

GRASSROOTS APPROACH

Addressing the First Nations water crisis, one community at a time

It's easy to get overwhelmed by the enormity of the First Nations water crisis. It's also easy to shift responsibility and point fingers of blame.

by CAROLYN CAMILLERI

Placing blame may temporarily relieve some of the shame that such conditions exist in First-World Canada but it also delays desperately needed action.

In graphic detail, the June 2016 Human Rights Watch report, “Make it Safe: Canada’s Obligation to End the First Nations Water Crisis,” gave the world a good, hard look at what many First Nations communities face daily. As of January 2016, of the 134 DWAs (drinking water advisories) across Canada, 85 of them were in First Nations communities.

Blame is placed squarely on the government and “the lack of binding regulations on water quality on First Nations reserves; persistent under-funding and arbitrary budgeting for water system costs, including capital, operation, and maintenance costs; lack of support for household water and wastewater systems; worsening conditions of source water; and lack of capacity and support for water operators.”

According to the report, “the Canadian government has violated a range of international human rights obligations toward First Nations persons and communities by failing to remedy the severe water crisis.”

As true as that charge may be, top-down remedies are proving less than



The June 2016 Human Rights Watch report, “Make it Safe: Canada’s Obligation to End the First Nations Water Crisis,” said that as of January 2016, of the 134 drinking water advisories across Canada, 85 of them were in First Nations.

ideal. In March 2016, the federal government increased the amount allocated over the next five years for infrastructure in indigenous communities from \$1.8 billion to \$4.6 billion. A year later, the David Suzuki Foundation and the Council of Canadians teamed up to check on progress. Their report, “Glass Half Empty? One Year Progress Toward Resolving Drinking Water Advisories in Nine First Nations in Ontario,” states, “Almost one year after the budget announcement, the process for attaining clean and safe drinking water for First Nations remains flawed.

Changes must be made to this complex process for the federal government to maintain progress toward its goal of ending long-term DWAs. Funding alone will not resolve the issue.”

The 2016 funding announcement is not the first time the federal government has spent broadly on First Nations water issues. If lessons are to be learned from the past, it is also critical to consider where funds are being spent.

Craig Stainton, executive director of the Ontario Ground Water Association, says it comes down to a “lack of common sense and a heavy

dash of greed.” The lack of common sense relates to installing water systems in communities without adequately training water operators, without adhering to regulations and without the approval of the community. And that is where the greed comes in: companies that have built infrastructure paid for by federal dollars and then abandoned the facilities, which then deteriorate.

“You can’t tell me they don’t know about all these problems with the residents not wanting to use the water, the treatment plants breaking down and the like,” Stainton says. “It is disgusting, and it just keeps going on and on. Suck polluted surface water out of lakes and streams, pound it with chemicals in a treatment facility the band has no hope of running, deliver it through a costly distribution system, wait for the inevitable imploding of the system no one can fix and start the problem all over again by involving Indigenous and Northern Affairs [INAC] or the federal government in the solution.”

The Human Rights Watch report supports this view: “Of the dozens of drinking water advisories in effect on systems in Ontario First Nations, at least 57 of them are for systems less than 25 years old and 12 are for systems less than 15 years old. In at least two cases, the advisory was put in place within a few years of construction.”

POTENTIAL SOLUTIONS

So how can we do this better? Inez Miller, executive director for the Manitoba Water Well Association, knows throwing money at the problem doesn’t work. She has visited 98 per cent of the First Nations communities in her province, and she has witnessed at first hand the barriers communities face with respect to water wells: drilling through rock, remoteness and road access challenges. In some cases, there are only ice roads.

“For water testing, to determine whether there’s any contamination, those tests must be analyzed within 48 hours,” Miller says. “What do you do when there isn’t any way of getting

those tests done? You can’t get tests out in 48 hours.”

She also points out that water sources – well, cistern or surface water – and how they are maintained vary, as do the problems they are likely to encounter.

“A lot of cases in the more southern or middle part of the province, there are cisterns in the homes, but nobody’s told the people how to take care of the cistern.”

