Please provide examples of ways in which water pollution, water scarcity and floods are having adverse impacts on human rights. Adversely affected rights could include, among others, the rights to life, health, water and sanitation, food, culture, livelihoods, nondiscrimination, a safe, clean, healthy and sustainable environment, and indigenous peoples' rights.

Indigenous people in Canada confront systemic barriers in accessing clean water for drinking and hygiene. Human Rights Watch confirmed Canada violated its international human rights obligations to Indigenous people by failing to address the water crisis.¹

The Tŝilhqot'in Nation², literally "the people of the river," an Indigenous people making this submission are situated in the state of Canada, and work hard to maintain their ancient connections to their territories including their lands and waters, and have done so since time immemorial. This connection includes ancestral obligations to protect the quantity and quality of water in the territory for generations. The Tŝilhqot'in way of life is dependent on the health and wellness of the waters. The health of the territorial water and the life it sustains are fundamental to their continued preservation of the Tŝilhqot'in people and their way of life (sustenance, fish, swim, carry out our sacred ceremonies, travel and exercise their rights).

LINKAGES BETWEEN WATER AND HUMAN/INDIGENOUS RIGHTS – through the lens of salmon

- Impacts on water are directly connected to human rights for the Tŝilhqot'in Nation in a myriad of interconnected ways, and at various scales. A useful lens to understand this connection is in relationship to salmon.
- The Tŝilhqot'in Nation territory is located in the interior of British Columbia, in the Chilcotin Watershed, a major tributary to the great Fraser River.
- The Fraser River supports the largest wild populations of salmon in the world. Some of the most important wild chinook and sockeye stocks in the world return to the territories of the Tŝilhqot'in Nation to spawn and rear.
- The Tsilhqot'in Nation has stewarded their territories for the protection of these species for millennia and continue to be key leaders in the conservation of these **now-threatened species**.
- Salmon are central to culture and identity of the Tsilhqot'in Nation.
- Human rights connections: Salmon is the primary food source for Tŝilhqot'in people and the health of these populations are directly related to health, food security and livelihoods. The expression of Tŝilhqot'in culture is practiced through the salmon fishery through the teaching of fishing and preparation practices, language, values, and critical social gatherings related to salmon fishing practices, etc. Salmon, that return as adults from the ocean to spawn and die, are a central component of a sustainable and healthy environment, providing nutrients to the headwaters of the Chilcotin watershed and are a critical source of food for iconic (and often threatened) species including the grizzly bear. Salmon that have spawned and died are known to be a foundational element of forest health in the interior forests of British Columbia. The ability for Tŝilhqot'in people to exercise their right to harvest salmon is a central indigenous right, and the significant decline of salmon species and the inability of the Nation to harvest salmon in the last 2 years due to population declines has been an infringement of their harvest right.

¹ Human Rights Watch, June 7, 2016, Make it Safe; Canada's Obligation to End the First Nation's Water Crisis. Online: https://www.hrw.org/report/2016/06/07/make-it-safe/canadas-obligation-end-first-nations-water-crisis ² The http://www.tsilhqotin.ca, for purposes of participating in this submission, is represented by the Tsilhqot'in National Government and is made up of the six Indigenous communities of Tl'etinqox (Anaham), Tŝideldel (Redstone), Yuneŝit'in Government (Stone), Xeni Gwet'in First Nations Government (Nemiah), ?Esdilagh (Alexandria) and Tl'esqox (Toosey).

• Therefore, the decline of salmon (directly related to impacts to the landscape, water and climate change) has direct impacts on the Tŝilhqot'in Nation's human/Indigenous rights.

