

Submission to Special Rapporteur on Human Rights and Hazardous Substances and Toxic Wastes: Seeking to Prevent Further Harm if the Muskrat Falls Megadam Goes Online in 2019

Presented by the Ontario-Muskrat Solidarity Coalition (in conjunction with the request for a meeting in Happy Valley-Goose Bay with the Rapporteur by the Labrador Land Protectors and Grand Riverkeeper Labrador Inc.).¹

Contact: Matthew Behrens, Ontario-Muskrat Solidarity Coalition (613) 267-3998, tasc@web.ca

Introduction:

For over a decade, debate has raged over the Labrador Muskrat Falls megadam (aka Lower Churchill Hydroelectric Generation Project). The frustrations and struggles of Indigenous people and non-Indigenous allies trying to stop the dam are reflected in the conclusion of the 1997 report of the World Commission on Dams: “At the heart of the dams debate are issues of equity, governance, justice and power – issues that underlie the many intractable problems faced by humanity...In too many cases an unacceptable and often unnecessary price has been paid to secure those [dams’] benefits, especially in social and environmental terms, by people displaced, by communities downstream, by taxpayers and by the natural environment.”²

We believe that the mandate of the Special Rapporteur on Toxics is engaged at Muskrat Falls due to a number of intersecting factors, the study of which will, we trust, produce recommendations based on the precautionary principle, independent and transparent science, and a respect rooted in the fundamental principles undergirding the United Nations Declaration on the Rights of Indigenous People (UNDRIP), the OAS Declaration on the Rights of Indigenous Peoples, International Convention on the Elimination of All Forms of Racial Discrimination, The Minamata Convention on Mercury, and related human rights instruments.

Core to any study of Muskrat Falls is an understanding that Indigenous people are disproportionately impacted by a megaproject that has never received the free, prior and informed consent of *all* Indigenous affected. The key project supporters – provincial crown corporation Nalcor, the federal government (which backs the megadam with \$9.2 billion in federal loan guarantees), and the government of Newfoundland and Labrador – sit at negotiating tables that are grossly unequal and weighted in their favour. It is here that they have invited Labrador Indigenous groups (Innu Nation, Nunatsiavut, and NunatuKavut) suffering from the traditional poverty and barriers born of colonial violence, dangling the promise of land claims agreements and impact benefits agreements in exchange for the dubious benefits of the Muskrat Falls megadam. Indeed – as with many megaprojects in Canada – federal and provincial governments have relied on their own impoverished, colonial definition of consultation at Muskrat Falls by seeking out partners who are either pliant or caught between an economic rock and a hard place, and discounting the often dissenting concerns expressed by elders, traditional title holders, and grassroots voices.

The predicted poisoning of the traditional country food web of Inuit and Innu with the lethal neurotoxin methylmercury for at least the next 30-35 years³ violates key rights and principles identified as part of your mandate: the rights to life, water, food, the highest attainable standard of health, and a healthy environment. In

¹ The Coalition engages in research, education, and public witness in support of the front-line work undertaken by Grand Riverkeeper Labrador Inc. (which seeks to preserve and protect the water quality and the ecological integrity of the Grand (Churchill) River) and Labrador Land Protectors, an Indigenous and settler/ally grass roots group trying to stop the Muskrat Falls dam from going online. As with many such megaprojects, Indigenous people are disproportionately affected (in this instance, the people of Nunatsiavut, Nunatukavut, and Innu Nation), and only selected community representatives are engaged in selective consultation with project proponents, an undemocratic and unaccountable process that falls far short of the UNDRIP minimum standard test of free, prior and informed consent.

² World Commission on Dams (WCD) Report, [https://energypedia.info/wiki/World_Commission_on_Dams_\(WCD\)_Report](https://energypedia.info/wiki/World_Commission_on_Dams_(WCD)_Report), p. xxviii, retrieved April 14 2019

³ Report of the Joint Review Panel - Lower Churchill Hydroelectric Generation Project, Nalcor Energy, Newfoundland and Labrador, publications.gc.ca/pub?id=9.694768&sl=0, retrieved April 14, 2019

addition, the importation of a large police presence (including Royal Canadian Mounted Police and Canadian Armed Forces)⁴, combined with a draconian court injunction⁵, have served to violate core rights to participation and effective remedies by criminalizing water and land protectors and jailing in maximum security penitentiaries those who walk on their traditional lands for alleged violations of the injunction⁶. Access to effective remedies is also constrained given the limited resources of grass roots groups and Indigenous peoples faced with what the Committee on the Elimination of Racial Discrimination identifies as “the substitution of costly legal challenges as post facto recourse in place of obtaining meaningful free, prior and informed consent of indigenous peoples.”⁷

The Muskrat Falls megadam project has continued to forge ahead – with projections to start producing power by fall, 2019 – despite:

