ASSESSMENT of the CANADIAN NUCLEAR LABORATORIES NEAR SURFACE DISPOSAL FACILITY and LEGACY CONTAMINATION of ALGONQUIN AKI SIBI.

Submission by
Kebaowek
First Nation
and
Kitigan Zibi
Anishinabeg
INTRODUCTION

Our inherent understanding is that women are keepers of the waters, men are keepers of the fire. Why are women keepers of the water is because we bring in the next generation, that when you are about to give birth it’s the breaking of the water to bring in new life, and the most sacred of all things is new life. So part of our water teachings is also, yes, the care taking of the water, but the understanding that the rivers and streams are like the veins of Mother Earth and Father Sky”

(Verna McGregor Kitigan Zibi Transcript of June 2, 2022 NSDF public hearing, p. 80)

“It’s a betrayal of a series of sacred trusts, Anishinaabe aki was not created for business profit. Our Nation was not built to turn the [Kichi Sibi], our great river, into a self-storage unit for nuclear waste” (Councillor Verna Polson, Kebsawek First Nation Transcript of June 2, 2022 NSDF public hearing, p. 133).

Algonquin-Anishinabeg Nations have deep ecological and spiritual connections to the Kichi Sibi (Great River) and all its tributaries, with rich histories and knowledge systems that have grown and evolved over time. We have lived with and traveled the watershed since time immemorial. We understand that our life and sustenance draw from Aki (earth) and Sibi (the river). Our symbiotic relationship with earth and water are sacred responsibilities entrusted to us by the moral and legal authority of our ancestor’s teachings including our language, culture, and territorial practices.

This document is a glimpse into a broader, ongoing movement to affirm Algonquin-Anishinabeg as title holders of the land with inherent rights to govern and protect the Kichi Sibi watershed. It reflects how, since time immemorial, our Peoples have been keepers of the Kichi Sibi watershed. We maintain our responsibilities to our ancestors and think ahead and take action for the next seven generations—to care for livelihood, health, security, cultural identity, territoriality, and biodiversity.

The Algonquin Nations of today live in a changed world that is radically different from the memories and teachings shared by our ancestors, but there is persistence, continuity, and endurance in our most fundamental dealings: our cultural protocols, legal relationships, and our responsibilities to the land and to our future generations. The information shared in our environmental assessment documents builds from a body of knowledge and research compiled and led by Algonquin communities. The People continue to stand for their rights and responsibilities and in defense of land, water, animals, and relationships that were given to Anishinabeg to care for, in perpetuity, which they have done for generations.

We believe our people and the land are one and that we must protect our resources from nuclear exploitation and degradation. Not only does our Aki Sibi provide spiritual solace and creative inspiration, but it also provides fish to eat, moose to hunt, and plants that can be used as food and medicine. We understand people need electricity and other benefits from nuclear energy but we remain opposed to the local and permanent impacts of nuclear waste disposal and storage on our sacred Aki Sibi.
Indigenous-led research is an important and non-negotiable element of an environmental assessment. Interpretation of facts, data, and stories require the lens of Indigenous expertise and analysis including historical and cultural memory.

For example, while common narratives about ‘nomadic’ Indigenous societies that had no concept of land ownership persist, Algonquin-Anishinabeg research and community knowledge indicates that the societies had an intricate and legible system of land tenure. Legal systems include protocols for guests and visitors, management and control of resources, and selective restrictions for access. Per extensive legal research and land claims material submitted by Kitigan Zibi Anishinabeg and other statement of asserted rights communities like Kebaowek, Algonquin-Anishinabeg maintained rigorous, defined patterns of control, possession, and management of territories for specific reasons. As outlined in Chris Printup’s 2011 research:

“The Anishinabeg clearly hold and understand concepts of property ownership in relation to our lands and we have exercised decisions and actions based upon our form of title since time immemorial. In actuality, we place a very high value on the principles of ownership, title, territoriality and access to resources.”

