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Indigenous communities need more than just water infrastructure

By Kevin Rumsey, Sustaineo Blue Water Consulting 2017.11.09

"We can't solve our problems with the same thinking we used when we created them."

Albert Einstein

I am watching carefully to see if the Liberal government's promise to solve all the water advisories in First Nations communities by 2020 (excluding those in British Columbia) will be achieved. To date, they have allocated almost \$8.4 billion in the last federal budget, primarily for infrastructure projects, to address the issue. While this focus on infrastructure will be good for those in our industry that are providing the upgrades, I question how successful this plan will be in actually improving overall First Nations water security. While new infrastructure for Indigenous communities is long overdue and there are significant advancements in technology to improve quality and supply, so often overlooked or minimized is the impact of investment in Indigenous people and institutions.

Having worked overseas in various regions of conflict and post disaster, coordinating safe water and sanitation for people at risk, I've seen what a simple hand-pump can do to transform a community. However, with that hand pump should also come an effort for empowerment and tools for the local beneficiaries to operate and maintain it, via their cultural norms. The Indigenous water operators, water managers and water training institutions are integral to operation, maintenance and sustainability of the infrastructure the Federal government is funding. Yet they are over-looked as a solution to this serious water access issues facing many First Nations across the country.

As of the end of October 2017, according to online data from Indigenous and Northern Affairs Canada (INAC) and BC First Nation Health, there were 190 water advisories ('warning', 'boil water order', or 'do not consume') that were associated with the over 600 First Nation-operated water treatment systems. According to INAC's own assessment (2016), approximately one-third of First Nations water systems were at medium or high risk of producing unsafe water. However, this statistic is much better than the 2011 baseline result that found 65% of all assessed systems were high risk. So, there has been progress, but sustainability of these systems remains a challenge.

The water issues facing First Nations communities do not occur in a vacuum, and there is no one smoking gun. Rather these problems are closely intertwined with several root causes: historical and cultural wrongs, current systemic financial shortfalls, dependency, lack of political will, general apathy, mismanagement, poverty, dependence, lack of source water protection planning, the ills of addiction on socio-health, remoteness, retainment and recruitment of

qualified personnel, as well as old and failing water-treatment systems that are undersized or poorly designed, and improperly maintained due to a lack of capacity or resources. Clearly, solving these complex causes will not be achieved by simply paying an engineering company to provide a technological fix.

A new approach

Our history made with Indigenous people remains at the core of the current problem. The document that created Canada, the *Constitution Act of 1867*, never mentioned the word "water" or the words "Indigenous Rights", rather it was the opposite. The Act effectively declared Indigenous people as property and created the Reserve system. Also, despite several hundred years of contact and relations, there still remains enormous gaps in a 'cross-cultural understanding' between Indigenous peoples and non-indigenous Canadians today. Non-indigenous Canadians need to come to terms that Indigenous peoples have a fundamentally different world view.

To improve Indigenous water security, two important concepts from this world view should be incorporated into mainstream water policy and programs: Soft Path and Indigenous Law.

The Soft Path

The more traditional model, known as the "hard path", typically has goals that are exclusively entrenched in the historical use of "centralized decision-making." This path also traditionally relies on building of large concrete infrastructure such as mega dams and long pipelines as well as energy intensive mechanical and chemical treatment facilities. These hard path processes are linear, logical, inflexible and managed in the most efficient economical and engineered manner. To the contrary, the soft path has a framework where there is an immediate acceptance of the need for ecological integrity; there are ecological limits and the maintenance of balance is crucial. The soft path typically has planning goals that are much broader and wholistic and working towards conservation, improved sustainability and building resilience are underlying themes. It is a path where the goals are not focused on supply management, but rather try to match the users' needs with the resources availability, encouraging innovation and ingenuity to work with nature rather than against it.

A soft path also includes creative partnerships between and among stakeholders, using an integrated management approach where decentralization of various services and decision-making is sought. The input and participation of the affected community is valued and encouraged in all decision-making.

Indigenous Laws

Indigenous Laws are a perfect complement to the soft path of water management. Indigenous people have an intrinsic sacred connection with land, water, all living and non-living things and Indigenous laws remind us that many Indigenous peoples have an inherent obligation to be

stewards of the land and water into the future. Many communities use a holistic approach, one that incorporates the body, the mind, the heart and the spirit, which are all constantly in flux while also being connected to each other. This is contrary to the pervasive western Euro approach, that is primarily centered on the mind and logic. Many Indigenous communities view water as vital and honored; it is considered the "life-blood," with rivers and streams viewed as the veins running through the "Great Mother."

Indigenous communities need more than just water infrastructure; the government must also invest in Indigenous people and institutions. If the federal government really wants to improve this national water crisis in First Nations communities, then it requires a serious shift in its approach. By incorporating the soft path and Indigenous Law, governments and private companies can begin to acknowledge—and ultimately embrace—an alternative approach to water management. This includes significant support for institutions and increased Indigenous-led approaches to capacity building as well as providing space for dialogue, collaboration, innovation, sharing, empowerment and experiential learning. The result will be improved relationships, trust, reconciliation, new thinking that leads to policy changes, new programming, and better funding formulas. Ultimately, the foundation of success is really the people, not the big infrastructure. It's a new approach for our Federal leaders but one that is effective, relatively inexpensive, and can lead to resilient and sustainable water systems.

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