



Reconciling Promises and Reality:

Clean Drinking Water for First Nations

COVER The history and sacredness of Yellow Quill First Nation's water is illustrated by artist Cheryl Buckmaster based on interviews with 22 Elders and community members. UNIVERSITY OF SASKATCHEWAN

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Executive summary



In 2017, the David Suzuki Foundation, in partnership with the Council of Canadians, released 12 recommendations for steps the federal government should take to meet its commitment to end all long-term drinking water advisories in First Nations across Canada within five years. A year has passed since our [first report](#); this second annual report assesses government's progress along a set of 14 indicators, developed from the recommendations in the previous report.

The Department of Indigenous Services Canada (formerly Indigenous and Northern Affairs Canada) reports that since its commitment was made in November 2015, 40 long-term drinking water advisories have been lifted and 26 new advisories have been added. DISC's commitment only applies to the 91 long-term drinking water advisories¹ in effect on public systems south of the 60th parallel and financially supported by DISC as of January 23, 2018.² Health Canada reported as of December 31, 2017, an additional 36 short-term drinking water advisories were in place in First Nations across Canada.³

For six of the indicators, the Foundation determined that steps have been taken to address the recommendations, and some progress has been made.

The federal government has taken initial steps to expedite the capital investment process for First Nations water infrastructure, including looking at adopting a design-build approach and providing greater considerations for context-specific issues like seasonality. There are plans to look at the funding formulas for operations and maintenance to address decades of chronic funding shortfalls. Overall, these investments still fall short of the \$889 million that a national assessment on First Nations drinking water

¹ Long-Term Drinking Water Advisory (LTDWA): A drinking water advisory that has been in place for more than one year.

² DISC (Department of Indigenous Services Canada). Retrieved from: aadnc-aandc.gc.ca/eng/1506514143353/1506514230742.

³ This number excludes short-term DWAs under the Saskatoon Tribal and short-term DWAs in British Columbia, which Health Canada does not report on.

called for in 2011.⁴ In addition, the Parliamentary Budget Officer recently reported that these new investments into waste and water infrastructure only represent 70 per cent of what is needed to end all First Nations DWAs across Canada.⁵

Seven of the indicators reflect that while steps may have been taken to address the recommendations, insufficient progress has been made.

Information about Source Water Protection Plans has proven difficult to obtain and it is unclear whether funds are available to support First Nations SWPPs. The extent to which existing SWPP are actually being implemented is also unclear. Not enough has been done to investigate or address the discrepancy in pay between operators in First Nations and those working in municipalities.

A working group of ministers, comprising six ministers, including the minister of Crown-Indigenous relations and Northern affairs and the minister of Indigenous services, has been established to carry out a review of laws, policies and operational practices to ensure they adhere to the United Nations Declaration on the Rights of Indigenous Peoples. Although this is a positive development, the Foundation has seen no indication that the working group of ministers will review the Safe Drinking Water for First Nations Act or source water protection. Such a review is necessary given that First Nations are currently not sufficiently included, if they are at all, in decision-making processes about the approval of activities that could affect their source water.

For one of the indicators, little to no progress has been made in addressing the recommendations.

No enforceable regulations have yet been developed that hold the federal government accountable to First Nations for safe drinking water, and development of any regulations has been halted pending the review of the Safe Drinking Water for First Nations Act.

Although the onus is on the federal government to provide safe drinking water for First Nations, not all solutions to the drinking water crisis are coming from government alone. The report profiles a number of “water stories” from around the country — instances where innovative, on-the-ground work driven by First Nations is leading to creative solutions to local drinking water issues, often in partnership with, or with funding from, DISC.

4 Neegan Burnside Ltd. (2011). National Assessment of First Nations Water and Wastewater Systems — National Roll-Up Report. Retrieved from Department of Indian and Northern Affairs Canada: aadnc-aandc.gc.ca/DAM/DAM-INTER-HQ/STAGING/texte-text/enr_wtr_nawws_rur-nat_rurnat_1313761126676_eng.pdf

5 Office of the Parliamentary Budget Officer. (2017). Budget Sufficiency for First Nations Water and Wastewater Infrastructure. Retrieved from: pbo-dpb.gc.ca/web/default/files/Documents/Reports/2017/FN%20Water/FN_Water_EN.pdf.

Three urgent and important themes emerge from this report.

First, building off successful pilots, a clear path toward expediting the capital approval process for water infrastructure in cooperation with First Nations is still needed. Addressed in the 2017 report, the Foundation recommends streamlining and simplifying the process for capital investments in water infrastructure by identifying roadblocks and reducing bureaucracy.

Second, the issue of clean drinking water cannot be addressed in isolation; rather, sustainable solutions will be found through recognizing the historical and present context in which drinking water has become a crisis and working interdepartmentally to advance multiple solutions.

Third, additional investments should be made that support innovative community-based approaches where First Nations are playing a leadership role and/or have ownership over the projects.

Overall, our assessments indicate that while some steps are being taken by the federal government to address the First Nations drinking water crisis in Canada, they fall short of the strides that are needed for this government's promises to become a reality.

Nickeyeah IR25—Water Treatment Plant Upgrade Post-commissioning Project Retrospective. "It is not from the benevolence of the individuals, or sectors that we don't fall, but from their regards for their own fall. When the linkage breaks, we all fall." RES'EAU-WATERNET



A retrofitted shipping container houses Lytton First Nation's water treatment system.

JIM BROWN

Introduction

This is the Foundation's second report on First Nations drinking water in Canada. One year ago, in February 2017, the David Suzuki Foundation, in partnership with the Council of Canadians, released the report: *Glass Half Empty? Year 1 progress toward resolving drinking water advisories in nine First Nations in Ontario*. The report concluded that although work to end drinking water advisories (DWAs) had begun, the federal government was not on track to fulfil its commitment made in the 2015 election campaign to end long-term drinking water advisories in First Nations across Canada within five years. This report checks in on progress two years into the federal promise.⁶

First Nations across the country have been clear that they are holding the current government accountable to this commitment. The David Suzuki Foundation is committed to working with First Nations and other water partners to advocate for equal access to clean, safe drinking water for all First Nations in Canada.

Access to safe drinking water and proper sanitation is a human right, one that the government is obligated to uphold through international law. The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), of which Canada is a signatory, states in Article 25, "Indigenous peoples have the right to maintain and strengthen their distinctive spiritual relationship with their traditionally owned or otherwise occupied and used lands, territories, waters and coastal seas and other resources and to uphold their responsibilities to future generations in this regard."⁷ The declaration also commits the Canadian government to obtaining the free, prior and informed consent of Indigenous Peoples before adopting and implementing legislative or administrative measures that may affect them. For reconciliation to become a reality in Canada, all

⁶ "A Canadian government led by me will address this as a top priority because it's not right in a country like Canada. This has gone on for far too long." Justin Trudeau vows to end First Nations reserve boil-water advisories within 5 years, CP, October 7, 2015, as found at: cbc.ca/news/politics/canada-election-2015-justin-trudeau-first-nations-boil-water-advisories-1.3258058

⁷ United Nations Declaration on the Rights of Indigenous Peoples, adopted September 13, 2007, G.A. Res. 61/295, U.N. Doc. A/61/L.67 and Add.1 (2007), Article 25, un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf (accessed January 31, 2018)

First Nations must be secure in their right to a healthy environment and access to clean, safe drinking water and sanitation.

Since the release of the 2017 report, the political landscape has shifted. The federal government announced in August 2017 that the Ministry of Indigenous and Northern Affairs Canada (INAC) will be divided into two separate ministries: Crown and Indigenous Relations, and Department of Indigenous Services Canada (DISC). This move has been met with a mix of praise and criticism; it is yet to be seen how it will play out in practice.

DISC reports that since its commitment was made in November 2015, 40 long-term drinking water advisories have been lifted and 26 new advisories have been added. DISC's commitment only applies to the 91 long-term drinking water advisories⁸ in effect on public systems south of the 60th parallel and financially supported by DISC as of January 23, 2018.⁹ Health Canada reported as of December 31, 2017, an additional 36 short-term drinking water advisories were in place in First Nations across Canada.¹⁰

This report provides a snapshot of government and grassroots efforts currently playing out to address drinking water advisories in First Nations. The first part of the report assesses progress made by DISC toward resolving the First Nation drinking water crisis in Canada. This progress was assessed based on a set of indicators that were developed from the recommendations of the first report.