“The British Crown and its successor Crown in Right of Canada have consistently failed to abide by the promises made in the Treaties of Swegatchy, Niagara, and the Royal Proclamation. Once again the descendants of the Algonquin and Nipissing of Lake of Two Mountains, as now represented by the Kitigan Zibi Anishinabeg call for justice, fair and equitable treatment in accordance with their treaty and constitutional rights.”
Our Peoples were known as the Omamiwininiwag (travelers of the river) or Anishinabeg (the original People). Our stories of Creation connect us to the watershed, to other Nations, and to our animal, plant, bird, fish, and spiritual relations. We carry a deep history and retain land title to our traditional territories. We consistently stand up to assert our ongoing responsibilities to care for the land, water, animals, medicines, and future generations that live along the Kichi Sibi (Ottawa River).

The Algonquin Nation

Today, the Omamiwininiwag are often referred to as the Algonquin Nation, which is made up of eleven distinct communities recognized as Indian Act bands. Since time immemorial, the Anishinabeg have occupied a territory whose heartland is Kichi Sibi.

At present, there are eleven federally recognized Algonquin First Nations, with a total population of approximately 8-10,000. Nine of these Algonquin Nations are located in Quebec and two in Ontario. Proceeding from northwest to southeast, these are the Abitibiwinni, Timiskaming, Kebaowek, Wolf Lake, Long Point (Winneway), Kitcisakik (Grand Lac), Lac Simon, Mitcikinabik Inik (Algonquins of Barriere Lake) and Kitigan Zibi (River Desert). In Ontario, members of the Algonquins of Pikwakanagan (at Golden Lake) and Wagoshig (Lake Abitibi) make up the only recognized Algonquin communities.

It is important to indicate that all of the Algonquin communities all have a potential title, interest, and inherent rights throughout the watershed, irrespective of the boundaries imposed by the reserve system, provinces, the Indian Act, and historically drawn by newcomers to the land (Crown and Canadian representatives and governments).

Only Kebaowek and Kitigan Zibi First Nations were afforded additional time for consultation and engagement activities for the environmental assessment hearing before the CSC. This is despite numerous other Algonquin First Nations seeking the time. All Algonquin First Nations seeking consultation should have been included in the procedural order issued in 2022, and even before that - consulted appropriately, as is constitutionally required - before the project began.

Note: in recent years, there are other organizations and corporations who have formed alliances with settler governance institutions to stake land and identity claims across our territory, self-identifying as Algonquin people. One such organization is the “Algonquins of Ontario.” For their part, Kitigan Zibi Anishinabeg has made clear their position:

“I believe as First Nation people we must preserve and protect anything and everything on the land and on the waters. No matter where it is located or the distance. If its our traditional territory we must do our best to protect it for future generations.” KFN member

“...and that it does not recognize AOO as an ‘Indigenous Organization’ or otherwise. KZA does not accept or acknowledge any claims to Aboriginal or treaty rights made by AOO or recognize it as an entity entitled to the constitutional Duty To Consult and Accommodate in any decision-making on Algonquin Anishinabeg lands. It is KZA’s position that AOO is a legal and policy creation designed to overtake our own Indigenous community engagement. Neither KZA nor Algonquin Nation divides itself between Ontario and Quebec.”

Additionally, the connections between communities have been strained and exacerbated by territorial separation, further divided by colonialist fragmentation of territory and families which was a key goal of the Indian Act and related legislation. Nevertheless, Algonquin Nations and people continue to grow in resilience and responsiveness to the ongoing harms of colonially imposed governance and land-based practices including the desecration of water, animals, fish, birds, medicines, and plants.
This document is an informational journey into our connections and belonging to the unceded lands of the Ottawa River watershed where the Near Surface Disposal Facility is being proposed.

In the following pages, Kabaowek and Kitigan Zibi First Nations share details about an Algonquin-led intervention to the established Environmental Assessment process developed by Canadian federal agencies.

To Anishinabeg, fire and water are sacred elements. Nuclear power began in secrecy in 1944 along the shores of the Kichi Sibi on Algonquin Anishinabeg sacred grounds Point au Baptheme directly across from Migizi kiishkaabikaan also known as Oiseau Rock. This sacred site is also home to “man who turned to stone.”