- doubling in cost (to almost \$13 billion) while ignoring key recommendations from a Joint Review Panel composed of provincial and federal representatives;
- the project proponent Nalcor (a provincial crown corporation) submitting an incomplete Environmental Assessment that excluded a major downstream area (Lake Melville, a significant cultural and nutritional source sustaining Inuit life since time immemorial – Labrador’s largest body of water and one designated an Ecologically and Biologically Significant Area by the Canadian Science Advisory Secretariat);
- documented concerns from a four-year Harvard University study⁸ that a failure to clear the 101 sq. km reservoir impoundment area⁹ of vegetation, trees, brush and topsoil will exacerbate the already significant risk of the neurotoxin methylmercury bioaccumulating in the Indigenous country food web, rendering it unsafe for consumption for 30-35 years;
- a failure by the federal and provincial governments, as well as Nalcor, to abide by the majority recommendation of their own Independent Experts Advisory Committee to mitigate methylmercury poisoning by requiring that “Nalcor undertake targeted removal of soil and capping of wetlands for the reduction of both the amount and duration of methylmercury production in the Muskrat Falls Reservoir.”¹⁰
- a failure to engage in the process of free, prior and informed consent with all Indigenous peoples affected, as prescribed by the UNDRIP;
- Swedish quick clay expert and engineer Stig Bernander concluding a study of the North Spur (an unstable natural formation being relied upon to hold back the full reservoir) with the caution that “the safety and reliability of the Muskrat Falls dam have not been demonstrated.”¹¹
- In addition to the risk that hundreds of lives could be lost with up to \$60 million in property damage in the flood zone given catastrophic dam break¹², the chaotic dredging up and spread of toxics from already existing contaminated sites caused by a flash flood could spread a toxic soup over a large area.

⁴ Emergency measures, military support: Documents reveal heightened concern about Muskrat Falls security (<https://www.cbc.ca/news/canada/newfoundland-labrador/labrador-canadian-forces-muskrat-1.4508634>, retrieved April 14, 2019)

⁵ Protesters hope to have injunction for Muskrat Falls site overturned, <https://www.cbc.ca/news/canada/newfoundland-labrador/land-protectors-challenging-injunction-1.4268851>, retrieved April 14, 2019)

⁶ Detainment of Inuit protesters in St. John's prison draws condemnation while causing inspiration, <https://www.cbc.ca/news/canada/newfoundland-labrador/jim-learning-marjorie-flowers-eldred-davis-muskrat-falls-hmp-1.4218900>, retrieved April 14, 2019

⁷ https://tbinternet.ohchr.org/_layouts/treatybodyexternal/Download.aspx?symbolno=CERD/C/CAN/CO/21-23&Lang=En, retrieved April 14, 2019

⁸ Durkalec, A., Sheldon, T., Bell, T. (Eds). 2016. Lake Melville: Avativut Kanuittailinnivut (Our Environment, Our Health), Scientific Report. Nain, NL. Nunatsiavut Government, <https://bgc.seas.harvard.edu/assets/sciencereport-low1.pdf>, retrieved April 14, 2019

⁹ https://www.gov.nl.ca/lowerchurchillproject/backgrounder_7.htm, retrieved April 14, 2019

¹⁰ Reimer, Kenneth, Letter from Chair, Independent Experts Advisory Committee, April 10, 2018, p. 2, <http://ieaclabrador.ca/wp-content/uploads/2018/04/Letter-IEAC-Chair-to-Responsible-Minister-April-10-2018.pdf>, retrieved April 14, 2019; See also “Nunatsiavut still waiting on methylmercury recommendations,” <https://www.thetelegram.com/news/regional/nunatsiavut-still-waiting-on-methylmercury-recommendations-262749/>, retrieved April 14, 2019

¹¹ Bernander, Stig, Safety and Reliability of the Muskrat Falls Dam, in, Light of the Engineering Report of 21 December 2015, by Nalcor/SNC-Lavalin, October, 2016, <http://www.pub.nl.ca/applications/IslandInterconnectedSystem/phasetwo/files/correspondance/From%20GRK%20-%20Dr.%20S.%20Bernander%20-%20Safety%20and%20Reliability%20of%20the%20Muskrat%20Falls%20Dam%20-%202016-10-13.PDF>, retrieved April 14, 2019

¹² <http://theindependent.ca/2017/07/05/calls-for-nalcor-audit-muskrat-inquiry-intensify-amid-ongoing-protests/>

- Years of peaceful demonstrations, the arrests and incarceration of Indigenous land and water defenders and non-Indigenous allies, lobbying, educational efforts, and attempts to engage government and crown corporation officials in meaningful dialogue to address core concerns.

Methylmercury Poisoning: Unacceptable At Any level

Methylmercury is a potent and potentially lethal neurotoxin associated with kidney and liver failure, tremors, dizziness, memory and hair loss, blurred vision and tingling at the extremities (aka Minamata Disease). It is often a byproduct of dam projects in which the reservoir area has not been cleared of brush, trees, and topsoil.