Although the onus is on the federal government to provide safe drinking water for First Nations, not all solutions to the drinking water crisis are coming from government alone. The report profiles a number of “water stories” from around the country—instances where innovative, on-the-ground work driven by First Nations is leading to creative solutions to local drinking water issues, often in partnership with, or with funding from, DISC. While the federal government has distinct constitutional powers and responsibilities in respect to First Nations, the provincial governments also are increasingly playing a role in supporting First Nations as they work toward provision of cleaner, safer and sustainable drinking water.

It is hoped that this report will contribute to the ongoing work and development of long-term solutions to the First Nations drinking water crisis in Canada. The David Suzuki

8 Long-Term Drinking Water Advisory (LTDWA): A drinking water advisory that has been in place for more than one year.

9 DISC (Department of Indigenous Services Canada). Retrieved from: aadnc-aandc.gc.ca/eng/1506514143353/1506514230742.

10 Government of Canada. (2018). Short-term drinking water advisories: First Nations south of 60. Retrieved from: canada.ca/en/health-canada/topics/health-environment/water-quality-health/drinking-water/advisories-first-nations-south-60.html.

Foundation is motivated by the need to find avenues for collaboration and partnership between organizations, communities and actors (government, First Nations, non-governmental organizations) that are exploring new approaches to achieve safe, sustainable drinking water. This is a pivotal moment in Canadian policy, with a government in power that has committed not only to end all long-term drinking water advisories, but also to reconciliation between First Nations and Canadians. This report identifies some hopeful steps that have been taken on the long road to fulfilling the federal government's promises.

The Foundation recognizes that access to safe drinking water is tied to a number of other important issues for First Nations. This report frames drinking water as one piece of a much larger puzzle that must be solved as we collectively move toward reconciliation in Canada.

Terminology

The historic and legal arrangements in Canada between Inuit, Métis and status, non-status and self-governing First Nations peoples and the Crown (federal, provincial and territorial governments) are diverse and complex. For the purposes of this paper, the term "Indigenous Peoples" is used when speaking more broadly (and includes First Nations, Inuit and Métis) and the term "First Nations" is used in reference to status First Nations across Canada.¹¹

Acronyms

AFN	Assembly of First Nations
BWA	Boil Water Advisory
DISC	Department of Indigenous Services Canada
DWA	Drinking Water Advisory
FNIHB	First Nations Inuit Health Branch
INAC	Ministry of Indigenous and Northern Affairs Canada
LTDWA	Long-term Drinking Water Advisory
SDWFNA	Safe Drinking Water for First Nations Act
SWPP	Source Water Protection Plan
UNDRIP	United Nations Declaration on the Rights of Indigenous Peoples

¹¹ University of British Columbia. (2017). Indigenous Foundations. Retrieved from: indigenous-foundations.arts.ubc.ca/terminology/.

Government roles and responsibilities



Scope of federal commitment

While the incoming prime minister committed in 2015 that the Liberal party would end all First Nations drinking water advisories within five years,¹² the target has since been slightly adjusted. Formally made in Budget 2016, the federal government's commitment now only applies to long-term drinking water advisories on public systems south of the 60th parallel and funded by DISC (formerly INAC) — of which there were 91 in place as of January 23, 2018.¹³ Health Canada reported as of December 31, 2017, an additional 36 short-term drinking water advisories were in place in First Nations across Canada.¹⁴

Targets are necessary to ensure the government is on track to improve access to safe drinking water for First Nations, and the commitment of ending all long-term DWAs was long overdue. However, it is worth noting that the scope of the current commitment may limit the number of First Nations that will ultimately obtain access to safe, secure and sustainable drinking water. For instance, under the government's current targets, DWAs on facilities such as gas stations may not be addressed. Nor does the plan address protection of the watershed from which tap water is drawn, or contaminated drinking water coming from private wells on reserves.

12 CBC News. (2015). Justin Trudeau vows to end First Nations reserve boil-water advisories within 5 years. Retrieved from: cbc.ca/news/politics/canada-election-2015-justin-trudeau-first-nations-boil-water-advisories-1.3258058.

13 DISC (Department of Indigenous Services Canada). Retrieved from: aadnc-aandc.gc.ca/eng/1506514143353/1506514230742.

14 This number excludes short-term DWAs under the Saskatoon Tribal and short-term DWAs in British Columbia, which Health Canada does not report on.

INAC restructuring

Effective August 28, 2017, the federal department of Indigenous and Northern Affairs Canada was dissolved into two new departments: the Department of Crown-Indigenous Relations and Northern Affairs, and the Department of Indigenous Services. The dissolution came with recognition that the Indian Act, which INAC was charged with implementing, is a “colonial, paternalistic law” and that “the level of ambition of this government cannot be achieved through existing colonial structures.”¹⁵ The new Department of Crown-Indigenous Relations and Northern Affairs has been charged with dismantling the Indian Act while working toward government-to-government relations with First Nations, Métis and Inuit.¹⁶

With these changes, the responsibility for First Nations drinking water now falls under

the DISC, which will oversee investments into Indigenous Services through Budget 2016 and 2017. The Prime Minister’s Office has confirmed its continued commitment to ending all long-term boil water advisories by 2021 as “a key measure in ensuring First Nations people on reserve have access to clean drinking water.”¹⁷

The Prime Minister’s Office has also affirmed a commitment to Indigenous self-government. While the minister of Indigenous services has been mandated to work on the quality of service delivery to First Nations, Inuit and Métis peoples, “over time, one fundamental measure of success will be that appropriate programs and services will be increasingly delivered, not by the Government of Canada, but instead by Indigenous Peoples as they move to self-government.”¹⁸

¹⁵ Prime Minister’s Office. (2017). New Ministers to Support the Renewed Relationship with Indigenous Peoples. Retrieved from: pm.gc.ca/eng/news/2017/08/28/new-ministers-support-renewed-relationship-indigenous-peoples.

¹⁶ Ibid.

¹⁷ Prime Minister’s Office. (2017). Minister of Indigenous Services Mandate Letter (October 4, 2017). Retrieved from: pm.gc.ca/eng/minister-indigenous-services-mandate-letter.

¹⁸ Prime Minister’s Office. (2017). New Ministers to Support the Renewed Relationship with Indigenous Peoples. Retrieved from: pm.gc.ca/eng/news/2017/08/28/new-ministers-support-renewed-relationship-indigenous-peoples

Bringing provinces to the table

Although the federal government has distinct constitutional powers and responsibilities in respect to First Nations, it is becoming increasingly common for provincial departments to be involved in some capacity with the provision of First Nations drinking water.

In Ontario, the Ministry of Environment and Climate Change established the Indigenous Drinking Water Projects Office in June 2016, which strives to provide First Nations communities, tribal councils and political territorial organizations with a single window for access to provincial technical resources and expertise. Ontario is also a partner in a trilateral table that has been established to develop an action plan for the elimination of LTWDWAs in the province, with representatives from DISC, the Ministry of Environment and Climate Change and the Ontario First Nation Technical Services Corporation, the Chiefs of Ontario, Health Canada and Ontario Political Territorial Organizations.¹⁹ The action and implementation plan focuses on LTDWAs, while monitoring advisories that have been in place less than one year to help ensure they do not become long-term. The plan also focuses on ways to expedite projects, such as completing advanced water quality sampling and pre-ordering, pre-purchasing or delivering equipment early to take advantage of winter roads.

Ontario is the only province so far to have formally developed this form of trilateral working arrangement. The province is also working bilaterally, through the Indigenous Drinking Water Projects Office, with communities and First Nations organizations, at their request, to provide technical support for the development of sustainable long-term solutions to drinking water issues.²⁰

Other provinces have developed or proposed regional organizations, such as the First Nations Health Authority in British Columbia and the First Nations Water Authority in Atlantic Canada, that work at the provincial level to support safe drinking water for First Nations. These organizations are described in greater detail in the “[Water Stories](#)” section of this report. Provincial teams developed to support First Nations and DISC would certainly benefit from having Indigenous representatives on staff to share approaches based on their lived experiences.