A Near Surface Disposal Facility (NSDF) is proposed by the Canadian Nuclear Laboratories, which requires that the proponent Canadian Nuclear Laboratories (CNL) remove a mountainside along the Kichi Sìbì very close to the water. This excavation would receive and store over a million cubic meters of legacy nuclear waste which in our Indigenous-led assessment has a direct impact on water quality, livability for animals and plants, and other species in the watershed. In the following pages, we will describe how this mountain is sacred to our people and meaningful to our animal relations. Any discussion of the NSDF must start with a deep understanding of the Algonquin Anishinabeg worldview and how the health of the Kichi Sibi watershed is culturally and ecologically crucial to all communities.

**KEY EVENTS: A Short Timeline**

**June 2022**

At the public licensing hearing for the NSDF project, Kebaowek and Kitigan Zibi First Nations intervened and submitted that we were not adequately consulted regarding our rights and interests in the watershed. Kebaowek asked the Commission to wait for one year before making their licensing decision, to allow meaningful consultation to occur.

**July 2022**

The Commission issued a Procedural Direction to leave their record open until January 31, 2023. The Commission stated it was providing additional time to receive further evidence regarding consultative efforts respecting the NSDF and/or for more engagement and consultation to occur between CNSC staff and Kebaowek First Nation (“KFN”) and Kitigan Zibi Anishinabeg First Nation (“KZA”).

**December 2022**

KFN wrote a letter to the Commission requesting an extension of the Procedural Direction deadline to May 01, 2023, stating the assigned time-frame to collect the information necessary to inform a Rights Impact Assessment was unrealistic. With the support of Kitigan Zibi, Atomic Energy Canada Limited (AECL), and CNL, the Commission granted the extension on December 22, 2022.

**June 06, 2023**

In the Matter of Canadian Nuclear Laboratories Application to amend the Nuclear Research and Test Establishment Operating Licence for the Chalk River Laboratories site to authorize the construction of a Near Surface Disposal Facility. Kebaowek First Nation and Kitigan Zibi Anishinabeg First Nation make their final submission pursuant to the Revised Notice of Public Hearing and Procedural Guidance for Final Submissions (Rev. 2), dated May 17, 2023. A public hearing will be held August 10, 2023.

**Respecting and Protecting the Sacred**

“Anishnaabeg recognize lands as sacred by virtue of the presence of other spiritual beings (Manitous). Western definitions of divinity do not apply to these spirits. Their existence is not ethereal. Their existence is closely connected to the Anishnaabeg’s worldly existence and is associated with particular places and seasons.” (Johnston, 2008).

**Mother Bear in the proposed NSDF footprint**

**Thunderbird Fusion at Man Turned to Stone (by Jeremy Dumont and Collage Creative)**
As part of this required consultation process, and in accordance with the Procedural Direction, Canadian Nuclear Safety Commission (CNSC) staff and Kitigan Zibi Anishinabeg, and Kebaowek First Nation worked together on a Rights Impact Assessment (RIA).

The RIA documents were completed with CNSC staff and presented information to:

a) Confirm the Kebaowek and Kitigan Zibi First Nations ongoing exercise of Section 35 rights and responsibilities at the Chalk River Complex;

b) Provide examples of where members continue to exercise their rights to fish and undertake cultural practices;

c) Confirm the ongoing and crucial role of animal kinship and stewardship within the inherent rights, culture, and way of life of Kebaowek members;

d) Exhibit the important cultural connection of Kebaowek to the Kichi Sibi (Ottawa River) watershed, and specifically the lands and waters surrounding Oiseau Rock including the Chalk River Complex;

e) Document community member observations and context on the challenges, constraints, and barriers they faced in attempting to carry out on-the-ground baseline ecological evaluation at the proposed NSDF project area to articulate how the project threatens local wildlife and the exercise Kebaowek First Nation rights, responsibilities, interests, and needs;

f) Document community views and perspectives on the contamination ramifications and consequences of siting, constructing, and operating the NSDF on Algonquin unceded lands and waters next to the Ottawa River;

g) Present the above information sets to the regulator Canadian Nuclear Safety Commission and the general public to support enhanced Crown consultation with respect to direct, indirect, and cumulative impacts on Kebaowek and Kitigan Zibi community rights and culture arising from the NSDF Project, and

h) Act as an important source of information for Crown officials to take into account and respect Kebaowek and Kitigan Zibi’s Section 35 rights, responsibilities, decision-making, and jurisdiction within the Kichi Sibi (Ottawa River).