EXAMPLES OF IMPACTS ON WATER THAT IMPACT RIGHTS (through salmon lens)

- In the Chilcotin Watershed, **forestry/forestry mismanagement** is a primary driver for landscape level effects, and decades of forestry mismanagement has resulted in dramatic impacts on water:
 - Removal of trees (cleared areas), road development and the impacts to riparian habitat have had significant landscape impacts, resulting in significant changes to how the watershed holds water. Extensive logging has resulted primarily in faster, higher spring run-off and longer drought periods.
 - Forestry and silviculture practices have promoted mono-culture planting of trees which
 elevate the susceptibility to forest fire and negatively affect ecosystem and wildlife
 population health. Combined with climate change, the result has been extensive forest
 pest epidemics (e.g. the mountain pine beetle infestation in central British Columbia),
 salvage harvest (exacerbated land clearing) and massive forest fire events.
 - O 2017 saw one of the most extreme fire events in BC history, much of it occurring in Tŝilhqot'in Territory and overall burning 1.2 million hectares of land, costing \$568 million to suppress, and requiring 65,000 people to evacuate.³ Many animals died, and many more continued to be impacted afterwards due to burnt ecosystems, loss of food and changes to riparian areas. Since then, the fires have also resulted in extreme flooding events with impacts on various scales impacting both the watershed (habitat instability, erosion/sedimentation and other water quality impacts, fish passage issues) on the local scale and on the larger Fraser River scale.
 - Two examples of how forestry practices and wildfire have impacted water include:
 - The Little Chilcotin Watershed logging impacts has resulted in changes to the hydrograph that has directly impacted the ability of salmon to return to the natal grounds;
 - Major spring flooding in the Chilcotin has contributed to very high spring run off in the Fraser Mainstem and the critical blockage of salmon species migrating up the Fraser River.
 - 2019 and 2020 saw significant passage issues for Upper Fraser salmon species due to the Big Bar landslide. Flooding from the Chilcotin Watershed resulted in significantly high water levels in the Fraser River that exacerbated passage issues and resulted in a period where no salmon species could pass that Big Bar site. This is a key example of how changes to the hydrograph have significant impacts on salmon species on different scales.
 - Forestry impacts in conjunction with climate change have also had significant impacts on:
 - Habitat quality/stability (due to change in the hydrograph)
 - Disruption to healthy aquatic ecosystems and life history processes due to changes in the hydrograph, i.e. changes to water levels are impacting salmon, causing shifts in ecosystem structure, predation patterns, and invasive species.
- **Agriculture impacts** on the Fraser River, including the Chilcotin watershed, has significant implications for water flows, water quality and habitat health. The dominant agricultural model is ranching (haying, grazing), and cattle can be highly disruptive to riparian habitat (stomping on habitat, creating erosion, contaminating drinking water sources and fish habitat), adding nutrients

³ Verhaeghe, C., Feltes E., and Stacey, J. 2019. NAGWEDIŹK'AN GWANEŚ GANGU CH'INIDŹED GANEXWILAGH (The Fires Awakened Us): Tŝilhqot'in Report. Available at: https://www.fness.bc.ca/downloads/the-fires-awakened-us.pdf.

- directly to small systems that are critical fish habitat. Cattle ranches draw an enormous amount of water from the Chilcotin River watershed. The Chilcotin watershed relies heavily on mountain run-off/snowmelt, and climate change impacts (changes to glaciers, run-off patterns) will increasingly exacerbate surface water access and flow issues.
- Mining activity includes the controversial discharge of tailings effluent from the Gibraltar Mine into the Fraser River mainstem, resulting in cumulative habitat degradation for iconic migratory salmon species and threatened white sturgeon. Other, smaller and abandoned mines including the Taylor Windfall Mine (Upper Taseko River watershed) and Pellaire Mine (Falls River watershed) that continue to have water quality impacts in critical spawning habitat for multiple salmon species (e.g. acid rock drainage). British Columbia's mining laws permit such discharge, or are ill equipped to enforce pollution rules in cases where the mining activity occurred many decades ago.

2. How has climate change exacerbated water-related problems?

Key water related problems in the Chilcotin are related to landscape level impacts (forestry) that have fundamentally changed how water is held in the watershed, resulting in flashier freshets and longer drought periods. With climate change, the consequences have been significantly exacerbated.