In other cases, a contaminated pump

“There is a whole raft of problems, and it’s hard to pinpoint any one. Every community will be just a little bit different.” –Inez Miller, Manitoba Water Well Association

may have been installed. “There is a whole raft of problems, and it’s hard to pinpoint any one,” Miller says. “Every community will be just a little bit different.”

For Miller, the medical connection is important. It’s not just a case of meeting the right to clean water: it’s a health risk and a medical services issue. “In those remote areas, just think, they don’t have a hospital to access, maybe just a nursing station, if they do have some kind of outbreak because of contaminated water,” she says.

That there will never be a one-size-fits-all solution for every First Nations community is evident, which is why Miller believes the hope for resolution starts with education at the community level. It has to start with the people.

“We can design and develop any kind of program we want, but if it doesn’t work for the people and it’s not a program identified with by the

people, in fact, it’s probably not worth the paper it’s written on,” she says.

WATER FOR THE PEOPLE, DELIVERED BY THE PEOPLE

It is impossible to ignore the water crisis when your people live with it every day.

“In B.C., we do have bands that live in Third-World conditions,” says Jamie Tomma, public works supervisor and head water operator for the Little Shuswap Lake Indian Band. “Myself and my band membership and other band memberships, take [water] for granted. We turn the tap on, and clean, safe water comes out of the tap. And yet there are bands of people that don’t experience that. They don’t have the luxury to do that.”

In Ontario, conditions are especially appalling in the north. “Our northern communities, they have it so much harder than anybody else,” says Bill Hutchison, public works manager for Keewatinook Okimakanak in Dryden. Hutchison explains that while all the communities are in the same boat on many issues, in the north, problems are intensified. “And without basic needs, like water, no one can succeed.”

A big part of the task ahead is cleaning up the mess left behind. “The government put in these state-of-the-art water treatment plants and sewer treatment plants in a lot of communities. But the people who are running them were not properly trained, and the plants deteriorated,” Hutchison says. “It took us a long time to get the facilities back in the shape they belong in. And it’s no fault of the operators. It’s just that they never had the right opportunity to be trained properly.”

In B.C., referring to wells in his own community as an example, Tomma talks about regulations and how in the past wells were drilled by whichever company INAC sent and standards were not adhered to or maintained.

“Pre-1986, the wells were drilled until they hit water, what’s called GWUDI – ground water under direct influence – and anything that was happening on the surface affected the well,” he says. “They were in it just to

Continued on page 24

make the money. They didn't really care about the service they delivered us."

"Now, the wells are all required to be drilled so that they're using actual ground water in a protected aquifer," he adds.

So what changed to result in progress? First Nations took control of their own water. Tomma says he is seeing the emergence of social, community, band and individual conscience. "We realize that if we don't do anything about it, nobody's going to," he says. "And that's when we start seeing the turnaround and things start happening for the better."

"Now that a lot of our bands in B.C. are assuming responsibility and control, we are able to deliver to our people a better service than what was provided before," he says. "And at our annual assembly, we can have 100 to 150 water operators there, and for the most part, they are extremely dedicated to their jobs. They take it seriously. There's a lot of pride in it."

Being involved with the design and delivery of the water system is a critical part of the success. "A lot of times in the past, somebody would come in and say, 'This is what we're going to give you, accept it,'" Tomma says. "And now that we have a voice in it, we have an educated opinion on what we accept or not."

TRAINING CRITICAL

Training is a critical. Hutchison says that until certification was made mandatory, it was difficult to retain water operators. "There'd be a very big turnaround, not very much retention," he says. "So that is why the chiefs wanted us to start training our own people, and that's how we started up with the Centre of Excellence."

Keewaytinook Centre of Excellence is a provincially accredited training facility in Dryden, Ont. Training can take place at the centre or arrangements can be made to deliver it at other locations. Training meets the certification requirements of Ontario's Ministry of Environment and Climate Change, and graduates of the core program are ready to manage water treatment facilities without operational support or oversight. Continuing education classes also are available for operators at all levels.

"We not only train for the operator licence itself, but there were so many out there that were working without even a GED [general education degree]," Hutchison says. "We've put on a GED course as well to help students get to the standards so they can start doing their OIT [operator in training]."