“ ‘It’s difficult to practice something like my traditional ways, knowing that I am walking on soil that is poison. How can we feel sacred knowing that our walk there is not in balance or harmony. It would be just not in my destiny.’ ” – KFN Member
The nuclearization of a very large area of Algonquin territory started over seventy years ago with the construction of Chalk River Laboratories on the Kichi Sibi across from Oisseau Rock near the lumbering town of Chalk River.

The site is owned by the Canadian Nuclear Laboratories (CNL), a subsidiary of Atomic Energy of Canada Limited (AECL, a federal Crown Corporation), and operated under contract by the Canadian National Energy Alliance, a private-sector consortium led by SNC-Lavalin. The CNL site is on unceded Algonquin territory.

Since 1944, CNL has been a major research and development site to advance nuclear technology. CNL has expertise in physics, metallurgy, chemistry, biology, and engineering, and hosts unique research facilities. Until the shutdown of its nuclear reactor in 2018, CNL produced a large share of the world’s supply of medical radioisotopes.

On August 6, 1945, the Hon. C.D. Howe, then Minister of Munitions and fishing, announced that “Canadian institutions played an intimate part and have been associated in an effective way with this great scientific development.” This comment was in reference to the dropping of the atomic bomb on Hiroshima, which had just happened.

The environmental assessment for their proposal commenced under the Canadian Environmental Assessment Act 2012.

The purpose of the facility is to permanently dispose of solid radioactive and non-radioactive legacy waste from the Chalk River facility and other CNL sites in an engineered waste disposal facility. CNL’s proposal is subject to both an environmental assessment (EA) and licensing assessment by the Canadian Nuclear Safety Commission (CNSC).

The seclusion area at Chalk River was never ceded by the Anishinabeg people, nor was it subject to a consultation. KZA and KFN have never provided their free, prior and informed consent to thrive development. It is instead the results of dispossession and restricting Indigenous peoples’ access to their own territory.

A project area was fenced to exclude KZA and KFN members, but today the NSDF site, if licensed, would further impact our access due to the radioactive levels being hazardous to human and animal health. Our membership’s concern about encountering contaminated land, water, plants, and animals on their traditional territory prevents them from going anywhere near those lands and waterways. Hence, the very existence of the NSDF infringes and restricts their rights and ability to access and enjoy land and waters well beyond the NSDF and Chalk River Laboratories site.

In 2016, Canadian Nuclear Laboratories (CNL) applied to construct a Near Surface Disposal Facility (NSDF) at the Chalk River Laboratories (CRL) site in Chalk River, Ontario. The environmental assessment for their proposal commenced under the Canadian Environmental Assessment Act 2012.

The purpose of the facility is to permanently dispose of solid radioactive and non-radioactive legacy waste from the Chalk River facility and other CNL sites in an engineered waste disposal facility. CNL’s proposal is subject to both an environmental assessment (EA) and licensing assessment by the Canadian Nuclear Safety Commission (CNSC).

The seclusion area at Chalk River was never ceded by the Anishinabeg people, nor was it subject to a consultation. KZA and KFN have never provided their free, prior and informed consent to thrive development. It is instead the results of dispossession and restricting Indigenous peoples’ access to their own territory.

The United Nations Declaration on the Rights of Indigenous Peoples (UNDPRP) addresses our expectations in this process. Article 27 says that states shall: Establish a fair, independent, impartial, open, and transparent process, giving due recognition to indigenous peoples’ laws, traditions, customs, and land tenure systems, to recognize and adjudicate the rights of indigenous peoples pertaining to their lands, territories, and resources, including those which were traditionally owned or otherwise occupied or used. As well, Article 29.2 says: Storage or disposal of hazardous materials States shall take effective measures to ensure that no storage or disposal of hazardous materials shall take place in the lands or territories of indigenous peoples without their free, prior and informed consent.