19 Trilateral Technical Working Group. (2017, June). Quarterly Progress Report on Eliminating Long-term Drinking Water Advisories affecting Ontario First Nation Communities. Page 3.

20 Personal Communication, Indigenous Drinking Water Projects Office, January 15, 2018.

Methods



To assess the federal government's progress in fulfilling its commitment to safe drinking water, the Foundation developed a set of 14 indicators based on the 12 recommendations made in the 2017 report. Indicators were only developed for recommendations for which sufficient data were available. Where a recommendation addressed a multifaceted issue, sub-indicators were created. These indicators were shared with DISC (formerly INAC), and sufficient time was provided to the department and other relevant actors to comment on progress made in fulfilling each indicator over the past year. This report contains limited input from regional branches of DISC, and the David Suzuki Foundation recognizes that each region across Canada may take a different approach to addressing the indicators.

The Foundation analyzed DISC's response based on data collected, including publications and websites, and documents from academic, organizational and other online sources. Conversations with community members and First Nations colleagues with expertise in drinking water helped to inform the analysis.

Assessments of glass full, glass half full, glass half empty and glass empty were then determined for each indicator.



Glass full

Significant progress has been made in addressing this indicator



Glass half full

Steps have been taken to address this indicator and some progress has been achieved



Glass half empty

Steps may have been taken to address this indicator but insufficient progress has been achieved



Glass empty

Little to no progress has been made in addressing this indicator

The Foundation recognizes that the assessments determined in this report are the opinion of the Foundation and its colleagues, and may differ from DISC's own assessments of progress.

The water stories were collected by reaching out to regional organizations, tribal councils and contacts across Canada involved in addressing the First Nations drinking water crisis. Written or oral consent was obtained from all participants, and all participants were provided with time to review drafts of relevant sections of this report.

Assessment of progress

None of the indicators were assessed as glass full; six were assessed as glass half full; seven were assessed as glass half empty and one as glass empty. The assessments indicate that while the federal government is taking some steps to address the First Nations drinking water crisis in Canada, they fall short of the strides needed for this government's promises to become a reality.

INDICATOR

1. Is there a revised, expedited process for capital investments in water infrastructure co-developed with First Nations?



EVALUATION

PROGRESS

The Foundation is aware of a few instances in which attempts are being made to expedite the capital investments process. For instance, Eabametoong First Nation is adopting an expedited process dubbed “design-build”.²¹ In this process, a contract is tendered for one bidder to both design and build the improved water treatment facility. Traditionally, this has been achieved through two bidding processes, with two different contractors usually being hired. This appears to be a step in the right direction and its transferability to other communities should be explored. The trilateral table

²¹ Definition: “Design-build is a method of project delivery in which one entity — the design-build team — works under a single contract with the project owner to provide design and construction services. One entity, one contract, one unified flow of work from initial concept through completion — thereby re-integrating the roles of designer and constructor. Design-build is an alternative to the traditional design-bid-build project delivery method. Under the latter approach, design and construction services are split into separate entities, separate contracts, separate work. Across the country and around the world, design-build successfully delivers both horizontal and vertical construction projects with superior results — no matter what the project type.”

From: dbia.org/about/Pages/What-is-Design-Build.aspx

is also working to expedite projects in Ontario where possible.²² Another indication of progress is that DISC entered into a memorandum of understanding on July 12, 2016, with the Assembly of First Nations, which commits government to a new fiscal relationship with First Nations that should increase First Nations' control over funding timelines. However, the Foundation has heard comments that funding from Budget 2016 is delayed, and some communities are faced with challenges in paying contractors because of these delays.

2. Is DISC working with First Nations to co-develop new legislation to govern drinking water in First Nations?



Many First Nations leaders across Canada have made it clear that the Safe Drinking Water for First Nations Act, created under the previous government in 2013, does not meet their needs and that a new act must be created. On May 29, 2017, DISC (formerly INAC) initiated an engagement process for the review of the SDWFNA.²³ The engagement agenda included discussions around amending or repealing the SDWFNA.

This engagement process has come under harsh criticism, with reports that First Nations were not provided with adequate capacity to prepare for the first meetings held in British Columbia in 2017. DISC has offered the AFN several options for moving forward, including that the AFN take the lead role in conceptualizing and initiating a re-envisioned engagement process, with the department's support as required. The challenge for government is whether it will be able to collaboratively create a productive space in which the old act can be revisited, or if it will need to develop a new act.

22 See page 5 for more details. Trilateral Technical Working Group. (2017). Quarterly Progress Report.

23 INAC. (2017). Safe Drinking Water for First Nations Act: Engagement 2017. Retrieved from: aadnc-aandc.gc.ca/eng/1496056786210/1496056888386.

3. Is there joint development between INAC and First Nations of legally binding regulations to govern drinking water in First Nations?



While the SDWFNA enables development of regulations for safe drinking water in First Nations, none has been created to date. Regulatory development was paused in fall 2015, pending a review of the SDWFNA. Some independent researchers and organizations, like the First Nations Water Authority, are exploring the potential for regional regulations for First Nations.

4. How many source water protection plans have been completed by First Nations (and what is the change from the year before)? Has adequate funding been made available to First Nations to participate in these processes?



DISC's Protocol for Centralized Water calls for First Nations to create a source water protection plan; however, there is no funding attached to this protocol. The Foundation has heard that this protocol may not be the best implementation tool for First Nations interested in SWPP and that a new process developed with First Nations may be more suitable.

According to DISC, SWPP is supported through various sources of Capital Facilities and Maintenance Program funding that is allocated to First Nations. Advice is also provided by the department in some cases, mainly through the First Nations On-Reserve Source Water Protection Guide and Template developed in 2014. DISC also states that in 2015–16, 306 First Nations across Canada had completed a SWPP and 321 in 2016–17—meaning that in the last year, 15 new SWPP were created.²⁴ However, information about these plans has proven hard to obtain and it is unclear the extent to which these SWPPs are actually being implemented.

²⁴ Personal Communication, OFTNSC, September 13, 2017.

5. Are there new priority ranking frameworks for capital investments in water infrastructure in First Nations that were put in place and co-developed with First Nations?



The current priority ranking frameworks used by DISC for allocating First Nations water and wastewater infrastructure are outdated and overly complex. The frameworks include a point system with thousands of data points. DISC has asked the AFN and water technicians to provide a critique of the framework, so it is assumed it is open to revisiting it.

6. Has a new funding formula been co-developed with First Nations to ensure adequate funding for water treatment operations and maintenance? If so, can you point to measurable increases in funding for operations and maintenance from previous years as a result of the new model?



DISC recognizes that the current funding formula for operations and maintenance is old and doesn't do the job.²⁵ On paper, 80 per cent of First Nation water and wastewater infrastructure is funded by DISC and the remaining 20 per cent of funding comes from own-source revenue from First Nations. These O&M funding formulas fall short of what is needed in most instances. Major discrepancies between First Nations actual O&M expenditures and DISC's current funding formulas have been documented in Ontario by the Ontario First Nation Technical Service Corporation.²⁶

DISC is working with the AFN to review and develop options for a new O&M policy framework for First Nations infrastructure, with a joint work plan currently underway. In terms of O&M, many First Nations have been chronically underfunded for years. This means that once new funding formulas are developed, it is very likely that significant new investments will have to be made by the federal government to address this issue.

²⁵ Communication from INAC to DSF, dated November 6, 2017.

²⁶ Personal Communication, OFTNSC, September 13, 2017.

7. Is DISC providing a level of pay in its funding formula for operations and maintenance to ensure water treatment operators in First Nations can be paid a salary comparable with that of municipalities?



There are major gaps in funding for First Nations operations and maintenance of water infrastructure, which means that many water treatment operators working in First Nations are being paid much less than they would earn in a nearby municipality. The band contribution requirement means that, depending on the capacity of a First Nation, water operators may earn different salaries.²⁷ DISC provides core funding that communities have to top up, and communities are constrained in how much they can afford to pay their water operators. There is also, in many instances, insufficient funding made available for training and education, as evidenced by the general lack of water system operators in many First Nations who are certified to the level needed to operate their water treatment plants.²⁸ Ensuring that adequate resources are provided for training and retention of operators can help ensure that, once a water treatment operator has been certified, they will remain in their community rather than choose to relocate to a municipality where they can earn more for their skills.

