014 as a collaboration of local governments responding to an extreme drought, the challenge engages residents from across the Regional District in a collective race to learn how to stretch our water budgets to meet the needs of the future.

Lowering water demand is a good idea because of: 1) currently declining summer water supplies in some areas, with longer, drier summers predicted region-wide for the future; 2) a growing population using finite water resources, and 3) gaps in our understanding about groundwater and the cumulative impacts of many users drawing on the same aquifers. Lower water demand also reduces costs for water infrastructure, particularly the costs of meeting peak summer needs.

2017 RESULTS

The 2017 results are mix of amazing, good and concerning news. The good news is that of the four water districts reporting this year, two have either reached or are very close to reaching the goal of 20% reduction in per capita residential water use. Also, all areas are showing a trend towards lower water use.

The amazing news is that residents served by the Town of Ladysmith water systems used just 189 litres per person per day. While this is still more than residents of Germany (122 LPD), it is significantly lower than the Canadian average (251 LPD). Thank you Ladysmith! (Note that this was a big drop from the previous year, and may represent a data 'hiccup' (e.g. new unoccupied homes) so we're keen to see Ladysmith keep it up!)

Cowichan Bay residents have shown a steady and impressive improvement in water conservation since the Challenge began, currently leading the group with a 27% drop in annual residential use compared to 2013.

Concerns remain that given future climate and population growth forecasts, we need to do more to use less.

The Cowichan Watershed Board would like to applaud our most water wise residents for leading the way to a sustainable future. The 2017 Water Challenge results are provided in the attached backgrounder.

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The Cowichan Water Conservation Challenge

The Water Challenge was inspired in part by Ladysmith's great success in water conservation between 2002 and 2013. The town reduced total water use from 1,700,000 m³ to 1,279,000m³, or approximately 25%, while the population grew by 20%, proving that big water savings are achievable.

Cowichan Watershed Board member David Slade, a local well-driller and groundwater expert, approached all the other local governments and major water suppliers about the value of water, and the goal of reducing home water consumption by 20%. The hope is that the culture of conservation will also 'trickle up' to the region's larger industrial and institutional water users where our residents work. Slade challenged them to 'meet or beat Ladysmith' and the seven largest residential water providers agreed.

The partners in the challenge are listed in the chart below. These partners encourage water conservation through mechanisms like tiered water pricing, installing water meters, and water conservation bylaws to control skyrocketing summer water demand. They track water use and report it annually to allow the Challenge to monitor progress, and try to learn what is working.

The Cowichan Watershed Board supports the initiative with public outreach and education. Water "super-heroes" hit the streets and public markets every summer, educating, entertaining and engaging residents to do easy things at home to reduce water waste. The Million Litre Challenge in March saved an estimated 2 million litres of water simply by getting people to connect their garden hoses properly in the spring using a wrench and hose washer. Workshops on low-flow irrigation systems and rainwater harvesting have also been held.

2017 Water Use Results (as reported by the water suppliers listed below, in litres per person per day (LPD)).

	2013 Baseline	2017 Water Use (LPD)
Municipality of North Cowichan (all systems)		
Residential Consumption Average Daily Flow (L/p/d)	296	283
Residential Consumption Average Daily Flow (L/p/d) compared to 2013 values.		-4%
Mill Bay Waterworks District		
Residential Consumption Average Daily Flow (L/p/d)	249	240
Residential Consumption Average Daily Flow (L/p/d) compared to 2013 values.		-4%
Cowichan Bay Waterworks District		
Residential Consumption Average Daily Flow (L/p/d)	307	223
Residential Consumption Average Daily Flow (L/p/d) compared to 2013 values.		-27%
Cowichan Valley Regional District (all systems)		
Town of Ladysmith		
Residential Consumption Average Daily Flow (L/p/d)	231	189
Residential Consumption Average Daily Flow (L/p/d) compared to 2013 values.		-18%
Cowichan Valley Regional District (all systems)		N/A*
Town of Lake Cowichan		N/A*
City of Duncan		N/A*

*2017 statistics were not available from Cowichan Valley Regional District, City of Duncan or Town of Lake Cowichan.