According to scientists at the Harvard T.H. Chan School of Public Health:

Chronic low levels of exposure are typically observed among frequent seafood consumers. Long-term dietary exposure to methylmercury has been associated with neurocognitive delays in children including long-term IQ deficits, attention deficit behavior and reductions in verbal function and memory. For example, prenatal methylmercury exposure has been linked to attention deficit symptoms in school age Inuit children in Nunavik, Canada. The developing brain during the third trimester of pregnancy is most vulnerable to impacts of methylmercury exposure, in part because it can readily cross the blood-brain barrier and accumulates in fetal umbilical blood. Recent research provides new evidence for impacts of methylmercury on cardiovascular health of adults... New information is also emerging about potential impacts of methylmercury on immune health and as an endocrine disruptor.”¹³

From the very beginning, project proponent Nalcor and the province of Newfoundland and Labrador have sought to downplay the threat of methylmercury poisoning in the traditional country food web of Indigenous peoples affected.¹⁴ The issue has always been addressed by project proponents and funders through the language of mitigation – containing or avoiding a risk that will result from the dam’s construction and operation – instead of asking whether the risk is too great to begin with.

The federal government has ignored the advice of its own scientists¹⁵ in extending two massive loan guarantees to back the project – \$9.2 billion¹⁶ – while also failing to abide by the legally binding Minamata Convention on Mercury to reduce mercury emissions and to protect the environment and human health (signed April 7, 2017). Notably, the Convention recognizes "the particular vulnerabilities of Arctic ecosystems and Indigenous communities because of the biomagnification of mercury and contamination of traditional foods, and [is] concerned about indigenous communities more generally with respect to the effects of mercury.”¹⁷

The 2011 Joint Review Panel established by Canada’s Minister of the Environment, the Minister of Environment and Conservation for Newfoundland and Labrador, and the Minister for Intergovernmental Affairs for Newfoundland and Labrador examined the issue of methylmercury mitigation in the proposed reservoir area for the Muskrat Falls dam. The Panel recommended “applying the ‘full clearing’ option to the Muskrat Falls reservoir because it would be technically and economically feasible and would not negatively affect the construction schedule.”¹⁸ In the final result, however, the federal government deferred to the province, which rejected the recommendation.

In addition, given the “dietary and cultural importance of fishing and seal hunting in this area, the Panel concluded

¹³ Durkalec, A., Sheldon, T., Bell, T. (Eds). 2016. Lake Melville: Avativut Kanuittailinnivut (Our Environment, Our Health), Scientific Report. Nain, NL. Nunatsiavut Government, <https://bgc.seas.harvard.edu/assets/sciencereport-low1.pdf>, retrieved April 14, 2019

¹⁴ “Nalcor continues to try and sweep the issue under the rug, as it has since a joint Federal-Provincial environmental review panel clearly recommended full clearing of the reservoir to reduce levels of methylmercury downstream from the project,” says Lands and Natural Resources Minister Darryl Shiwak. “Partial clearing is not an acceptable mitigation measure.” (from “Nunatsiavut Government outraged by Nalcor’s response to Harvard mercury study”, press release, Sept. 9, 2015, <http://www.nunatsiavut.com/article/nunatsiavut-government-outraged-by-nalcors-response-to-harvard-mercury-study/>, retrieved April 14, 2019

¹⁵ Reimer, Annex B, Written Opinions of IEAC Oversight Committee Members, <http://ieaclabrador.ca/wp-content/uploads/2018/04/Letter-IEAC-Chair-to-Responsible-Minister-April-10-2018.pdf>, retrieved April 14, 2019

¹⁶ “Canada’s other really dumb power project,” <https://ipolitics.ca/2018/07/06/canadas-other-really-dumb-power-project/>, retrieved April 14, 2019

¹⁷ <http://www.mercuryconvention.org/Convention/Text>

¹⁸ Report of the Joint Review Panel - Lower Churchill Hydroelectric Generation Project, Published under the authority of the Minister of Environment, Government of Canada, August 2011, p. xiv

that there would be significant adverse effects on fishing and seal hunting in Goose Bay and Lake Melville should consumption advisories be required for that area.”¹⁹ The Panel took note of the potential for “significant adverse effects on the pursuit of traditional harvesting activities by Labrador Inuit, including the harvesting of country food.”²⁰

Data from Nalcor’s own models, provided to the Joint Review Panel, “predicted that fish mercury concentrations in adult sized fish would increase between 230 and 480 percent,” while smaller fish species could see spikes of 340-480 percent over baseline values.²¹ Notably, in Nalcor’s predictions of the effects of flooding areas where brush, foliage, and topsoil had not been cleared – thus leading to the production of the lethal neurotoxin methylmercury – there would not be a return to baseline levels for 35 years, leading the panel to conclude that “Nalcor’s assertion that there would be no measurable effect on levels of mercury in Goose Bay and Lake Melville has not been substantiated.”²²

The adverse effects of this methylmercury threat to the Inuit country food supply were documented in the peer-reviewed 2016 Harvard University study:

90 percent of Nunatsiavut residents over 15 years of age reported harvesting country food in the prior 12 months. Food sharing networks are strong in Nunatsiavut, with a majority of households reporting that family and friends share country food with them. Country food is rich in antioxidants, omega-3 fatty acids, monounsaturated fatty acids, protein, and micronutrients. As such, it makes a critical nutritional contribution to diets in a region with high market food costs and nearly five times the level of moderate to severe food insecurity as the general Canadian population. Harvesting itself is associated with physical, cultural, material, spiritual and social benefits. It is a cultural anchor, reaffirming Inuit identity and connection to the land and strengthening social relationships through food sharing practices. Lake Melville is an important area for harvesting country food for Inuit living in Rigolet and the Upper Lake Melville communities.”²³