In this case, there does not appear to be a willing host for the NSDF. The NSDF is within the Algonquins of Pikwàkanagàn First Nation’s (“Pikwàkanagàn”) unceded traditional territory. As of their May 19, 2022 submission, Pikwàkanagàn had not made an official decision of “Free, Prior, and Informed Consent” regarding the NSDF. They stated they did “not see enough Project revisions, commitments, and conditions in place to offset” their concerns.

As two neighbouring communities to Pikwàkanagàn and Wolf Lake, with territory very near to the proposed NSDF footprint, we are not willing hosts at this time (for all the reasons outlined above). The lack of a willing host for the NSDF should be a sufficient basis to deny this project from moving forward.

Construction Concerns

It is our understanding from the Environmental Impact Statement that was shared in the NSDF proposal that the site will require specific forms of construction that we deem unsafe and concerning. The proponent (NSDF) has begun arrangements to secure a contractor for several activities, and we list them below as concerning and in need of review and analysis by our own experts.

• Vegetation clearing (e.g., removal of trees)
• Mobilization of necessary construction equipment
• Completing large-scale earth moving activities (e.g., excavation, blasting, hauling of materials, and grading)
• Permanent changes to geology, destroying a sacred mountain used by numerous bears denning
• Potential death of wildlife including fish from pressure and vibrational changes that result from blasting and noise
• Storage and use of blasted rock may result in metal leaching and acid rock drainage
• Blasting residuals and metals may be released during construction of the ECM and surface water drainage features through the SSA may cause changes to soil quality. Use of explosives during the construction phase of the NSDF Project could cause changes in soil quality
• Explosives have the potential to release nitrogen residual substances (e.g., ammonium nitrate/fuel oil)
Our lands and waters are part of Anishinabeg Aki, a vast territory surrounding the Great Lakes and across major parts of North America. The People retain oral history, traditional knowledge, language, place names, and archaeological and land-based evidence supported by cultural and spiritual traditions.

The knowledge maintained by families and communities carries history to demonstrate “wide trade and communication networks that existed up to 6,000 years ago, enabled by the Ottawa River and its tributaries.” Algonquin-Anishinabeg know that they have always lived in this area since time immemorial and can trace our ancestry and cultural knowledge to prior eras of time, intimately connecting past and current generations to the landscape and to geological events and historical periods. Our people have culturally distinct knowledge systems to assess environmental change and carry knowledge about the formation of the territory itself. We continually adapt our occupation and use of resources to support sustainability and ethical harvesting with all our relations (plants, water, animals, and other life forms on the territory).

Our history on the land is stored in the physical landscape through our ancestral burial and other sacred sites, along with our traditional knowledge, language, and cultural teachings, such as our ancestor’s stories of Wisakedjik (also called Nanabush). Our documented history ties us to the time of the Giant Beaver (approximately 10-12,000 years ago), through sacred stories which share details on how the Great River Kichi Sibi was formed.

Archaeologist, Clyde Kennedy excavated the sites of the nearby Algonquin Anishinabeg stronghold of Morrison Island (MN-6) and Ile aux Allumettes (AL-1) between 1960 and 1963. Artifacts from the ile aux Allumettes site, and Morrison Island numbered in the tens of thousands. Kennedy brought to light astonishingly rich and well-defined collections including copper artifacts from the Great Lakes area in the middle Ottawa Valley. These are material clues that indicate broad social networks and trade processes that took place between Great Lakes Anishinabeg and Omàmìwininiwag around 6500-5500. The campsites indicated repeated use by small Algonquin family groups during several weeks, several years in a row, in late summer or early summer before leaving for their territory winter inland.

The Omàmìwininiwag would bury their departed along the waterways – most notably along our main artery, the Kichi Sibi. Many burial sites have been found throughout the years along the Kichi Sibi, including recent archaeological finds near Lac Leamy in Gatineau and at Parliament Hill during the renovation of the Centre Block. Sadly, it has historically been common practice at construction sites to overlook the discovery of ancestral remains. Remains were often wrapped in birch bark along with special offerings including red ochre as documented on nearby Morrison and Allumette Islands. Indeed, knowing that the Anishinabeg have been in the area since time immemorial and buried their ancestors along waterways, Pointe au Baptheme and Allumette Islands. Lands. Indeed, knowing that the Anishinabeg have been in the area since time immemorial and buried their ancestors along waterways, Pointe au Baptheme and Allumette Islands. Moreover, it is important to note that the Anishinabeg have always lived in this area since time immemorial and have a deep connection to the land and its waterways. We continue to adapt our occupation and use of resources to support sustainability and ethical harvesting with all our relations (plants, water, animals, and other life forms on the territory).