27 McCullough, J. and Farahbakhsh, K. (2012). Square peg, round hole: First Nations drinking water infrastructure and federal policies, programs and processes. *The International Indigenous Policy Journal*, 3(1).

28 Lebel, P. M., and Reed, M. G. (2013). The capacity of Montreal Lake, Saskatchewan to provide safe drinking water: applying a framework for analysis. *Canadian Water Resources Journal*, 35(3).

8. Have changes been made so that DISC's budget windows are more aligned with context specific issues for First Nations, such as seasonal considerations?



First Nations across Canada are diverse and distinct, and may experience context-specific issues that could affect their spending and the delivery of capital investments. For instance, many remote northern communities rely on winter roads constructed from ice bridges to transport supplies in preparation for summer construction. These considerations often do not align well with government budget windows, which dictate the date by which funds must be spent.

One way in which DISC is addressing context-specific issues like seasonal considerations is through the establishment of carry forward funding, which was formalized in the MOU signed between the AFN and the federal government. As of April 1, 2018, First Nations will be able to carry forward their funding where helpful, applicable and desired, rather than having infrastructure spending be dictated by year-end timelines. This is a step in the right direction toward supporting increased flexibility and autonomy for First Nations so that communities can respond to context-specific issues as they arise.²⁹

9. Has DISC developed or contributed to policies to implement all relevant articles of the United Nations Declaration on the Rights of Indigenous Peoples with regard to safe drinking water and healthy watersheds?



As part of the government's commitment to reconciliation with Indigenous Peoples, a working group of ministers has been established. It is currently reviewing laws, policies and operational practices with the stated intention of ensuring that Canada is meeting its constitutional obligations with respect to Indigenous and treaty rights;

²⁹ Regina Leader Post. (2017, July 25). First Nations will be allowed to carry over federal funding. Retrieved from: leaderpost.com/news/local-news/first-nations-will-be-allowed-to-carry-over-federal-funding.

adhering to international human rights standards, including the United Nations Declaration on the Rights of Indigenous Peoples; and supporting the implementation of the Truth and Reconciliation Commission of Canada's calls to action.³⁰ The minister of Crown-Indigenous relations and Northern affairs and the minister of Indigenous services are two of six ministers on the working group.³¹ Although this is a positive development, the Foundation has seen no indication that the working group of ministers will review the SDWFNA or source water protection. Such a review is necessary given that First Nations are currently not sufficiently included, if they are at all, in decision-making processes about the approval of activities that could affect their source water.

10. Is there transparency in how DISC's budget for addressing DWAs in First Nations is being allocated?



DISC's budget is published in the *Plans and Priorities* report, provided at the end of the fiscal year. However, this budget does not provide information on funding awarded to individual First Nations. The department has stated that there are limits to how much it can share, due to privacy issues and ownership over data.³² The Parliamentary Budget Officer's report, released in December 2017, notes that government spending on water infrastructure fell below planned spending every year between 2010 and 2016.³³ Due to the implications of this chronic spending shortfall, the Foundation believes that there remains a need for a transparent breakdown of budget allocations, even if it is not on a per-community basis.

30 Government of Canada. (2017). About the Working Group of Ministers. Retrieved from: canada.ca/en/privy-council/services/review-laws-policies-indigenous/about.html.

31 Government of Canada. (2017). Members of the Working Group of Ministers. Retrieved from: canada.ca/en/privy-council/services/review-laws-policies-indigenous/members.html.

32 Communication from INAC to DSF, dated November 6, 2017.

33 Office of the Parliamentary Budget Officer. (2017). Budget Sufficiency for First Nations Water and Wastewater Infrastructure. Retrieved from: pbo-dpb.gc.ca/web/default/files/Documents/Reports/2017/FN%20Water/FN_Water_EN.pdf.

11. Is there transparency in the total, cumulative length of time that DWAs have been in place for each First Nations?



Both Health Canada and DISC track DWAs on their websites. HC reports on all DWAs, while DISC only reports on LTDWAs that are funded by its department. One challenge in tracking long-term DWAs is that in some instances, because the type of DWA may have changed, the clock is reset. This can obscure the severity or actual length in time that a community has been living under a drinking water advisory. DISC has stated it is working with HC to address this issue, but so far no concrete plan has been made publicly available.

12. Does DISC publish or share updated information on progress to address DWAs in First Nations with the public? How often is the information updated?



DISC's website has been changed significantly over the past year. The site now has an interactive map that shows all long-term drinking water advisories affecting DISC-funded public systems, as well as the actions that are being taken to address them. The status of DWAs is reported in real time, according to DISC; however, other information on progress and plans to address DWAs is updated less frequently. The goal according to DISC is to have its website updated quarterly, although in 2017, information was only updated in January and December.³⁴ Information on all waste and waste water projects is also accessible through the federal government's open data, and through Infrastructure Canada's website.

³⁴ INAC (Indigenous and Northern Affairs Canada). (2018). Ending long-term drinking water advisories in First Nations communities. Retrieved from: aadnc-aandc.gc.ca/eng/1506514143353/1506514230742.

13. Is there a process for DISC, DISC-FNIHB and First Nations to agree on issuing and rescinding a DWA, and if not, is one under development?



It is the responsibility of the chief and council of a First Nation (or their delegates, such as water treatment operators) to issue or lift a DWA. This is usually done with advice from an environmental health officer employed by the Government of Canada or with additional water-quality sampling done by the First Nations Inuit Health Branch (FNIHB), which was formerly a part of Health Canada and is now a part of DISC. According to the DISC-FNIHB website, it is also the responsibility of chief and council, or their delegates, “to take necessary actions to address the cause of the DWA.”³⁵ The DISC-FNIHB is taking the lead on a review of the procedures for declaring a DWA; however, this process has been underway for some years now and no changes have been made. The AFN has been invited to advise on this process.

14. Have interdepartmental working groups that bring together HC, DISC and ECCC (and their regional equivalents) been established with a mandate to meet and coordinate frequently to resolve DWAs?



The newly reformed Strategic Water Management Committee made up of DISC, HC, AFN and Environment Canada was recently revived to monitor water and wastewater action plans and had its first meeting in December 2017. The intention is to meet twice yearly. The Foundation has heard positive feedback from this initial meeting, and that there is a general receptivity to new ideas.

³⁵ Government of Canada. (2017). Short-term drinking water advisories: First Nations south of 60. Retrieved from: canada.ca/en/health-canada/topics/health-environment/water-quality-health/drinking-water/advisories-first-nations-south-60.html#a3.



“ I want to restore the faith in tap water in my own community first, and then travel out and restore the tap water quality in other communities.”

ERIC VAUTOUR

A photograph of Chief Candice Paul, a woman with dark hair, wearing a colorful patterned shirt, speaking into a microphone at a conference table. In the background, there are blurred lights and other people. A name tag on the table in front of her reads "Candice Paul, St. Mary's First Nation".

“If we work in partnership with a true Nation-to-Nation approach, we can achieve our goals.”

CHIEF CANDICE PAUL

Chief Candice Paul, St. Mary's First Nation,
co-chair of the Atlantic Policy Congress.
ATLANTIC POLICY CONGRESS

Water stories

Atlantic Canada: First Nations water authority

Atlantic Canada is developing the country's first water authority constructed, owned and operated by First Nations, led by the Atlantic Policy Congress of First Nations Chiefs Secretariat. The water authority is one of three main activities of the First Nations Clean Water Initiative, which also seeks to set drinking water and wastewater regulations for First Nations and to determine appropriate financing models. Millbrook First Nation Chief Bob Gloade, co-chair of the APC, explains, “the Water Authority will not be a political organization, rather it will be a progressive authority focused on the provision of water and wastewater services.” As a legal not-for-profit corporation, the water authority seeks to ensure that “each participating community will have an equal say in the governance of the authority.”³⁶ The water authority's corporate structure recommendation was developed in partnership with Halifax Water, Accelerator Inc., and Graham Gagnon, director of the Centre for Water Resource Studies and professor of engineering at Dalhousie University. First Nations leadership, elders and technical

³⁶ Personal communication, APCFNC. December 19, 2017.

staff were engaged throughout its development, leading to a recommendation to use a two-eyed seeing approach that maintains best practices in industry while sustaining First Nations cultural values.