Notably, those living in the Lake Meville area are not new to the issue of mercury poisoning. When one of the world’s largest hydro dams was constructed in Labrador in 1971 (the 5428 MW Churchill Falls Power Station), “creation of the Smallwood Reservoir in the 1970s caused methylmercury concentrations to increase in fish in the Churchill River system, including 300 km downstream in Lake Melville. Mercury levels in non-piscivorous fish (non-fish eating, lower trophic level) are [only] now approaching or have returned to background levels, while levels in piscivorous northern pike and lake trout remain elevated in the main stem of the Churchill River, with consumption advisories in effect for these species.”²⁴

At a time when inter-generational education and cultural continuity is critical to the survival of the cultures, languages, and spiritual lives of Indigenous peoples, a three-decade severing of vital links to their traditional way of life will prove devastating and, likely, irreparable.

The Joint Review Panel agreed with Natural Resources Canada that “Recent research has shown that the most effective mitigation may be removal of vegetation and the upper soil layer in what would become the drawdown area of the new reservoir. It therefore recommended that Nalcor consider large-scale removal of mercury and carbon-rich soils within this area, the so-called ‘bathtub ring’, to mitigate methylmercury production, acknowledging that this form of mitigation had so far only been conducted at a smaller experimental scale.”²⁵

In another example of the disregard for the effects of its project on Indigenous peoples, the Panel also concluded that Nalcor did not carry out a full assessment of the fate of mercury in the downstream environment, “including the potential pathways that could lead to mercury bioaccumulation in seals and the potential for cumulative effects of the Project together, with other sources of mercury in the environment. Because Nalcor did not acknowledge the

¹⁹ *Ibid.*, xxi-xxii

²⁰ *Ibid.*, p. xxiii

²¹ *Ibid.*, p. 72

²² *Ibid.*, p. 88

²³ Durkalec, A., Sheldon, T., Bell, T. (Eds). 2016, p. 5

²⁴ *Ibid.* p. 7

²⁵ Report of the Joint Review Panel, pp. 73-74

risk that seals could be exposed to mercury from the Project, it did not address whether elevated, mercury would represent any threat to seal health or reproduction.”²⁶

While Nalcor, the province and federal government have maintained that consumption advisories are sufficient to mitigate the threat, these advisories would do nothing to lessen environmental effects, and would instead shift the responsibility for mitigation to those whose lives are most at risk. In an area where food insecurity and poverty are particularly relevant social determinants of health and survival (and where store-bought food is often subject to exorbitant prices²⁷), thousands who rely on country food will be forced to either go hungry or risk methylmercury poisoning to feed their families.

Failure to consult/No Remedies

As recounted by the Harvard study,

The Nunatsiavut Government objected strongly and repeatedly to the exclusion of Lake Melville from the EA, asserting that predictions of impacts made without a sound understanding of the system being affected are unreliable, and an adequate and protective monitoring program cannot be put into place for a system that is not well understood. The exclusion of Lake Melville meant that the EA did not rigorously assess impacts of the project on Inuit territory or on a number of key indicators and valued ecosystem components of importance to Inuit, such as seal health and Inuit health. Inuit are experts in their environment, and the view of the Nunatsiavut Government is that this knowledge was not valued or used to inform the EA design, methods, and findings.”²⁸

The Harvard study recounts how, despite the consensus amongst the Joint Panel and experts from Fisheries and Oceans Canada that Nalcor’s downstream mercury predictions were unsubstantiated and not scientifically sound,

“government sanction decisions were based on this limited information. In the subsequent regulatory process, government did not implement the Panel’s recommendation for a comprehensive downstream assessment, choosing instead to only require limited sampling. The Nunatsiavut Government filed motions for judicial review of the permitting decisions by the federal and provincial governments based on inadequate consultation and accommodation, but these were dismissed at the federal and provincial Supreme Court levels in 2015, in part related to the timing of these motions. The provincial court found that once the province released the project from EA in 2012, concerns about mercury accumulation impacts and mitigation, monitoring, and compensation measures “move[d] to the background, in a legal sense” (*Nunatsiavut v Newfoundland and Labrador*, para 160). However, the Court also found the province’s dismissal of the Panel’s recommendation for full clearing “surprising” (para 87) and its focus on economic rationale “somewhat shallow” (para 86).”²⁹

Following a series of 2016 hunger strikes, nonviolent blockades, and a multi-day occupation of the construction site by dozens of Labrador Land Protectors, the provincial government committed itself to addressing the methylmercury mitigation issue with the appointment of an Independent Experts Advisory Committee (IEAC), but critics wondered why the government required additional scientific research when the Harvard Study, a peer-reviewed 4-year work, provided plenty of proof that bolstered findings of the 2011 Joint Panel. Many believed the government was not interested in solving the issue because, despite assigning a mandate to the IEAC, it failed to halt ongoing construction of the dam pending the IEAC’s recommendations.