Tomma also talks about the positive effects of education. "When the First Nations started assuming the responsibility of looking after their own water, one of the big things I've noticed is that the level of training that the operators are receiving is first rate," he says. "With the level of training that we have and the people who are doing the job now, we are able to alleviate quite a bit of the problem. We're not solving it, but we're alleviating quite a bit of the problem."

And best practices for drilling, installing, and maintaining wells are followed. "In the past, on our reserve, at least, the well was just considered a pipe in the ground. There was no protection. Nobody maintained it," Tomma says. "Now, most bands that have the capability have what's called multi-barrier protection training. Maintenance is one of the big things. Cleaning, monitoring. So now that everybody looks after the well, it's not just a pipe in the ground that the water comes out of. We maintain our wells now."

Qualified support is important. "We have trained operators in our public works office in Dryden," Hutchison says. "All these other communities are under this licence, so if there is a problem indicated by the continuous monitoring, it lets us know before it becomes a big problem. Then our operators here can either phone up to the community and help them through verbally, or if it's too big a problem, we'll send them up there." "We never got that support before."

Though there is some success, it is far from being a perfect system. There are still issues with funding to ensure the treatment plants can continue to run, including the operators' pay. "The operators are not paid to the standard that municipal operators are paid, even though they have the same responsibilities," Hutchison says.

Road access is still a challenge in many communities, especially if equipment needs to be replaced. Hutchison

LS
LevelSender

Telemetry For Levelloggers

Receive email or SMS
Data sent to smart device & PC

www.solinst.com

High Quality Groundwater and Surface Water Monitoring Instrumentation

Solinst Canada Ltd., 35 Todd Road, Georgetown, ON L7G 4R8
Fax: +1 (905) 873-1992; (800) 516-9081 Tel: +1 (905) 873-2255; (800) 661-2023
instruments@solinst.com

Solinst

How the ground water industry can help

Stainton would very much like to see properly drilled, installed, and maintained wells in more First Nations communities. He believes ground water should be used wherever possible, that each home should have a well, that its occupant should know how to maintain it, and that this should be accomplished in accordance with regulatory standards, which in the case of Ontario are the Wells Regulations.

"If each individual home had its own well and pumping system, the occupant would conceivably incur a sense of ownership and responsibility," Stainton says.

Additionally, this approach takes the infrastructure emphasis off linking communities to a municipal-style system that relies on substantially treated and distributed surface water.

"When one [well] is down, it's not the whole village, and ground water is generally much less likely to require the heavy treatment that surface water demands," he says.

Miller sees potential in partnerships and an organizational structure to make the best use of limited resources.

"Whether it be with a tribal council, whether it be on band council, I see the water well associations acting as resources," she says, adding that the associations are the industry experts. "It's not creating employment for the water well drillers or anything like that. It's acting as resources. You start with some kind of partnership arrangement with the federal government or medical services or Indigenous and Northern Affairs Canada which have infrastructure control."

For example, there could be partnerships to design and develop delivery programs.

"Certainly, I think one of the greatest needs we have in the First Nation communities is education for the well owners on the care and maintenance of wells," Miller says, adding that education programs need to be one on one and at the community level. "For lack of a better word, call it outreach work."

points out that it is not just the cost of the piece of equipment but also the cost of flying it up there and paying someone to do the repair.

"It's not like we have anybody who can be there in a half an hour," he says. "So everything's just compounded, and it adds stress for the operators and everybody else."

And, of course, there are still so many DWAs.

MOVING FORWARD

In addition to his role as public works manager for the Keewatinook Okimakanak tribal council, Hutchison has recently taken over the Safe Water Project (<http://safe-water-project.ca>) from his predecessor Barry Strachan, who designed the program.

The project, which emerged in 2014, is unique because participating communities receive focused training that helps their members become certified local water operators. While they pursue certification, the project provides support by way of licensed operational personnel who are available to assist local operators on a 24-7 basis. Communities also receive industry-leading technology that allows them to continuously and remotely monitor the quality of their water and immediately address any issues that arise.