Four recommendations for corporate structuring of the water authority are under consideration. One of these, the development of a public-private partnership, has come under heavy criticism from some groups that are concerned about the implications of water being removed from community control. Based on the engagement carried out by the APC, it has been concluded that a P3 approach is not the preferred option for First Nations, given that it does not fit with First Nations values, the challenges of small drinking water systems and the flexibility needed to adapt to the diverse needs of communities.³⁷

St. Mary's First Nation Chief Candice Paul, who is also co-chair of the APC, explains, "the most apparent benefit to Atlantic First Nations with the establishment of a pan-Atlantic Water Authority is increased public health and safety with the improvement in quality of drinking water and wastewater." Chief Paul ties the water authority to larger issues like self-governance, stating, "if we work in partnership with a true Nation-to-Nation approach, we can achieve our goals."³⁸

The proposed water authority falls under the Safe Drinking Water for First Nations Act, which states, "the Minister may enter into an agreement for the administration and enforcement of regulations made...with any province, corporation or other body." The water authority plans to hire all current First Nation operators, given that they are experts in their own community's water systems. Each operator will be placed on a systematic career-building track that will support those who aspire to advance their careers through increased certification or the pursuit of an engineering degree.

The APC is seeking a firm, 25-year commitment from the federal government, stating, "in order to succeed, we need political support that addresses the critical need for safe water."

37 Atlantic Policy Congress (APCFNC). (2017). Corporate structuring for Atlantic First Nations water authority. Retrieved from: apcfnc.ca/images/uploads/Preliminary_Report_-_May_22__2017.pdf.

38 Personal communication, APCFNC. December 19, 2017.

Ontario: Eabametoong First Nation, design-build

After more than 15 years under a boil water advisory, the northern Ojibway community of Eabametoong, also known as Fort Hope First Nation, is anticipated to have a newly expanded water treatment plant by December 31, 2019. The community is approximately 360 kilometres north of Thunder Bay and is accessible only by air and winter road. Most of the First Nations population of 1,500 people have spent the better part of two decades buying bottled water or boiling water for at least five minutes before drinking it. Andy Yesno, senior adviser at the Eabametoong band office, explains, “recently, because of the priorities of the government to end boil water advisories, we finally got on the list to address the boil water and call for a new expansion of the water treatment plant.”³⁹ The community will receive just over \$10 million for an upgrade to the current water treatment plant, which will double its size and update the facility.



Eabametoong First Nation Nursing Station. JESSICA LUKAWIECKI

The community is one of the first to take part in an expedited “design-build” process, initiated by the federal government, which combines two major steps in water infrastructure delivery. Rather than hiring two separate contractors—one to complete the water treatment plant design and another to build it—one contractor is hired to complete both steps, saving time and resources. The tender for the design-build process has already gone out, and shovels are expected to be in the ground by summer 2018. Because the federal government releases funding incrementally in the form of progress payments, the project will occur in phases and will not be complete until December 31, 2019.

The water treatment plant in Eabametoong was built more than 20 years ago and is designed to accommodate a community one-third the size. Due to high demands placed on the water treatment plant by a growing community, chlorine distribution is not uniform across the community. Yesno explains that when you take readings across the First Nation, there is high chlorine in some areas and low chlorine in others, which is the primary cause of the community’s boil water advisory.

Assistant band manager Ronald Misewace explains that, ideally, the community would have liked to build a new water treatment plant instead of expanding the existing one, but with the funding allocated they have to work with what they are given. Speaking

³⁹ Personal communication, Andy Yesno, senior adviser, Eabametoong First Nation. November 29, 2017.

about his community, Missewace explains, “we want to progress and expand. We don’t want roadblocks. We’re looking for ways to work with governments or businesses or organizations.”⁴⁰

Although equipment for the project has been pre-ordered, concerns remain about whether there will be a winter ice road this year. Last year, because of unseasonably high temperatures, the ice never became thick enough to build a winter road. With an anticipated 30 to 40 truckloads of supplies needed for water treatment plant construction, flying in necessary supplies in the event of unviable winter roads can add enormous costs to construction for the First Nation.

Yesno explains that the process for updating water infrastructure in First Nations communities has traditionally been “one of the slowest processes I know of, working with government.” However, since the federal government made the commitment to end all long-term drinking water advisories by 2021, he has noticed changes: “they’re fast tracking this one.”

“We have to watch out that this is done right,” Yesno cautions. “If it’s not done right, then we’re back to the same problem we had before.”⁴¹



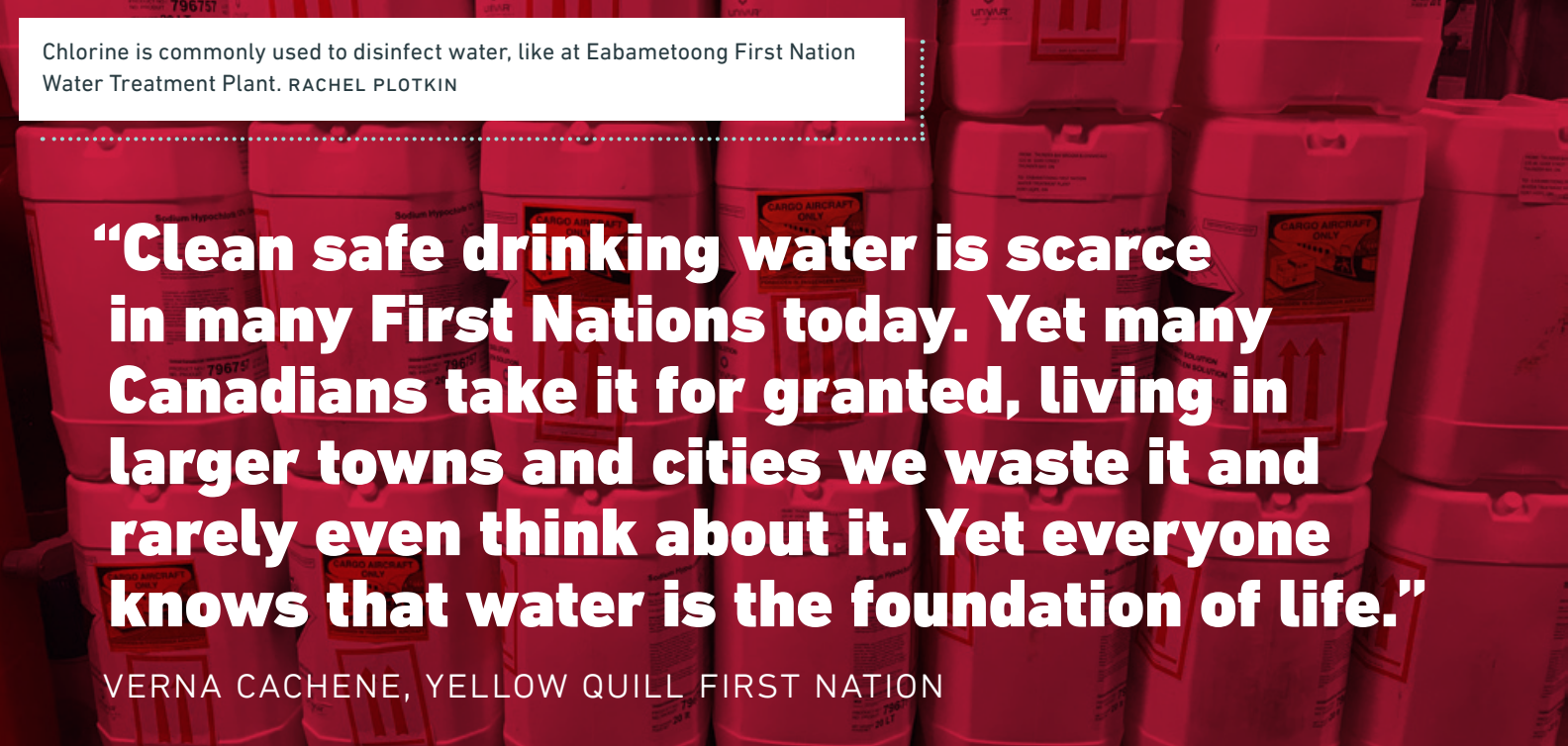
Harry O'Kees, assistant water treatment operator. RACHEL PLOTKIN



Eabametoong First Nation Water Treatment Plant. RACHEL PLOTKIN

⁴⁰ Personal communication, Ronald Missewace, assistant band manager, Eabametoong First Nation. November 29, 2017.