In the meantime, area residents expressed intense anxiety and fear over the Harvard finding that

²⁶ Report of the Joint Review Panel, p. 88

²⁷ Food shopping ‘extremely stressful’: Protests against high prices in northern Labrador, <https://www.cbc.ca/news/canada/newfoundland-labrador/protests-high-cost-food-labrador-inuit-1.4161885>, retrieved April 14, 2019; “Frustrations over food prices in Labrador’s Inuit communities, where some groceries cost three times as much as they do elsewhere, led to a protest in Nain Wednesday, where residents confronted Premier Dwight Ball about food subsidies. ... Meanwhile, pictures posted on social media of grocery store shelves in Nain are prompting outrage online. Viewers can’t believe the \$7-cans of soup, \$16-bottles of dishwashing liquid and boxes of cereal, \$17-bottles of juice, and nearly \$75 for baby formula.”

²⁸ Durkalec, A., Sheldon, T., Bell, T. (Eds). 2016, pp 10-11.

²⁹ *Ibid.*, p. 11.

Experimentally flooded soils from the future Muskrat Falls reservoir area showed a spike in methylmercury concentrations within 72 hours, and a 14-fold increase in methylmercury concentrations within 120 hours, at which point levels were still increasing but monitoring ended. Organic material provides food for bacteria responsible for converting inorganic mercury in the ecosystem to methylmercury, so the actual pulse is likely to be much greater. Elevated levels of methylmercury are anticipated to last for several decades. Even under the low methylmercury scenario, which requires complete removal of topsoil, vegetation and trees, and rapid decomposition of methylmercury in downstream environment, there will be an overall increase in methylmercury exposures.³⁰

The Harvard study also concluded that under the “high methylmercury scenario, there may be some individuals who consume greater amounts of country foods whose methylmercury exposures can increase by up to 1500%,” while “Rigolet residents are at higher risk of increased mercury exposures due to flooding because of their greater reliance on locally caught food, with up to 46% of the community exceeding the most conservative Health Canada reference dose and up to 66% exceeding the U.S. EPA reference dose under the high scenario.”³¹

For those who rely on Lake Melville, particularly alarming is the finding that the lake’s unusual characteristics make it “particularly efficient at magnifying methylmercury in food webs” and further that the system is especially vulnerable to increased inputs of both methylmercury and inorganic mercury that may be methylated in the water column.”³²

While the provincial government is currently conducting an inquiry regarding Muskrat Falls, Indigenous groups and allies have criticized a process that seems almost exclusively focused on financial decision making, with no mandate (despite pleas to broaden its scope) to explore the very real health concerns of Indigenous people, the lack of consent, and the failure to view this project through an UNDRIP lens. Indeed, any findings from the inquiry will be published after the scheduled completion of the project, when the damage will be well underway.

Meanwhile, largely Indigenous arrestees and their allies have been traumatized by a years-long, unwelcome interaction with the court system that continues with further court hearings expected in summer, 2019. When four Indigenous Labrador Land Protectors (Beatrice Hunter, Marjorie Flowers, James Learning, Eldred Davis) were incarcerated over a period of several weeks during the summer of 2017, five members of the Canadian Senate expressed their outrage, noting:

The refusal of these three Land Protectors to undertake to stay away from the Indigenous land on which the Muskrat Falls hydroelectric project is being developed was motivated by their ongoing concerns about the impact of the project on their traditional lands and on the way of life and well-being of Labrador Innu and Inuit Peoples. These concerns have been raised again and again by Indigenous Peoples who have found their voices ignored and their concerns left unaddressed by the Muskrat Falls consultations that were supposed to protect their constitutional rights under section 35 of the Constitution Act, 1982, rights echoed in article 32.1 of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), which the federal government has recently reaffirmed its commitment to adopting. Once again, we are shocked and disappointed that the province's response to these concerns, and the flaws in the consultation process, has been to jail those who raise them. Like Beatrice Hunter a few weeks earlier, Ms Flowers has been incarcerated in a men's prison and all three Land Protectors have been moved 800 kilometres away from their homes, families, communities and support systems in order to be jailed. We are appalled that this has been allowed to happen again.³³

Following a 2017 sharing circle with Labrador Land Protectors and Crown-Indigenous Relations Minister Carolyn Bennett – one only acceded to by the federal government following sit-ins and a major pressure campaign – the minister more or less dismissed the idea that the project could be viewed through an UNDRIP lens since, she argued, it has already been

³⁰ *Ibid.*, p. VII

³¹ *Ibid.*, p. VII

³² *Ibid.*, pp. 55-56

³³ <https://www.cbc.ca/news/canada/newfoundland-labrador/senators-letter-muskrat-falls-protectors-jail-1.4225611>, retrieved April 14, 2019

sanctioned. Land Protectors argued that free, prior and informed consent applies for the life of the project, and not merely the beginning.³⁴

