

## QUICK IMPACT

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## Water Woes: Will the Canadian government's \$214 million in funding ensure that Iqaluit can have a sustainable source of safe drinking water?

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On April 1<sup>st</sup>, 2022 the Canadian government released a media statement to announce an investment of \$214 million in Igaluit's water infrastructure. This was hailed as exciting and welcomed news, but this left some to wonder is this official, or an April fools' hoax? Iqaluit does not have dependable clean drinking water. The town has a population of 7,429, Nunavut's largest. Nunavut, the largest of the three territories, is home to approximately 21 per cent of Canada's freshwater. However, Igaluit's isolated location, cold climate, melting permafrost, underfunded infrastructure, and limited access to services has created many challenges. Arguably the most important concern, and one that most Canadians living in the South take for granted, is a safe and reliable water supply. The city deals with freezing and outdated water pipes, an unreliable water treatment plant, and has temporary water supply measures. Igaluit's water was first brought to the forefront in 2021 when residents complained about a gas smell and its bad taste. After two rounds of testing it was revealed that the water was contaminated by fuel making it unsafe to use. Bottled water was flown in, and the Canadian military set up a temporary water treatment site at Sylvia Grinnell River. It took two months for the source of contamination to be removed. Fuel contamination was found again in the water supply, and ongoing partial water shutdowns due to mechanical failures have left the city with an untrustworthy water supply. Failing infrastructure is common across Nunavut as 85% of the Territory's water infrastructure is in poor condition, and the lack of sustainable solutions for the Arctic is one of the main drivers behind substandard water infrastructure.

The federal government's \$214 million investment is through the <u>Disaster and Mitigation Adaptation Fund</u>. The <u>fund aims to</u> build reliable infrastructure in communities affected by climate change like Iqaluit. <u>The</u> <u>government's goal is</u> to ensure a long-term sustainable solution for the city's water supply system. Projects will include the creation of a new reservoir, improved distribution system, and new and upgraded supply, storage, and distribution infrastructure designed and built <u>to provide long-term sources of water</u>.

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Despite recent investment, the funding might not be able to address all of Iqaluit's drinking water problems. First, it will take time for Igaluit to see the funds as the money is conditional on requirements to consult with indigenous groups, and/or conduct an environmental assessment. Furthermore, third-party reviews of the water crisis, and the bureaucratic bidding process for projects could further delay improvements to water infrastructure. While oversight is necessary, emergency funding must be released immediately to resolve pressing water issues in the city as the community will continue to suffer. Second, the statement mentions the creation of a new reservoir, and to improve Igaluit's water distribution system, but there are no details to how the new reservoir will improve the quality of water. Iqaluit water treatment plants rely only on chlorination to "clean" the water with no filtration system. The Canadian Council of Ministers of the Environment, which is the "primary minister-led intergovernmental forum for collective action on environmental issues of national and international concern", recommends a multi-barrier drinking water filtration system. Filtration and disinfection are treatment technologies critical to ensuring a high quality of drinking water. Today, Igaluit's temporary bypass system to distribute water does use a combination of ultraviolet light (filtration) and chlorine (disinfection). However, will permanent treatment systems be built based on a multi-barrier drinking water filtration system platform? Lastly, the statement lacks specifics on whether the government has a plan to train and retain qualified workers for the new water infrastructure. How will workers be trained? What measures will be taken to retain these workers? How can the community attract workers?

When projects are finally underway, attention must be given to how Iqaluit will maintain their new water infrastructure – i.e., will there be maintenance funding? The community must take on the responsibility to attract and retain qualified labour and maintain the water infrastructure. In the past Arctic investments by the Canadian Government have <u>fell short of expectations</u> as illustrated in Iqaluit's "deep-sea" port only time will tell if this investment becomes a drawn-out April fools' joke, or a lasting legacy.