

First Nation Drinking Water: Discussion of Challenges and Recommendations

Outline:

Cultural background, current challenges and examples of efforts that are working and will finish with some recommendations.

The aboriginal drinking water tragedy in Canada has been well documented by the media and academics and even sensationalized to some degree. And rightly so, because the issue is a national disgrace. As I speak there are over a hundred of drinking water advisories for aboriginal water systems across Canada.

Some advisories lasting decades.

During March of this year, there were 111 First Nations communities were under some form of a water advisory/order across Canada, issued by First Nation Health Authorities or Health Canada

For a community to provide a safe and continuous supply of potable drinking water it requires several integrated functioning systems – such a planning, design, engineered infrastructures for water storage, treatment and distribution, a financial resource base, a governance structure and a supported network of skilled and certified personnel. However, for many First Nation communities in Canada, these basic requirements remain a significant challenge.

Why is that?... in Canada in 2016?

In 2006, an Expert Panel of First Nations Drinking Water (2006) publically stated it was a combination of a lack of resources, qualified people and governance structure, to manage, operate and maintain WTP. In addition, the panel heard that that the heart of the water problem, was the poor economic capacity of many First Nations communities.

Other contributing factors include; remoteness, finding qualified people interested to be an operator, no contingency plans, no emergency plans, no source water protection plans. Many elders are against forms of water treatment, because they do not like chlorine in their water. The roles and responsibilities for drinking water in First Nation reserves can be quagmire of overlap and government influence.

Other factors come from how many non-aboriginal people are just unaware, don't care and/or misunderstand aboriginal culture and their values, like the fact that Indigenous peoples have a sacred interconnectedness with nature, the land and water.

Examples of what needs support

Developing appropriate training methods that allow for experiential learning – hands on learning that is also transferable. Accepting that Indigenous peoples learn differently, using the heart, spirit, body and mind.

Supporting mentoring programs to help train and certify aboriginal water operators. The Government of Canada invests over \$10 million per year in a national training program called the *Circuit Rider Training Program*, which helps to mentor First Nation operators directly, one on one. The trainers are qualified water utility professionals, usually non-aboriginal, and are retained across Canada, and rotate through a regular circuit of First Nation communities. The benefits of the CRTP are numerous; helps maintain the federal assets of which the government has invested billions. It's a free program that reduces

maintenance costs, ensures minimal interruption of services, helps to retain operators thus reducing turnover, and promotes higher operator self-confidence and self-esteem (INAC, 2016).

Another approach is building mobile training units that have pilot water treatment plant inside. There are constructed within a specially designed dual axle cargo trailer. The units and trained instructors can go into the First Nation communities for training purposes.

So to summarize

Some recommendations for government to maintain and improve access to potable water for aboriginal communities

1. Invest in appropriate water treatment system technology and consultation: Economical and relatively simple treatment plants.
2. Consultation with First Nations both technologically and socially from the beginning of any new water project.
3. Build capacity through ongoing appropriate training and support for FN water operators and administration staff: including involving youth and women in water projects.
4. Embrace technology for dealing with remoteness with webinars, video-conferencing, and interactive websites.
5. Clear and main stream government roles and responsibilities for drinking water management.
6. Increased funding and technical support to First Nations to develop source water protection plans.
7. Ingenuity with new ideas – Einstein

Thank you to my reviewers, Sharon-May, Mahsa and Guiamo

References