Flooding and Toxics

In accordance with the Canadian Dam Safety Association (CDA) Guidelines, the Muskrat Falls dam and reservoir are classified in the high risk category for which the required project design flood is the PMF [Probable Maximum Flood.]³⁵. Numerous areas downstream of Muskrat Falls have been the subject of toxic contamination remediation for the past 15 years, a process undertaken because of the toxic byproducts of Canadian Forces Base Goose Bay (hydrocarbons, heavy metals, chlorinated compounds (PCBs), pesticides (including DDT), etc.)³⁶ and the long-term presence of tank farms. While some of the tanks have been removed, it remains unclear whether the soil beneath and around them has been remediated. Area residents express concern that while some surface areas have been addressed, toxic residues have leached into the soils both in and around the base community, while the Department of National Defence (DND) has not been as transparent as they would hope.³⁷ The latest remediation update from DND indicates that toxic contamination remains subject to cleanup timelines that go beyond 2019 and the scheduled opening of the Muskrat Falls dam.³⁸ Indeed, challenges include “large amount of waste in hard to access areas, with sensitive ecological receptors” and “sites surrounded by wetlands, streams and recreational areas.”³⁹

A catastrophic flash flood from total dam break upstream could, in addition to the concerns of infectious disease outbreak⁴⁰, result in the kinds of toxic contaminant dispersal in the flood zone that is similar to what has been increasingly witnessed globally during and following extreme weather events.⁴¹

Residents of the downstream community Mud Lake already experienced an unprecedented traumatizing flood in 2017 which residents attribute to the inability of Muskrat Fall dam operators to properly control water levels.⁴² Reports that area residents now go to sleep with life preservers under their bed are common.

Human Impacts

Living under the threat of methylmercury poisoning and the potential for catastrophic dam break – in addition to the scars of surviving residential schools and a lopsided colonial relationship with the provincial and federal governments as well as Nalcor – has had significant impacts on the spiritual, emotional, physical, and mental health of the largely Indigenous population living downstream of Muskrat Falls.

In 2018, Jessica Penney, a Nunatsiavut Inuk with family from Rigolet and Happy Valley-Goose Bay, conducted an in-depth health survey as part of a Global Health master’s dissertation to ascertain the extent of those impacts. In addition to finding that research participants “feared for their own health and wellbeing and that of their community in a way they never had before,” they were also “frustrated with the democratic processes that allowed the project to go forward, and felt as though they were experiencing ongoing colonialism.”⁴³

Penney noted that peoples’ conceptions of health and cultural changes “were understood in relation to a changing environment, closely connected to Indigenous conceptions of health and wellbeing.”⁴⁴ The fears around methylmercury, she pointed out, cannot be separated from the food systems and food security of Labrador. Because country foods such as fish, seals, caribou, and whales, are important for social, cultural, psychological, and spiritual reasons, she found, “The idea that what is perceived as one of the healthiest things to consume could now be

³⁴ <https://aptnews.ca/2017/11/29/undrip-not-likely-apply-retroactively-bennett-says-labrador-talking-circle/>, retrieved April 14, 2019

³⁵ <http://www.pub.nf.ca/applications/muskratfalls2011/files/mhi/MHI-Report-VolumeII-Hydrology.pdf>

³⁶ <http://www.forces.gc.ca/en/news/article.page?doc=goose-bay-remediation-project/hnps1ufz>, retrieved April 14, 2019

³⁷ <https://www.trurodaily.com/news/regional/decade-long-court-case-against-dnd-ends-in-labrador-16671/>, retrieved April 14, 2019; see also <https://www.cbc.ca/news/canada/toxins-from-goose-bay-airbase-may-be-spreading-dnd-warns-1.496032>, retrieved April 14, 2019

³⁸ Goose Bay Remediation Project Update, http://neia.org/wp-content/uploads/2013/07/NEIA-presentation15_April_2015.pdf, April 15, 2016; retrieved April 14, 2019

³⁹ *Ibid.*

⁴⁰ <https://www.tandfonline.com/doi/full/10.4161/21505594.2014.975022>, retrieved April 14, 2019

⁴¹ <https://www.cbsnews.com/news/327-toxic-superfund-sites-climate-change-flooding-bulls-eyes-ap/>, retrieved April 14, 2019; see also <https://theconversation.com/after-a-disaster-contaminated-floodwater-can-pose-a-threat-for-months-to-come-84247>, retrieved April 14, 2019

⁴² <https://newsinteractives.cbc.ca/longform/mud-lake-flood-one-year-later>

⁴³ Penney, Jessica, “The safety that was...is gone”: Muskrat Falls and Labrador Land Protectors’ Changing Health and Well-Being, p. 3 (report attached to submission)

⁴⁴ *Ibid.*, p. 3

harmful is almost inconceivable to some people.”⁴⁵

Penney quotes at length the observations of Inuk woman Marjorie Flowers, who spent time locked in a federal penitentiary for being on her own land:

[The MF project] has affected me spiritually and emotionally. And of course the threat of being physically, you know, affected by methylmercury...because my life is on the land. My life is of the water. My life is, you know, country food. I have always believed that [...] the wild food is what sustains us as Inuit people. To live that way for...tens of thousands of years. In this certain niche of living and eating this food. These foods and these birds and these animals. How can we suddenly drop out of that? And not be affected. It's impossible. Our bodies are part of it. We are what we eat. That's a known fact, right?”⁴⁶

In addressing the issue of government and Nalcor ideas of mitigation – that Indigenous people should simply refrain from eating traditional country foods when advisories warn them not to consume – Penney notes “Contamination of food sources is not simply a matter of excluding that animal from one's diet; it interrupts one's sense of self.”