⁴¹ Personal communication, Andy Yesno, senior adviser, Eabametoong First Nation. November 29, 2017.



“Clean safe drinking water is scarce in many First Nations today. Yet many Canadians take it for granted, living in larger towns and cities we waste it and rarely even think about it. Yet everyone knows that water is the foundation of life.”

VERNA CACHENE, YELLOW QUILL FIRST NATION

Saskatchewan: Yellow Quill First Nation

Yellow Quill is about two and half hours east of Saskatoon with a population of over 800 people on reserve and home to 2,800 registered members in total.

Verna Cachene is a former band councillor for Yellow Quill First Nation. She recalls how in her early years, when she lived with her grandparents and then later her parents, “we caught water in rain barrels or took water from lakes, rivers, streams and even sloughs; and we hauled and melted snow in the winter.” This situation changed for Yellow Quill First Nation as surrounding source water became increasingly degraded, and the community was placed on a drinking water advisory in 1994.

“The cost of the water treatment system is one matter. The cost to human life when your community goes nearly a decade without clean water is another.”

When Cachene became a band councillor for Yellow Quill in 1998, one task on the table was the water issue. Cachene explains that as a band councillor, “it was not long before band members came to talk to me and show me what the problems were regarding water. People were generally unwell. One lady came to see me in my office one day and she showed me the open sores and scabs she had on her hands, arms and legs.”

Cachene explains, “At the council table we discussed the issue. Part of the problem was that INAC had a ‘one size fits all’ treatment plant that they peddled to all first nations, regardless of what the water problems were.” INAC’s proposal involved building a new water treatment plant using the same treatment system as the old plant, and relying on the same water source without addressing upstream contamination. The community had major concerns about viability of the proposed plant and drinking

With help from INAC and the Saskatoon Tribal Council, Yellow Quill connected with Hans Peterson, executive director of Canada's Safe Drinking Water Foundation, to get help finding solutions to the community's water issues. Research identified the bacterial culprits causing skin conditions as legionella or mycobacteria, which could also cause other significant health problems. It took a few years before the Integrated Biological and Reverse Osmosis Membrane treatment system was constructed and ready for use. Cachene explains that "all the funding including the on-reserve test facility was provided by INAC. In 2004 the new IBROM treatment plant began producing water for distribution... and finally after almost 10 years of boil water advisory we had water that we could safely drink and bathe in."

UNIVERSITY OF SASKATCHEWAN



British Columbia: Circle of Trust in Lytton First Nation

The Community Circle of Trust is a pilot project for drinking water initiated by a partnership between Lytton First Nation and RES'EAU-WaterNET, an NSERC Strategic Network of multiple universities and public and private organizations in North America devoted to providing innovative solutions for the drinking water challenges of small, rural and Indigenous communities. The circle of trust approach places community water treatment operators at the centre of innovation circles, benefiting from their insights early on in the problem-solving process. Recognizing there is no one-size-fits-all solution to drinking water issues, Res'eau-WaterNET has worked with communities like Lytton First Nation to identify the key challenges they face and to test promising new solutions in real-world conditions.

For Lytton First Nation (at Nickeyeah Reserve No. 25), this partnership involved piloting different options for providing affordable and sustainable water treatment solutions to the community. A mobile, state-of-the-art water treatment plant, capable of fitting on the back of a truck, was built in a lab at the University of British Columbia and transported to the First Nation.⁴² The project was completed in collaborative partnerships with Lytton First Nation, INAC, the First Nations Health Authority, Kerr Wood Leidal, BI Pure Water, Lillooet Contracting, University of Guelph, Université Laval and UBC, effectively lifting the longstanding BWA at Nickeyeah IR 25 in 2016.⁴³

Jim Brown, a level II operator and former maintenance manager and lead operator, talks about the project in his own words:

"I come from a First Nation of over 2,000 members living on 56 reserves in the Interior of British Columbia. I was employed as operations and maintenance manager for 35 years and band councillor for 22. My interest is water, good safe drinking water for our communities.

"There are nine community water systems on Lytton Band land and all went under a BWA at some time. An engineered feasibility design of \$1,300,000 was forwarded to INAC from Lytton Band and was removed from their capital infrastructure plan because they did not consider the design to be cost effective. INAC representatives were then asked, 'Because the design was not cost effective and removed, does that mean the residents of Nickeyeah continue to consume the BWA water?' INAC initiated a new process, with the introduction of RES'EAU Water-NET, which led to a working

42 CBC. (2017, March 22). First Nation latest to take control of water problems. Retrieved from: cbc.ca/news/indigenous/lytton-first-nation-water-system-fixing-1.4036018.

43 RES'EAU-WaterNET (2017). Retrieved from: reseauwaternet.ca/lytton-first-nation.

relationship with INAC, Kerr Wood Leidel, BI Pure Water, UBC engineering students and Nickeyeah community members. The challenge: How can we work together? The answer: “Community Circle”. A pilot trailer was brought to Nickeyeah site and operated by UBC students. Their objective was to find the best possible design for filtration and disinfection process for the Nickeyeah Creek water. With the professional work of Lillooet Contracting, installation of the designed 20-foot shipping container by BI Pure Water for the project was completed and commissioned. A community circle celebration of all the participants was held at the water treatment site. Today the residents enjoy good safe drinking water made possible by a Circle of Trust.

“I thank the Creator for allowing me to speak out. My parents and grandparents were prohibited to voice their concerns.”⁴⁴

An inside look at the innovative water treatment system that ended Lytton First Nation's Nickeyeah drinking water advisory. JIM BROWN



Jim Brown, Maintenance Manager at Lytton First Nation for 35 years.



⁴⁴ Personal communication, Jim Brown, Level II operator and former maintenance manager and lead operator, Lytton First Nation. September 27, 2017.

Ontario: Empowering youth, the future water protectors

Across Canada, First Nations youth are playing a powerful and emergent role in securing clean drinking water for their communities.

Sitting in the band office of Aundeck Omni Kaning First Nation on Manitoulin Island, Naomi Mandamin of Wikwemikoong Unceded Indian Reserve and Eric Vautour of Sheguiandah First Nation talk about the importance of water and their work as interns with the Canadian charity Water First. Even though their community is not under a DWA, many community members still drink bottled water due to a lack of trust in the on-reserve drinking water.

The Water First internship was started last year in partnership with the United Chiefs and Councils of Mniidoo Mnising, the Union of Ontario Indians and Wikwemikoong Unceded Indian Reserve.

“Water is truly essential to the process which we call life, and it teaches us many different lessons, from lessons of destruction to lessons of healing,” Vautour explains.⁴⁵ Vautour has been involved in water and environmental work since high school, when he participated in a program that engaged youth in environmental initiatives, like shoreline cleanups. Through the Water First internship, established this year, Vautour is gaining valuable knowledge and certifications regarding drinking water treatment, which he hopes will enable him to pursue a post-secondary program next year.

He has big plans for the future. Vautour explains that he “wants to restore the faith back in tap water in my own community first, and then travel out and restore the tap water quality in other communities.” With new awareness of the drinking water issues that many communities across Canada face, Vautour has become more passionate about spreading solutions to even the most remote First Nations.

Mandamin explains that when she started the Water First internship she wasn’t passionate about water. Since then, things have changed. She reflects on the Water Walkers who talked to the interns on their first day, and how they participated in water ceremonies and prayer. The Water Walkers are a group of Anishnaabe women and men who have taken action on the issue of contaminated water by walking the perimeter of the Great Lakes every year to raise awareness about water quality.⁴⁶ “That moment, I knew this was going to be a different journey, not just about learning to work at the

⁴⁵ Personal communication, Eric Vautour, Sheguiandah First Nation. October 24, 2017.