Our history, spirituality, and cultural traditions are written on the land and embedded in the landscape. Across from the Chalk River Laboratories site, 150 meters above the Kichi Sibi, there is a rock face known by some communities as Kinew Kiishkaabikaan, Migizi Kiishkaabikaan, or “Oiseau Rock”. This was the first site where sacred ceremonial offerings were witnessed in Canada by De Troyes expedition in 1686. Algonquin leadership, families, and individuals would gather here to make sema (tobacco) and food offerings. Here, they conducted ceremonies and carried out land-based responsibilities to the site, the Spirits, and the lands and waters. Migizi Kiishkaabikaan contains ancient pictographs inscribed, which sadly have been defaced in recent decades as part of the erasure of Omàmìwininiwag presence and the lack of education about their significance.

It must be mentioned that through colonization one of the processes of assimilation was the outlawing of gatherings, ceremony, and access to sacred sites such as Migizi Kiishkaabikaan. It was only in 2001 that a reconnection ceremony was done at this site. Even at that time, there were concerns about attending the site due to concerns about its proximity to the Chalk River Laboratories site.

Another meaningful feature showing the historical, cultural, and spiritual importance of the Chalk River Laboratories and NSDF sites is Pointe au Baptheme. It is across the river from, and slightly west of Migizi Kiishkaabikaan, just next to the outlet of Perch Creek, the same creek into which the Chalk River Laboratories and the potential NSDF site. Regardless of whatever proposed mitigation measures might be implemented for the NSDF, if approved, the NSDF site will remain a hazardous nuclear site closed to our access for centuries. KZA and KFN will have lost another part of their sacred lands and a meaningful one as well. An indefinite extension of an existing impact—denied access—is a significant impact in itself.

Denied Access

These are still concerns today that KZA and KFN wish to highlight in this submission: it is of particular significance and great sorrow to KZA and KFN that the Migizi Kiishkaabikaan and Point au Baptheme site access is still today hindered by its proximity to Chalk River Laboratories and the potential NSDF site. Regardless of whatever proposed mitigation measures might be implemented for the NSDF, if approved, the NSDF site will remain a hazardous nuclear site closed to our access for centuries. KZA and KFN will have lost another part of their sacred lands and a meaningful one as well. An indefinite extension of an existing impact—denied access—is a significant impact in itself.
Over two million people live in the Kichi Sibi watershed, a region that is renowned for its natural, economic, cultural, and heritage values. We realize that protecting the Kichi Sibi watershed requires collaboration amongst many organizations and individuals that span two provinces. We recognize that the river provides drinking water to millions of people in both provinces. We support the interventions of all communities and organizations opposing the NSDF project for this reason. Water is sacred. The watershed is also under pressure from a variety of stressors, including population growth, nuclear waste production, and climate change. The Kichi Sibi watershed has been home to our Algonquin communities for countless generations.

In 2016, the heritage significance of the Ottawa River was celebrated through the recognition of the Ontario portion of the river as a Canadian Heritage River, followed by the recognition of the Quebec portion of the river as a historical site by the province of Quebec in 2017.

KFN and KZ concerns with the NSDF project derive not only from our broad concerns around the health of the environment, but also because many of the animals we harvest on our traditional territory are migratory. Impacts to animals in and around the Chalk River Laboratories site can have far reaching impacts. For example, a migratory bird or a moose who drinks contaminated water or consumes contaminated cattail roots in Perch Lake could easily be hunted and consumed by our membership a short time later.

HUMAN HEALTH

Physical
One of the primary reasons KZA has extremely heightened concerns about the impacts of the NSDF stems from our historic and ongoing exposure to unsafe levels of uranium and radium within our drinking water. Studies have demonstrated that certain parameters of renal function show abnormalities when exposed to uranium. Human health from an Anishnabe perspective has multiple dimensions: physical, emotional, mental, spiritual. Radiation contamination is a source of fear and established harm for our communities in the following ways.

