

Plenty of good, clean water in B.C.? 8 things you don't know about our water

BY DAN FUMANO, THE PROVINCE AUGUST 6, 2013



Environment Canada environmental studies scientist Melissa Gledhill at a real-time water quality monitoring buoy moored in the Fraser River estuary in Richmond.

Photograph by: Jason Payne, PRV

Our water — it's as valuable as any resource in B.C., vital to our economy, environment and health.

But experts are raising alarms, saying there is too much we don't know about the quality of our water and how much we have.

Despite the number of government agencies that keep track of water, much of the information about this vital resource is murky in B.C., especially compared with other parts of North America.

Here are eight things you may not know about the province's water — and a few things that no one seems to know.

1. Metro Vancouver is one of Canada's two top problem regions. The other? Alberta's oilsands.

A recent Fraser Institute report on Canada's water quality singles out just two locations in Canada that especially need improved water monitoring.

One was the Athabasca River downstream from the oilsands in Alberta, widely accepted as one of the most polluted areas in the country. The other region was Metro Vancouver.

2. No one seems to know if levels of toxic substances in Vancouver's Coal Harbour are continuing to rise.

The Ministry of Environment found the level of PCBs, a toxic substance associated with cancer risks, shot up about 300 per cent from 1993 to 2002 in Coal Harbour.

But what's happened in the decade since then?

"(On) measurements of toxic substances in sediment in Burrard Inlet, the latest information I could find was 2002," said Joel Wood, author of last month's Fraser Institute report on water. "I couldn't find any further information, any later data on that."

When asked by The Province, the Ministry of Environment could not provide more recent data of their own. Hans Schreier, a University of B.C. watershed expert, said he's not surprised, as government science resources have been downsized so much. "It's actually quite a sad situation," Schreier said, "because we need more monitoring ... so it's up to researchers at the university and students to do the research."

3. How much water do we use in B.C.? Who knows?

Unlike many jurisdictions in North America, B.C. has no provincewide reporting system for water usage. Scientists and water organizations are advocating for a mandated reporting system, saying that without one the vast majority of water-licence holders — including industrial and agricultural operations — simply do not report on their water usage.

A 2012 report from the B.C. Waste and Water Association said that of B.C.'s roughly 44,000 water licences, only four per cent reported their water usage.

"Our position is that we really need to implement a provincewide reporting system," said water association CEO Tanja McQueen.

A Ministry of Environment official acknowledged these concerns, and said that improved monitoring and reporting will be a key feature of the province's proposed Water Sustainability Act.

4. The groundwater drawn from B.C.'s wells is largely unregulated.

While many argue B.C.'s surface water needs more reporting and regulation, the groundwater drawn from the province's wells is almost completely unregulated.

"Since B.C. is one of the last jurisdictions in North America that does not license, regulate or monitor groundwater extraction ... the true picture of water use in British Columbia remains largely unknown," reads the BCWWA's position statement.

“You don’t have to tell anybody or ask anybody about how much water you’re going to withdraw, even though that groundwater can be directly linked to salmon-bearing streams, it can affect your neighbours, all kinds of things,” said Oliver Brandes of the University of Victoria.

Nestle, the world’s biggest bottled water seller, does not require a permit to draw water from B.C.’s wells, according to a recent editorial by Ben Parfitt from the Canadian Centre for Policy Alternatives. Nor does the province charge Nestle for the water it uses, or require the firm to report it.

5. Clean drinking water remains out of reach for more British Columbians than you may think.

Metro Vancouver claims its drinking water ranks with the best in the world. But it’s a different story in other parts of the province, where at any given time as many as 500 communities are under a boil-water advisory.

A 2008 report from the Canadian Medical Association Journal found B.C. had more boil-water advisories per capita than any other province. Just last month, the Toquaht First Nation on Vancouver Island ended a boil-water advisory that had been in effect for more than a decade.

6. Every year, when it rains hard, Vancouver waters are flooded with untreated sewage.

During heavy rains, some Metro Vancouver water treatment plants overflow, expelling loads of unfiltered raw waste from sewage pipes directly into the Strait of Georgia and Burrard Inlet. The problem is being fixed but it’s a long, difficult project, budgeted over several years.

“It’s diluted, so you don’t really notice it, but it’s ... rain water and untreated sewage,” said North Vancouver Mayor Darrell Mussatto, chair of Metro Vancouver’s utilities commission. “It’s untreated sewage going into the Burrard Inlet.”

7. B.C. does not have the same mandatory drinking water quality testing as other provinces.

Some provinces, including Ontario and Alberta, are required to test drinking water for more than a hundred physical, chemical, and biological parameters, according to the guidelines for Canadian drinking water quality. But B.C. does not strictly follow those federal guidelines, and only biological testing is mandatory.

The testing for physical and chemical parameters is left to the discretion of a drinking water officer, said Madjid Mohseni, a water treatment expert from UBC’s department of chemical and biological engineering. Depending on the water’s source, that could be a problem.

Mohseni gives the example of a B.C. community drawing water from a well near an agricultural region. If agricultural fertilizers add nitrates to the aquifer, and that region doesn’t choose to test for nitrates, the people drinking that water could be at risk.

8. The fundamental laws governing water use in B.C. are a century old.

Pretty much everyone agrees that B.C.’s Water Act needs an update.

The Ministry of Environment says B.C.'s proposed Water Sustainability Act will update and replace the century-old Water Act. The government plans to introduce it into the legislature in 2014.

Oliver Brandes of the University of Victoria said there have been repeated attempts to modernize B.C.'s Water Act during the past decades but every time the issue starts to gain traction in the provincial government, it slips off the radar.

dfumano@theprovince.com

twitter.com/fumano

© Copyright (c) The Province

[Previous](#)

[Next](#)



Environment Canada environmental studies scientist Melissa Gledhill at a real-time water quality monitoring buoy moored in the Fraser River estuary in Richmond.

Photograph by: Jason Payne, PRV

