

Survey of Drinking Water Plants, 2019

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Total per capita potable water use in Canada was 4% lower in 2019 compared with 2017. Households accounted for half of the water used in Canada in 2019, most of which (88%) was drawn from a river or lake.

Drinking water plants produced 4 866 million cubic metres of potable water in 2019, down slightly from 2017.

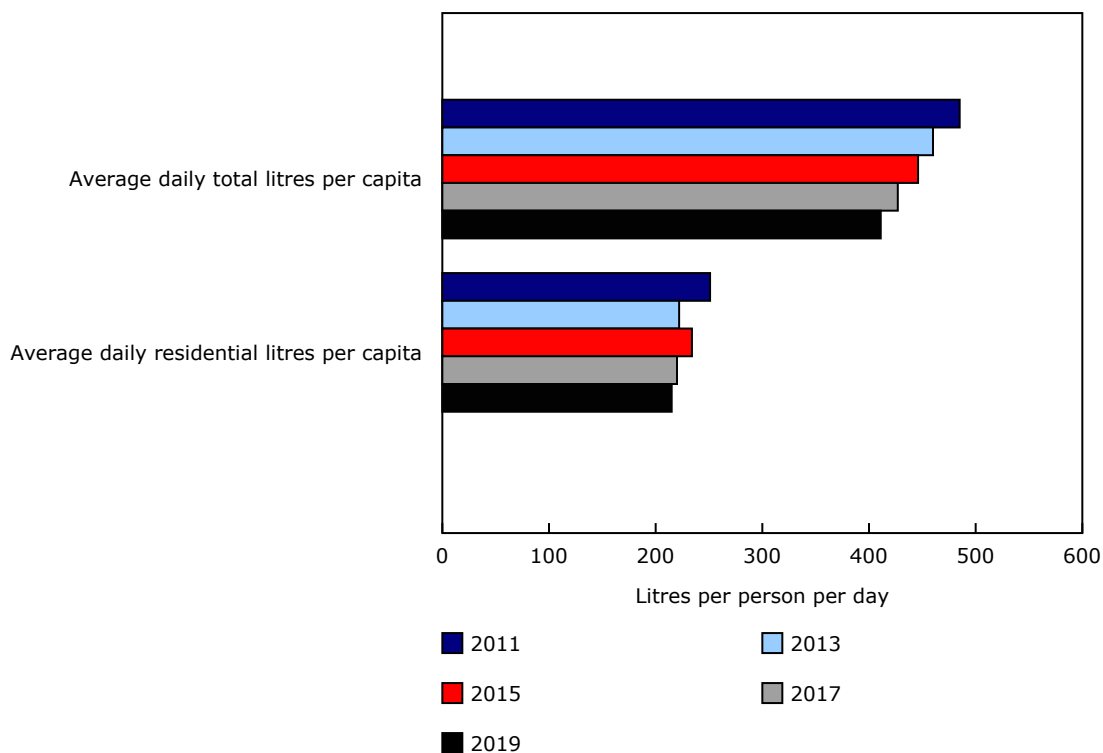
The number of Canadians who received their drinking water from plants that served communities of 300 people or more, rose from 31.4 million in 2017 to 32.5 million in 2019.

Total per capita water use continues to decline

Total per capita water use, which includes residential, industrial, commercial and other uses of water provided by public utilities, averaged 411 litres per person per day in 2019, down 4% from 427 litres per person per day in 2017. The decline in per capita water use was attributable to a larger population and stable drinking water production.

In 2019, total water use per capita was above the national average in Newfoundland and Labrador, New Brunswick, Quebec, British Columbia and Yukon, while it was the lowest in Nunavut and Manitoba.

Chart 1
Potable water use in Canada



Source(s): Table 38-10-0271-01.

Total water use decreased from 485 litres per person per day in 2011 to 411 litres in 2019, a 15% decrease.



Residential water use accounts for half of the drinking water produced annually

The residential sector was the primary water user, averaging 215 litres per person per day in 2019. This worked out to 2 469 million cubic metres, or 51% of the drinking water produced.

In terms of residential use, households in Newfoundland and Labrador, Yukon, British Columbia, the Northwest Territories, New Brunswick, and Quebec used more water per capita than the Canadian average in 2019.

Many factors can account for differences in water use, including water metering and pricing, water supply shortages, conservation measures (such as low-flow toilets), climate, demographics, dwelling types, economic activities and the state of infrastructure.

Residential water use decreased from 251 litres per person per day in 2011 to 215 litres in 2019, a 14% decrease.

The industrial, commercial, institutional and other non-residential sectors combined used 1 350 million cubic metres or 28% of the water produced in 2019. Losses from the distribution system (such as leakage) accounted for 18% of the volume produced. The remaining 3% of the total water volume was wholesale transfers to other jurisdictions.

Surface water sources, such as lakes and rivers, supplied 88% of the water in 2019, with groundwater and other sources accounting for the rest.

In 2019, nearly all of the water produced was treated by filtration and disinfection processes, while 1% of Canadians received untreated water, which came primarily from groundwater sources, unchanged from 2017.

Capital expenditures down year over year

Capital expenditures to upgrade existing infrastructure and commission new components for water treatment plants totalled \$969 million in 2019, down 7% from a year earlier, when expenditures totalled just over \$1 billion.

These upgrades include improvements to buildings, machinery, processing equipment, and other physical assets related to the acquisition and treatment of water, but exclude infrastructure for water distribution.

Operation and maintenance costs rise

Just over \$1.2 billion was spent on operations and maintenance in 2019, up 8% from 2017. These costs include expenditures on materials (chemicals and replacement parts), labour and energy, but exclude water distribution costs.

Labour costs represented the largest share of these expenses at \$502 million, followed by materials expenses (\$285 million) and energy (\$259 million). Other costs accounted for the remaining \$178 million.

Note to readers

The target population is composed of drinking water treatment plants that are licensed and regulated by provincial/territorial agencies (excluding First Nations communities) and that draw and process source/raw water from the environment to produce treated/potable water for consumption, serving 300 or more people.

Available tables: [38-10-0092-01](#) to [38-10-0094-01](#) , [38-10-0103-01](#) and [38-10-0269-01](#) to [38-10-0272-01](#) .

Definitions, data sources and methods: survey number [5149](#).

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