Emotional
Beyond physical harm, changes in the living environment resulting from a nuclear incident have an adverse impact on psychological health of exposed individuals, such as clinical and sub clinical depression, anxiety and post traumatic stress disorder. Low-dose radiation can also cause epigenetic alterations and trans-generational effects, associated with reproductive impairment. These are the realities that our membership lives with on a daily basis.

Mental
In light of the interaction of co-morbidities resulting from this underlying factor, the health risks associated with radiation could have a more significant impact for KZA than in the general population. When considering the impacts a nuclear incident can have on mental health, this cannot be done in a vacuum. Indeed, it is essential that these risks be assessed in light of the psychological and physical harm colonization continues to cause upon Indigenous peoples.

Spiritual
There are multiple ongoing violations and egregious harms that stem from colonialisrt attitudes and behaviours. These include the dehumanization of Indigenous peoples, the tarnishing and abuse of sacred sites, and the demolition of Indigenous burial sites as documented by the Center for Global Pluralism and others: “It is widely-held knowledge in Algonquin communities that the mortar used to bind the bricks of the Parliament Buildings contains sand taken from one of the four confirmed Algonquin burial sites located in the environs, including one across the Kichi Sibi from Parliament Hill where the Canadian Museum of History now stands. The use of these quarries means that the remains of Algonquin ancestors may be in the mortar of the Parliament Buildings.”
Baseline studies are of high priority to KFN when assessing and managing environmental assessments concerning imperiled species. Successful environmental assessments cannot be adequately developed without reliable estimates of imperiled species’ land use and population size. As such, during these past several months, KFN has been conducting fieldwork at the CRL site and inside the NSDF footprint.

Upon beginning work on the ground, it quickly became evident to KFN technical staff that there were significant gaps in the baseline environmental work done for the NSDF. Specifically:

1. CNL had not conducted animal population counts in the NSDF for moose, deer, or bear, nor studied prey-predator relations; in particular, there was a lack of documentation or investigation of threatened species of eastern wolf presence, population, and prey-predator relations since the beginning of the NSDF EIS process in 2016.

2. The long-term, structural habitat implications of removing 37 hectares of select old-growth forest habitat for Eastern wolf and other mammals in the NSDF footprint (e.g. their future population distribution and status) were unclear.

As such, KFN’s fieldwork focused on locating and identifying species at risk, as well as identifying cultural and habitat values that would be lost or impacted by the NSDF. KFN collected data within the NSDF footprint, as well as the surrounding areas that would be affected, including Perch Lake and Perch Creek drainage to the Ottawa River.

We faced delays and difficulties while completing this fieldwork, such as CNL imposed delays in KFN carrying out our own TEK study methodologies; scheduling conflicts (e.g. with hunting season for community members); seasonal requirements for studies; uncomfortable tick levels; and winter holiday closures.

Despite these obstacles, KFN managed to gather numerous data points which support KFN’s stewardship rights and responsibilities. From September 19, 2022, to April 17, 2023, KFN’s environmental technical team collected data points on-site, in real-time direct-to-digital format using Kobo toolbox. A total of 609 data points were collected from a selection of seven categories, as seen in the Value Table below. Of particular importance is the presence of three active bear dens, winter moose and deer habitat, potentially threatened species Eastern wolf, milkweed, and several bat species in the NSDF.

The purpose of collecting this data was to locate and identify species at risk as well as cultural and habitat values that would be lost or impacted in the construction of the NSDF. KFN also employed real-time camera trapping in the NSDF in March 2023 to let animals tell their own story.
Our ancestors lived off the rich resources the Kichi Sibi has to offer, everything from neme: lake sturgeon, to pimisi: eels, oga: walleye, chigwatik: white pine on the water’s edge, mooz: moose, amik: beaver, and the many seasonal medicines and foods including berries, nuts, and trade foods such as mandamin, or corn.