⁴⁶ Water Walkers. (2017). About us. Retrieved from: motherearthwaterwalk.com/?page_id=11.



Naomi Mandamin. WATER FIRST

water treatment plant,” Mandamin says. “It was about a different journey as well, a traditional journey.”⁴⁷

Participation in the Water First Internship has not been without its challenges. Mandamin explains that this year, she has had to spend time away from her young son. “I’ll teach him,” she tells us. “I’ll let him know how important it was for me to do this. I feel like I am where I need to be right now.”

Working with water has reconnected these youth to their roots, and reignited in them an interest in ceremony, sweat lodges and water ceremonies. As Vautour explains, working so closely with water has reinforced in him a “broader view of what the water is. It’s alive, it has a spirit. It’s a gift for us to cherish.”

⁴⁷ Personal communication, Naomi Mandamin, Wikwemikoong Unceded Indian Reserve. October 24, 2017.

A photograph of two young people, Amy Waboose and Alex Nahwagahbow, smiling. Amy is on the left, wearing a grey hoodie. Alex is on the right, wearing a grey t-shirt with a blue 'WATER FIRST' logo and a baseball cap. They are standing in front of a large, intricate wooden carving depicting various figures and scenes.

“The Elders don’t dare to touch the water today, unlike when they were younger. They used to just scoop it into their hands and drink it.”

AMY WABOOSE

Ontario: Protecting water at its source in Whitefish River First Nation

First Nations youth Amy Waboose and Alex Nahwagahbow from Whitefish River First Nation have spent part of the last year as interns in the Water First Internship Program. Both have been actively working on a First Nations–led source water protection plan in their community that aims to protect the rivers, lakes and streams around their First Nation — i.e., to protect water at its source.

Source water protection involves preventing contaminants from entering water sources in the first place, and is the first layer of defence in the multi-barrier approach to water protection.⁴⁸ It is about “protecting both the quality and the quantity of water sources, now and into the future” using a variety of management actions.⁴⁹

Waboose explains that she was first drawn to this kind of work after doing walks and ceremonies around the Great Lakes with Water Walker Josephine Mandamin. “She said

48 Government of Canada. (2014). First Nations On-reserve Source Water Protection Plan. Retrieved from: aadnc-aandc.gc.ca/eng/1398369474357/1398369572276.

49 CELA (Canadian Environmental Law Association). (2014). First Nations’ On-Reserve Source Water Protection. Retrieved from: cela.ca/sites/cela.ca/files/First_Nation_SWP_Legal_Toolkit.pdf.

our waters are sick, and everyone started doing more. It's hard to inform people about it, because they don't understand, they don't realize how important it is."⁵⁰

Source water protection usually falls under provincial jurisdiction in Canada, given that watersheds extend outside of reserve boundaries. This can make source water protection planning for First Nations legally and logistically complex. A report by Human rights Watch explains, "in practice, First Nations cannot carry out their culturally-understood obligation to protect water — either on or off reserve." First Nations leaders have expressed concerns about not being sufficiently engaged in decision-making regarding development activities that could affect their traditional territories and the waters within them. According to Human Rights Watch, "in many cases the lakes, rivers and streams that contribute to the source water for these communities have deteriorated because of pollutants from industries and growing municipalities."⁵¹

Speaking with concern about the quality of water surrounding Whitefish River First Nation, Waboose asks, "Why are the steams gone, the smelts? Pipelines, oil rigs, polluting all the water — for what, money? You're going to die without water. And they don't see that until it's gone."⁵²

Staff from the David Suzuki Foundation meet with youth from the Water First Internship Program in the band office of Aundeck Omni Kaning First Nation on Manitoulin Island. WATER FIRST



⁵⁰ Personal communication, Amy Waboose, Whitefish River First Nation. October 24, 2017.

⁵¹ Human Rights Watch. (2016). Make it safe. Retrieved from: [hrw.org/report/2016/06/07/make-it-safe/canadas-obligation-end-first-nations-water-crisis](https://www.hrw.org/report/2016/06/07/make-it-safe/canadas-obligation-end-first-nations-water-crisis).

⁵² Personal communication, Amy Waboose, Whitefish River First Nation, October 24, 2017.



First Nation Health Authority (FNHA) Environmental Health Technician Cori Johnson demonstrates water analysis using testing equipment that FNHA supplies to First Nations communities in BC, particularly in remote areas, for bacteriological testing. FNHA also works with approved laboratories across the province to meet federal and provincial sampling requirements. FIRST NATION HEALTH AUTHORITY

British Columbia: First Nations Health Authority

The First Nations Health Authority is the largest Indigenous-led health authority in Canada. The authority takes a holistic view of health, as FNHA drinking water safety manager Sylvia Struck explains: “we see how things are linked, and recognize how health is connected to larger issues.”⁵³ One of these issues includes safe drinking water, which has led to the Drinking Water Safety Program, a program that works with communities to help ensure drinking water is regularly monitored and sampled and that it meets or exceeds federal and provincial guidelines.

While the DWSP is a national program, since the formation of the FNHA in 2013 several new DWSP positions have been created in British Columbia to support safe drinking water. These include environmental health technicians and community-based water monitors positions, which are trained and funded through the FNHA DWSP to conduct regular drinking water sampling in their community. The organization employs environmental health officers who are responsible for making public health determinations and providing advice, guidance and recommendations on drinking water supplies. They are supported by EH technicians, who provide additional support to communities in carrying out the DWSP and to build First Nations capacity within the organization.

⁵³ Personal communication, Dr. Sylvia Struck, Drinking Water Safety Manager, FNHA. December 8, 2017.

Four EH technicians self-identify as First Nations, including Kristin Davis of the Gitxsan community of Gitwangak and the Nisga'a community of Gitlaxt'aamiks. Davis has worked with the FNHA on the development of water awareness grants, which provide funds to communities to host drinking water events that help raise awareness among community members about drinking water sources and ongoing protection and conservation efforts or opportunities. In speaking more broadly about the role of education in promoting safe drinking water, Davis says, "I think you have to look at this issue through a wider lens."⁵⁴ She explains that these grants provide an "important education opportunity to understand more about water systems, to become more involved, and to help return the role of ownership to the community."

In the long term, it is hoped that the EH technician and CBWM positions will become stepping stones for First Nations people who are interested in becoming EHOs. According to the FNHA, "currently there are very few First Nations in the field of Environmental Health, and there would be considerable value to increasing the number of First Nations individuals in these roles."



FNHA Environmental Health Technician Neil Kane demonstrating the importance of protecting drinking water from source to tap at Nicomen First Nation during an FNHA supported water awareness event. FIRST NATION HEALTH AUTHORITY

⁵⁴ Personal communication, Kristin Davis, EH technician, FNHA. December 8, 2017.

Update on the nine Ontario communities in the 2017 report⁵⁵

Community	Status	Estimated time to resolve
Slate Falls	Construction	Fiscal year 2017–2018, Q4
Nibinamik	Feasibility	Fiscal year 2020–2021, Q4
Constance Lake *	Complete	N/A
Northwest Angle No. 33	Feasibility	Fiscal year 2020–2021, Q4
Anishinabe of Wauzhushk Onigum	Feasibility	Fiscal year 2020–2021, Q4
North Spirit Lake	Construction	Fiscal year 2017–2018, Q2
Shoal Lake 40	Design	Fiscal year 2020–2021, Q4
Obashkaandagaang	Construction	Fiscal year 2017–2018, Q3
Wawakepewin	Project development **	TBD

* Despite being removed from a DWA, Constance Lake First Nation has made application to DISC to resolve increased sodium levels in its groundwater supply. Levels have increased to the point where those on sodium-restricted diets are advised not to consume the water.

** Project development: Discussions and planning are underway but feasibility study has not yet been conducted.

Continuum of progress: Project development → Feasibility stage → Design stage → Construction stage → Complete.

⁵⁵ Trilateral Technical Working Group. (September 2017). Quarterly Progress Report on Eliminating Long-term Drinking Water Advisories Affecting Ontario First Nation Communities.