Lessons Learned So Far

One of the advantages of the challenge has been the opportunity to learn from the water operators from different water districts who work most closely with our water resources. Some of their observations and suggestions to reduce water demand are:

- Landscaping: When new lawns and landscaping are planted in spring or summer, water demands are higher. Timing plantings to take advantage of fall rains is preferable. This is particularly effective with large landscaping projects such as new housing developments. Planting with [native drought-tolerant plants](#) is also recommended.
- Irrigation systems: Where people embrace micro-drip or rainwater irrigation systems with well-tuned timers, water demands are greatly reduced.
- Water metering: [Global statistics](#) show that when people pay more for using more water, they use less. For example, in Ladysmith, water operators estimate that the Town used an astounding 45% less water per capita in 2013 compared to 2002 after water meters were installed.
- Watering Restrictions: Watering restrictions really work to reduce peak water demand, and in some areas, in some years, they are essential to keeping the water flowing. If the region had better data about which groundwater sources were declining and which were healthy, combined with good public understanding of that data, it would be possible to tailor watering restrictions to the water source for each property. Lacking that, however, the partners do their best to collaborate for consistent water conservation bylaws to improve overall public understanding of acceptable watering practices. Some variation occurs due to the wide difference in water sources across the region.
- Ideally, water conservation should be a year-round habit. Much of the water “used” is often wasted through leaks or leaving a tap running. We can learn to live well with less, and will be doing ourselves a favour if we start to adapt now.
- in several areas, overall water consumption is down significantly, likely revealing success at fixing leaks or business/industry improvements. We hope to dig into those successes in the future.

Why Save Water?

1. Because we use more than our share. According to the last Canadian statistics on municipal water systems (2011), average residential water consumption was 251 litres/person/day (LPD) which is among the highest rates in the world. The 2016 Cowichan Region average according to reports received was 262 LPD – even higher than that Canadian average! By comparison, Germans use less than half as much water per person, at approximately 122 LPD. [\(2012 statistic\)](#)

2. Because Vancouver Island droughts are becoming the norm. While many of us get our water from invisible underground sources, the low water levels we see above ground are a reflection of lower summer water flows throughout the region. Studies show that not all water sources are depleting, but some are, and it is unknown which will deplete next, or how quickly.

3. Because we can! Here are some changes we can to make, at multiple scales.
 - Embrace higher housing density. Tighter neighbourhoods with less lawn and landscaping reduce summer watering.
 - Use recycled water. Some of our parks use recycled water. For example, the toilets at Transfer Beach and Cobble Hill Mountain Park both use recycled water for flushing.
 - Capture the Rain! [Rain barrels](#) are good but may be too small to make much of a difference in summers without intermittent rains, as is happening more. Invest in a larger [rain water harvesting](#) system if you can, of 1000L or more, or landscaping aids like mulch that absorb water. Plants prefer rainwater too, so you get healthier gardens.
 - Enjoy the summer tan. Let your lawn soak up the sun and turn brown for the season.
 - Plant only [drought tolerant species](#). Our climate has changed – so must our gardens.
 - Save up for a micro-drip system (one using less than 20 gallons per hour which operates at less than 25 psi to deliver water to the root zone of the plant material). They are so efficient that they are allowed to operate at any time of day for a maximum of 4 hours per day during water restriction stages 1, 2 and 3.
 - Keep a dishpan in the sink to catch your rinse water and carry it out to replenish your rain barrel or water plants, or have a plumber install a greywater outlet directly from your kitchen sink to a watering tank.
 - [It's hip to fix a drip!](#) Leaking toilets and hose connections waste water every second. In some cases fixing one leak can reduce a home's water use by 20% in one simple step.

[BC Water Week](#) is organized by the BC Water and WasteWater Association and encourages the conservation of water. “While Canada has historically had significant amounts of fresh water resources, the increase in population growth and industry as well as climate change impacts are placing growing strain on our drinking water supply. Drinking water conservation is critical during hot and dry summer months when drought conditions arise, but it is also important throughout the year because reducing our water consumption decreases the amount of water that needs to be treated and the costs related to water services.”

More information

Cowichan Water Conservation Challenge website: <http://www.cowichanwaterchallenge.ca/>

Photos on Facebook: <https://www.facebook.com/pg/CowichanWaterChallenge/photos>