Penney also spoke with downstream residents who revealed that local knowledge discounts Nalcor's assessment that the North Spur can act as a dam. Roberta Benefiel noted, “...Nobody here trusts the North Spur. Nobody here believes that the way they've built this dam is actually safe for the communities living downstream”. Sam Saunders said, “I've seen landslides all along this riverbank, right from down to the mouth of the river, right up to...Churchill Falls [...] When I was trapping one winter [...] I seen a landslide in the winter time. And [it was] not good”.⁴⁷

Similarly, NunatuKavut elder Jim Learning shared that “It's put what was a secure food supply in question. And that's a psychological factor that now you have to overcome. You either ignore it, or try to tone down your expectations of the proteins you're getting from it...That becomes a question. So, yes. That's the impact of that in my world. Changes your perception of the safety that was, is gone.”⁴⁸

While Penney finds that “long-established beliefs and confidence in food sources are changing due to the MF project”, she also concludes “that stress, uncertainty, and psychological impacts of these anticipated negative changes could be harmful in other ways. Stress was a repetitive theme encountered. While speaking about the health impacts of the project, Eldred Davis said: ‘For me, and for most of the people in this community, I'd say, it's mental. It's stress, anxiety [...] I know people are going to bed frightened. I've heard of people getting up 4 o'clock in the morning, who live on Hamilton River Road or Cartwright Road, and they get up and get dressed and they see if the river's rising. [...] I know they're under stress right now.’”⁴⁹

Penney notes that the physical manifestations of that stress may be quite damaging:

There are also believed to be physical effects of stress. Associations have been made between stress and depression, and cardiovascular disease. It may also impact upper respiratory tract infections, asthma, herpes viral infections, autoimmune diseases, and wound healing. Therefore, the stress and fear experienced by LLPs and the community need to be considered as more than just worry, but as having the ability to impact individual and community health...A healthy environment, in which one can partake in cultural and land-based activities, is essential for living a well-balanced lifestyle. This lifestyle is threatened by the Muskrat Falls project...As Marjorie Flowers explained, “We have food as an important pillar of Indigenous life. Country food. [...] And for this to happen with the Muskrat Falls project is...it's like it will be a total obliteration of our culture and our way of life”.⁵⁰

⁴⁵ *Ibid.*, p. 7

⁴⁶ *Ibid.*, p. 7

⁴⁷ *Ibid.*, p. 7

⁴⁸ *Ibid.*, p. 8

⁴⁹ *Ibid.*, p. 8

⁵⁰ *Ibid.*, pp. 8-9

With respect to the failure to properly consult all affected Indigenous people through the minimum UNDRIP standard of free, prior and informed consent, Penney found that “Regardless of explicit intention, it was felt by many participants that the attitude the government has towards them was the same as it has been for many years. Eldred Davis said, ‘... You’re made to feel that you don’t count. That you’re inferior. That’s always been the situation with Labradorians anyway..’ The paternalism associated with prior colonial policies is still present, and despite an appearance change, the MF project may have similar end results as residential schools by leading to a loss of culture, traditions, and intergenerational trauma.”⁵¹

Penney’s conclusions about the danger of the Muskrat Falls-induced stress is instructive:

The concerns raised by [Labrador Land Protectors] in relation to health, particularly mental health, may have significant impacts on community health in Happy Valley Goose Bay, which is of interest to both mainstream health services and Indigenous organizations. Stories about people in the flood zone living in fear and constant stress should be taken into consideration, as depression, anxiety disorders and substance abuse commonly exist alongside stress disorders. Further, stress disorders are associated with increases in death, and are strongly associated with suicide.

The impact of changing lifestyles due to methylmercury contamination leading to changing diets could result in worsening health inequalities, as well as personal and community costs associated with declining health. Food from traditional food systems connects the environment and human health, and forms the basis of social activity, unity, and integration. It follows that if this food is not available, these important social systems will likely suffer, impacting the social conditions that determine health in the wider Labrador region.⁵²

Those concerns are echoed in the words of respected Innu elder Elisabeth Penashue, a long-time opponent of the dam and a leader against other projects that have adversely affected the Innu people. Her February, 2019 letter to the editor of *The Telegram* sums up well the issues we invite the Rapporteur to consider, report on, and make recommendations about, following a visit to this area:

Everything on the ground that is growing, animals that are living on the land and drinking the water, will be killed with the flooding and mercury poisoning. This is what happened when the Churchill Falls dam was put in and now with Muskrat Falls there is going to be more mercury poisoning.

It seems that the government does not think that there is anyone still hunting animals on the land or fishing in the waters.

This is not true. People from Sheshatshiu still hunt and fish. The Elders in Sheshatshiu want to teach the children our culture.