Update: Nibinamik First Nation, Ontario

The community of Nibinamik, which was profiled in the David Suzuki Foundation's 2017 report, is in the process of completing a feasibility study, the first step in the process of determining what is needed to achieve safe drinking water. The design-build methodology or another expedited process is likely required if Nibinamik is going to achieve clean drinking water within the timeframe promised by the Liberal government. The First Nation has been in discussions with INAC for many years, but according to Chief Johnny Yellowhead, with whom the Foundation spoke in December 2017, progress over the last year has been slow.

Throughout 2017, the First Nation faced several crises, including the deaths of several community members, some of whom died by suicide. The First Nation lacks the capacity to address all the issues it faces, including mourning and supporting grieving families; dealing with inadequate housing; engaging in planning consultations; participating in road studies and planning for clean drinking water. According to Chief Johnny, "I'm overwhelmed because of the all the crises that we have... we don't have enough resources; it's minimal. When a crisis occurs, everything stalls, it backs up everything when there's one crisis after another. We have to try to coordinate ourselves to utilize whatever resources we have."⁵⁶

This speaks to the need to incorporate the drinking water crisis into a holistic framework that empowers First Nations with the capacity to address ecological and social issues. These challenges are compounded by, and partially a result of, historical injustices First Nations face as a result of the legacy of colonialism, forced relocation, residential schools and systemic racism in Canada. Through Prime Minister Justin Trudeau, the Government of Canada gave this issue high profile in a recent speech at the United Nations in which he acknowledged Canada's dark history with First Nations and called the social challenges such as those faced in this community as "the legacy of colonialism in Canada."⁵⁷

⁵⁶ Personal communication, Chief Johnny Yellowhead, Nibinamik First Nation. December 1, 2017.

⁵⁷ "Justin Trudeau vows to do better for Canada's Indigenous People in UN speech", CTV news, September 21, 2017. globalnews.ca/news/3761308/justin-trudeau-un-speech-indigenous/ (accessed January 2018).

Conclusion



A year after the first report, all 12 recommendations still stand as being required to achieve the government's goal of ending long-term drinking water advisories in First Nations.

As funding remains an important aspect to solve the drinking water crisis, revision of operations and maintenance formulas will be an important step forward. The parliamentary budget officer has illustrated that current funding of operations and maintenance for First Nations water infrastructure falls dramatically short of what is needed.⁵⁸ The federal government indicates that policy options for updated formulas will be available soon and will likely include substantial new investments into operations and maintenance to make up for years of shortfalls.

Further, it appears provincial involvement has potential to be a positive development. Ontario's trilateral table offers a model for others to consider as a way of providing additional support to First Nations to move through the capital investment process and to support First Nations with long-term sustainability of their drinking water systems. The First Nations Health Authority and Atlantic First Nations Water Authority also present creative approaches to service development and delivery.

The following represent the three most urgent and important themes emerging from this report.

First, the government must expedite the capital approval process for water infrastructure. As illustrated in the report, a few new initiatives have been piloted, demonstrating that it is possible to expedite existing processes. It is critical that the templates and results of these processes are shared broadly so there is collective learning about their strengths and weaknesses. Further, it is crucial that they are designed cooperatively with First Nations.

Second, recognizing the historical and present context in which drinking water has become a crisis in so many First Nations communities is crucial to finding sustainable solutions. A long history of colonialism has had disastrous effects on social, psychological and economic resilience in communities. Only a holistic approach that builds

⁵⁸ Office of the Parliamentary Budget Officer. (2017). Budget Sufficiency for First Nations Water and Wastewater Infrastructure. Retrieved from: pbo-dpb.gc.ca/web/default/files/Documents/Reports/2017/FN%20Water/FN_Water_EN.pdf.



The drum, the heartbeat of all life, carries the message of Earth stewardship and the sacredness of water at Turtle Lodge, Sagkeeng First Nation
ALAYA BOISVERT

capacity and infrastructure throughout communities and across sectors will be successful. The issue of clean drinking water cannot be addressed in isolation; rather, it requires interdepartmental collaboration and must be equipped alongside capacity building and adequate resources.

Finally, as the case studies in the report highlight, most innovation is taking place where First Nations are playing a leadership role and/or have ownership over the projects. The David Suzuki Foundation believes that investments should be made to replicate and expand these successful community-based approaches. This will require the federal government to honour its commitment to relationship-building, trust and sharing decision-making authority.

Appendix A

Problem identified in report card	DSF recommendation	Indicator
A highly complex and cumbersome federal process	Work with First Nations to streamline and simplify the process for capital investments in water infrastructure by identifying roadblocks and reducing bureaucracy.	1. Is there a revised, expedited process for capital investments in water infrastructure co-developed with First Nations?
Lack of a regulatory framework to govern drinking water for First Nations	Work with First Nations to identify an appropriate regulatory framework.	2. Is DISC working with First Nations to co-develop new legislation to govern drinking water in First Nations?
		3. Is there joint development between INAC and First Nations of legally binding regulations to govern drinking water in First Nations?
	Collaborate with First Nations in co-developing and implementing source water protection and restoration plans.	4. How many source water protection plans have been completed by First Nations (and what is the change from the year before)? Has adequate funding been made available to First Nations to participate in these processes?
Insufficient infrastructure funding and ineffective allocation processes	Work with First Nations to establish federal funding levels and formulas for First Nations drinking water and sewage systems so that existing systems are not further degraded and water system repair and restoration is not subject to delay.	5. Are there new priority ranking frameworks for capital investments in water infrastructure in First Nations that were put in place and co-developed with First Nations?

Lack of adequate resources for operations and management	Work with First Nations to establish federal funding levels and formulas that provide sufficient operations and management capacity to meet their needs.	6. Has a new funding formula been co-developed with First Nations to ensure adequate funding for water treatment operations and maintenance? If so, can you point to measurable increases in funding for operations and maintenance from previous years as a result of the new model?
	Eliminate the pay gap between water systems operators in First Nations and comparable municipalities.	7. Is DISC providing a level of pay in its funding formula for operations and maintenance to ensure water treatment operators in First Nations can be paid a salary comparable with that of municipalities?
Lack of First Nations decision-making power over resolving drinking water issues in their communities	Support First Nations–led approaches to drinking water that recognize the leadership of First Nations governments and organizations.	In recognizing that any indicator for this recommendation would be qualitative, anecdotal information was provided. See water stories on pages 24–37 .
	At the request of First Nations, support development of collaboration between First Nations and provincial governments.	See text box on page 10 .
	Take into account context-specific issues for First Nations, such as appropriate construction seasons.	8. Have changes been made so that DISC's budget windows are more aligned with context specific issues for First Nations, such as seasonal considerations?
	Fulfil government commitments to implement the United Nations Declaration on the Rights of Indigenous Peoples, particularly free, prior and informed consent for laws and regulations related to First Nations water, and the UN-recognized human right to safe drinking water and sanitation endorsed by Canada.	9. Has DISC developed or contributed to policies to implement all relevant articles of the United Nations Declaration on the Rights of Indigenous Peoples with regard to safe drinking water and healthy watersheds?
		10. Is there transparency in how DISC's budget for addressing DWAs in First Nations is being allocated?

Lack of transparency in federal monitoring of progress toward ending DWAs	Increase federal transparency and reporting of budget spending and progress toward ending long-term DWAs in First Nations.	11. Is there transparency in the total, cumulative length of time that DWAs have been in place for each First Nations?
		12. Does DISC publish or share updated information on progress to address DWAs in First Nations with the public? How often is the information updated?
		13. Is there a process for DISC, HC and First Nations to agree on issuing and rescinding a DWA, and if not, is one under development?
Lack of holistic approach to addressing clean drinking water	Ensure that water issues are not addressed in isolation but are linked to wider issues such as housing, infrastructure, training and the impacts to watersheds from industrial activities.	14. Have interdepartmental working groups that bring together HC, DISC and ECCC (and their regional equivalents) been established with a mandate to meet and coordinate frequently to resolve DWAs?

Witnesses walk toward ceremonial structures during Nibi water gathering at Turtle Lodge, Sagkeeng First Nation.
ALAYA BOISVERT