- Forestry mismanagement (the scale of deforestation and the mono-culture planting of trees) plus climate change resulted in devastating mountain pine-beetle infestations and tree death throughout the region.
 - Salvage harvesting of dying trees resulted in accelerated land clearing, further contributing to erosion and impacts to the hydrograph
 - O Longer drought periods related to the inability of the watershed to retain water, plus climate change has led to increased forest fire risk, and in 2017 the Chilcotin experienced devastating and unprecedented forest fires, which were some of the most extreme in BC history. The forest fire impacts (and complete forest loss) have further contributed to flooding, erosion, water pollution and overall impacts to the hydrograph.
- Salmon that return to the Chilcotin watershed have long migration routes from the ocean back to their natal spawning grounds. Salmon are subject to numerous pressures, and **increasing water temperatures in the mainstem of the Fraser due to climate change** have been a driving cause of in-river mortality for returning stocks, further diminishing the ability for Tŝilhqot'in Nation members to harvest salmon and exercise their harvest right.

• Habitat/ecological sustainability:

- Climate change and water warming in the Chilcotin watershed itself is believed to have had impacts on habitat health/sustainability, with disruptions to ecosystem composition (invasive species), changes in food web structures (higher abundance of fish species that are predatory on salmon eggs/salmon babies such as white fish and crayfish), and changes to predation on salmon has been flagged as a high concern with Tŝilhqot'in members, but not well understood to-date.
- O Given that Fraser Chinook populations have declined dramatically in recent years and are of high conservation concern and sockeye have returned at record low numbers in the last two years, climate change impacts to food web and life cycles are significant for specific populations on which the Tŝilhqot'in Nation depends.

• Water Sources

The water cycle in Tŝilhqot'in Territory is primarily driven by snow melt and glacier-fed lakes and rivers, in particular Chilko Lake and Taseko Lake. The glaciers are actively and quickly receding, and there are significant risks associated with the loss of these glaciers

- and impacts to having adequate sources of water to support humans and other species, and the ecosystem more generally.
- Changing winters have also resulted in not only receding glaciers but also warmer, shorter winters and reduced snowpack, which results in flash flooding (exacerbated by forestry practices), but also drought and elevated fire risk in the summer. The cumulative effect of receding glaciers, reduced snowpack and industrial practices on the landscape are a serious threat to water quantity and quality in Tŝilhqot'in Territory.
- 3. Include Instruments that refer directly to the right to a healthy environment and/or the rights to clean water and adequate sanitation.

The Tsilhqot'in Nation exercise their right to govern and act as stewards in the use and the management of waters in their territory. As such, they rely on their age old laws to continue to guide their approach to managing water, and to guide how to advocate for recognition and protection of their territorial waters. They rely on a myriad of instruments to safeguard their waters, for example including:

Nemiah Declaration

The Xeni Gwet'in, on behalf of the Tŝilhqot'in Nation, publicized their laws governing the territorial resources within their community ("caretaker") area by enacting the *Nemiah Declaration* that prohibits mining and commercial logging, stops commercial road building and requires visitors to get permission before entering the land as a response to extractive industries' severe adverse impact on the watersheds. This declaration is intended to protect the integrity of the waters the Tŝilhqot'in Nation and safeguard their waters. Specifically, the declaration states:

Let it be known that: Within the Nemiah Aboriginal Wilderness Preserve:

- 1. There shall be no commercial logging. Only local cutting of trees for our own needs. i.e. firewood, housing, fencing, native uses, etc.
- 2. There shall be no mining or mining explorations.
- 3. There shall be no commercial road building.
- 4. All terrain vehicles and skidoos shall only be permitted for trapping purposes.
- 5. There shall be no flooding or dam construction on Chilko, Taseko, and Tatlayoko Lakes.
- 6. This is the spiritual and economic homeland of our people. We will continue in perpetuity: a. To have and exercise our traditional rights of hunting, fishing, trapping, gathering, and natural resources; b. To carry on our traditional ranching way of life; c. To practice our traditional native medicine, religion, sacred, and spiritual ways.
- 7. That we are prepared to SHARE our Nemiah Aboriginal Wilderness Preserve with non-natives in the following ways: a. With our permission visitors may come and view and photograph our beautiful land; b. We will issue permits, subject to our conservation rules, for hunting and fishing within our Preserve; c. The respectful use of our Preserve by canoeists, hikers, light campers, and other visitors is encouraged subject to our system of permits.
- 8. We are prepared to enforce and defend our Aboriginal rights in any way we are able.