Currently, the communities and the water treatment plants involved in the Safe Water Project rely on surface water, Hutchison says, adding that the infrastructure was there already but maintenance and repair were required.

Hutchison would like to see training at the Centre of Excellence expand to include more on ground water wells and well maintenance. "There's interest in it," he says.

He also would like to see the Safe Water Project replicated in other communities. He says they train operators from other tribal councils and from municipalities.

"The initiative is capable of eliminating boil water advisories and empowering communities to manage their own drinking water," Hutchison says. "By providing the training for our own communities, we're providing employment in communities that have none. People are starting to take

GROUNDWATER

INSURANCE PROGRAM

PROUDLY SERVING THE GROUNDWATER INDUSTRY SINCE 1992:

Lackner McLennan Insurance has made it their business to protect other businesses, and their specialty program for the groundwater industry has been making waves.

PROGRAM DESIGNED FOR:

- Water Well Drilling Contractors
- Pump Installation Contractors
- Geo Thermal Heating Contractors
- Hydro Geologists / Geo Scientists
- Manufacturers / Suppliers

COVERAGES INCLUDE:

- Automobile & Fleet
- Property & Commercial Liability
- Environmental Impairment Liability
- Errors & Omissions (Professional) Liability
- Bonding

DIRECTORS & OFFICERS / EMPLOYMENT PRACTICES COVERAGE:

A liability program designed to provide you with defense costs arising from an employee dispute or issue with one of the Ministries. (Labour, Environment, Revenue)



STEPHEN BLEIZEFFER
519.579.3330 ext. 311
sbleizeffer@lmcanada.com
www.lmcanada.com

YOUR BUSINESS. OUR POLICY.

ownership.”

In addition to his role position with the Little Shuswap Lake Indian Band, Tomma is a founding member and representative of the southeast region for the First Nation Operators Water Net for British Columbia and Yukon Territories, which is linked to Res’eau Water Net (<http://www.reseauwaternet.ca>). A “Community Circle” model is used to solve water problems in small systems and to meet the site-specific needs of systems serving fewer than five homes. This approach places as much emphasis upon understanding and respecting the culture and unique requirements of end users as it does on technological development, economic considerations, operations and maintenance issues, and environmental stewardship. Tomma says the Community Circles are panel-style and address the needs of First Nations and other communities that need and share the delivery of palatable water.

“It’s sort of like a think-tank,” Tomma says. “People get together and talk. That’s the first step: to talk and identify the needs.”

Both Hutchison and Tomma acknowledge that while some positive steps are being taken, there is still a long way to go. “In my band, when I first started this job [14 years ago], we were on a boil water advisory,” Tomma says. “But through training and hard work, we were able to get that lifted.”

And that’s what it will take in all the other communities that need help. “People tend to report the good things. They tend to report the successes, not what should be done,” Tomma says. “Eventually when our organization gains a better voice, we can become an advocate and we’re going to focus on the ones that need help, not just showing people the good we’ve done. We’re going to say, ‘Look, this band needs help,’ and we’re going to try and help them and make sure they gain what should be a basic human right: clean water. What I say to all my counterparts in the other tribal councils around us is that it’s not about us. We’ve got to work together because it’s about the people. In order

to get things changing, we have got work together,” says Hutchison, who describes himself as a very vocal advocate, especially for northern communities. Maybe that starts with a voice that finally, hopefully, someone is hearing. “That’s one of the great things about it now: when the First Nations take the lead in things and

they have a voice and they’re actually listened to a little bit more,” Tomma says. “I can’t say why, but that seems to be happening.”

Carolyn Camilleri is a Toronto-based writer, editor, and content strategist. She has been writing for consumer and trade magazines, as well as national businesses and organizations, for more than 15 years.

For more on drinking water quality, visit
www.groundwatercanada.com > Issues > Water Quality



YOUR EYES IN THE FIELD

In-Situ

With In-Situ, you trust your water monitoring equipment and data to be accurate and reliable, every time. We’re in the field 24/7, so you don’t have to be.

in-situ.com/gwc

f t in