When I am teaching children, I show them the water, the trees, and the animals. However, the government is still going ahead with the Muskrat Falls dam. How am I going to go in the woods with the children to teach them about our culture if so much of the land will be flooded or the animals and fish will have mercury poisoning?

All the tools I use to teach the children will be gone. The children are going to ask me why I cannot teach them. How will I tell the children that we can no longer go to the country because there is no place left to go?

I will be so sad trying to explain. I will be crying. The children are going to be sad as well, because there will be no place to go. How will I explain what happened to the children. How will my grandchildren carry on our traditions with their children?

How can I plan to use the land if the government does not stop ruining the environment? What are the older people going to use to teach the children? There are only a few people left in Sheshatshiu who are my age. We want to teach our culture to the children before we are all gone.

I want to teach my children in the same way that our parents taught us in the country. They taught me everything in our culture and I want to do the same thing and have these traditions pass down from generation to generation. Everything that they taught me is in my heart. Everything has been passed down to me from my ancestors, generation after generation. We need to maintain our traditions.

The Innu are people of the land and rivers. We will not be able to go on the land and rivers if they are contaminated. The Innu are working hard to try to stop what is happening. I know the Innu Nation has signed agreements with the government, but not everybody in Sheshatshiu is happy with this agreement.

⁵¹ *Ibid.*, p. 10

⁵² *Ibid.*, p. 12

Sometimes it seems to me that the government does not realize what it has done to our land and rivers and it seems that the government does not care, because the people in government who are making the decisions do not live off the land. The government is just interested in money and business and does not care our well-being.

We want to keep our life and culture. The elders in Sheshatshiu want to protect the land. I want to save the life on our land. I do not want everything to die. Before in Labrador, everything was clean. What has the government done in Voisey's Bay, Muskrat Falls and Churchill Falls; the government is killing the land.

The elders in Sheshatshiu do not want to see Gull Island developed and the land destroyed. We have already seen the environmental problems that have come with Churchill Falls, Muskrat Falls, and Voisey's Bay. If Gull Island is also damaged, what will be left for our people?

Elizabeth Penashue, Sheshatshiu, N.L.⁵³

Recommendations

The Ontario-Muskrat Solidarity Coalition, in conjunction with the Labrador Land Protectors and Grand River Keeper Inc., recommends that:

- the UN Special Rapporteur on Toxics visit Happy Valley-Goose Bay, Labrador to meet with and hear directly the critical concerns of those Labrador Land Protectors living downstream of Muskrat Falls.
- the Rapporteur find that the impoverished and selective “consultation” employed to justify the project was insufficient, and that even at this stage of near-completion, project proponents must stop the project from proceeding any further until they engage an UNDRIP lens that would allow for the minimum standard of free, prior and informed consent of *all* Indigenous people affected. (This recommendation would be in concert with a similar finding of the Committee on the Elimination of Racial Discrimination at Site C dam in British Columbia: “Immediately suspend all permits and approvals for the construction of the Site C dam. Conduct a full review in collaboration with indigenous peoples of the violations of the right to free, prior and informed consent, of treaty obligations and of international human rights law from the building of this dam and identify alternatives to irreversible destruction of indigenous lands and subsistence, which will be caused by this project).⁵⁴
- while we believe there is no safety guarantee that can be provided by those pursuing the Muskrat Falls project (with respect to methylmercury poisoning and the instability of the North Spur – and that it would be far safer to abandon the project before it does any further harm) – we nonetheless invite the Rapporteur to also consider the rational conclusion that the Muskrat Falls megadam must not go online without an independently-produced, scientifically grounded guarantee that the well-documented risk of methylmercury bioaccumulation in the traditional Indigenous food supply has been either eliminated or mitigated to a degree satisfactory to all those who must live with its consequences.
- at the very least, the government of Newfoundland and Labrador, Nalcor, and the federal government cannot allow the hydro development to go online (including full impoundment of the reservoir) without agreeing to implement the recommendation of the governments’ own Joint Review Panel for the “‘full clearing’ option of the Muskrat Falls reservoir because it would be technically and economically feasible and would not negatively affect the construction schedule.” Failing that, a bare minimum must be following the majority recommendations of the Independent Experts Advisory Committee for “targeted removal of soil and capping of wetlands for the reduction of both the amount and duration of methylmercury production in the Muskrat Falls Reservoir.”⁵⁵
- the Rapporteur join the calls for an independent engineering panel to study the instability of the North Spur (the natural formation largely composed of quick clay which, despite the likelihood of liquefaction under pressure, is being relied upon to hold back the reservoir).

⁵³ Elizabeth Penashue: Development damaging Innu way of life, February 14, 2019, <https://www.thetelegram.com/opinion/letter-to-the-editor/elizabeth-penashue-development-damaging-innu-way-of-life-284384/>, retrieved April 14, 2019; Note: Gull Island represents an additional hydro development that has long been promoted as the next project after Muskrat Falls

⁵⁴ https://tbinternet.ohchr.org/_layouts/treatybodyexternal/Download.aspx?symbolno=CERD/C/CAN/CO/21-23&Lang=En, see recommendation at 20 (e), p. 6

⁵⁵ Reimer, p. 2