?Elhdaqox Dechen Ts'edilhtan (?Esdilagh Sturgeon [Fraser] River Law)

The Tŝilhqot'in Nation recently adopted the *?Elhdaqox Dechen Ts'edilhtan (?Esdilagh Sturgeon* [Fraser] *River Law)*⁴ with the objective of remediating and protecting a key watershed the Tŝilhqot'in Nation, and many other Indigenous people, rely on for sustenance. This law is based on age old laws of the Tŝilhqot'in people. A few of the provisions of the law include:

⁴ ?Elhdaqox Dechen Ts'edilhtan (?Esdilagh Sturgeon River Law) was adopted by the ?Esdilagh First Nation Chief and Council on May 27, 2020, and endorsed by the Tŝilhqot'in Council of Chiefs on May 28, 2020.

Purpose

- 1. The ?Esdilagh of the Tŝilhqot'in Nation have rights and responsibilities as caretakers of ?Elhdaqox to ensure that ?Elhdaqox provides for the entire Tŝilhqot'in Nation and is protected for this generation and the generations to come.
- 2. The purpose of this Law is to ensure *?Elhdaqox* is managed and protected in accordance with Tŝilhqot'in *dechen ts'edilhtan* [laws] to ensure *?Elhdaqox* is healthy.

Tŝilhqot'in Rights to ?Elhdaqox

- 6. Tŝilhqot'in people have a right to:
 - (a) clean tu [water] from ?Elhdagox; and,
 - (b) use and access *tu* [water] from *?Elhdaqox* for basic human needs, social, economic and cultural purposes, and the exercise of our Aboriginal rights; and,
 - (c) ?Elhdaqox for safe and unhindered navigation.
- 7. Tŝilhqot'in people have a right to Free Prior Informed Consent on all uses, projects, or proposed projects that may affect or impact *?Elhdaqox* and/or our Aboriginal rights that depend on.
- 8. Tŝilhqot'in people have a right to participate in decisions on the planning, and management of ?Elhdaqox. This right, with respect to the ?Esdilagh Caretaker Area, may be made operational through engagement with the ?Esdilagh Government utilizing the principles of FPIC.

Nulh Ghah Dechen Ts'edilhtan (Tŝilhqot'in Nation Wildlife Law)

The Tŝilhqot'in Nation enacted their *Wildlife Law* as a means of protecting the lands, waters and animals that sustain them. This law was created as an emergency response to the grave low numbers of animals in the territory due to loss of critical habitat including clean, available waters. This loss of habitat has escalated to a severe hardship of food security for the Tŝilhqot'in people. The loss of safe, sufficient water has deep adverse impact on the Tŝilhqot'in people further augmenting their poverty and food insecurity.

The purpose of the Tŝilhqot'in Nation Wildlife Law (Nulh Ghah Dechen Ts'edilhtan)⁵ is to protect the territory for generations to come, it states:

1. The purpose of this *Nulh ghah Dechen Ts'edilhtan* is to ensure the nen and wildlife upon it are managed and protected according to Tŝilhqot'in values and teachings, to make sure our nen [territory] provides for our generation and generations to come.

Conclusion

The Tŝilhqot'in Nation continues to face threats to its Indigenous and human rights to access clean water, and this is being made worse by climate change. A key barrier and reason for the lack of access to the full expression of the Nation's rights is the denial by settler governments about the role of Indigenous governments and a lack of respect for proven and responsible Indigenous management approaches for water. Today, the diminished and polluted water systems in Tŝilhqot'in Territory is resulting in the loss of critical fisheries, dire food insecurity and poor human health. Indigenous peoples experience these issues at rates like no other Canadian. The Tŝilhqot'in Nation is working to respond to 150+ years of denial by actively sharing and enforcing their age old laws that provided formidable protection to the environment, waters and human health in the past. The UN Rapporteur could highlight the work of the Tŝilhqot'in Nation, and emphasize the importance of the role of Indigenous Peoples' and their values to guide our collective work to better protect water, including as it is expressed through domestic and international laws, policies and treaties. Sechanalyagh (thank you) for this opportunity.

⁵ Tŝilhqot'in Nation Wildlife Law (Nulh Ghah Dechen Ts'edilhtan), came into force on August 23, 2019.