When 113 KFN members were surveyed on their current use and occupancy surrounding the CNL NSDF 42% said they fish in the area, 32% said they hunted, 31% harvest berries and plants and 12% take part in ceremony. To this day our people still gather on the Ottawa River, but the importance of the area goes beyond food. The river provides critical ecosystem services annually, including clean drinking water, protection from natural disasters and a place to recreate. It is also home to a wide diversity of species, and many are culturally and traditionally significant to KZA, KFN, and other Algonquin communities. The Algonquin Nation continues to feel the impacts of wildlife decline on the territory and is concerned about additional impacts on already vulnerable populations.

These concerns derive not only from our broad concerns around the health of the environment but also because many of the animals we harvest on our traditional territory are migratory. Impacts to animals in and around the Chalk River Laboratories site can have far-reaching impacts. For example, a migratory bird or a moose that drinks contaminated water or consumes contaminated cattail roots in Perch Lake could easily be hunted and consumed by our membership a short time later.

A traditional practice of sharing country foods, like wild-caught fish, also remains important for KFN members. Approximately 75 percent of surveyed members reported that someone “often” or “sometimes” shared traditional food with their household in the past year. On average, respondents also reported they shared their harvest with 2–3 households. This reflects how traditional foods and sharing is an important part of members’ lives.
When 113 KFN members were surveyed on the importance of bears, 60% identified that the bear is a “powerful spirit” in Algonquin culture, that is “held in the highest regard” and is “sacred”. The bear was identified as a symbol of a brother or sister, and “relay the message of courage”. Several respondents reported being part of or associated with the bear clan. One member noted that bears “carry the knowledge of medicines” and they “show up to help when I need them”.

Members also noted that bears play an important part in the ecosystem by catching fish and leaving carcasses in the forest as fertilizer.

The fact that at least three bear dens are within the proposed footprint of the NSDF is deeply concerning to KZA and KFN. More so these are female bear dens with females returning to use the dens year after year because of the quality of the site. KFN identified two active female bear dens in 2023. One is occupied by a sow and three cubs born in 2022 and another is occupied by a sow with two cubs born in 2023. This makes for a total of 8 bear residents relying upon the NSDF site for both hibernation and foraging.

Their dens are ideally selected in deep sand on the forested slope that protects them from climate change events. Interestingly sows and cubs were on camera returning to their dens to enter them outside of the hibernation period. Once again a reflection of the quality of the shelter and high protein diet this mountain provides.

The construction of the NSDF will require destroying these bears’ mountain den sites and immediately displacing them. It is not lost on KZA and KFN that those very same processes that displaced us from our traditional lands are being used against the animals and living beings on the territory. We view this as an affront to KZA, KFN Omāniwininiwag inherent rights, and responsibilities.
For KFN and KZA community members, wildlife protection and conservation services are of direct interest because they support traditional values and cultural activities. Wolves (gray wolves, Canis lupus, and eastern wolves, C. lycaon) are of particular interest in this regard, not only because of their value as apex predators but more generally as an important animal in Algonquin culture. Relations between Indigenous hunter-gatherers and canid companions were based on mutual respect and cooperation. A total of 61 percent of 113 KFN members identified wolves as an important animal in Algonquin culture, with some members identifying themselves as wolf clan members. Like the bear, wolves are “powerful spirits in the bush” that symbolizes guardianship, loyalty, and being humble and not arrogant. “Ma’hingan is also a symbol of what wilderness we have left.” (Elder Moka’ang Gizis, 2020)

Members noted their dens are important - “if we destroy their dens we upset the balance of nature”. Wolves were also identified as a true sign of a healthy environment.

Wolves rely in part upon prey populations that are abundant in earlier-successional forests, such as deer (Odocoileus virginianus) and beaver (Castor canadensis), but also make use of later successional, conifer-dominated forests like the NSDF that provide moose (Alces americanus) and ungulate winter habitats (Forbes and Theberge 1996, Sears et al. 2003). NSDF lands include relatively large coniferous areas; however, the extent to which ungulates and wolves exhibit winter movements into these areas was not examined by CNL or CNSC in the Environmental Impact Statement.

Even though Eastern wolves are recognized in Ontario as threatened and federally as species of special concern and are associated with the regional area deer yards no research studies or analysis of their relationship had taken place until KFN commenced their work under the procedural order for consultation by conducting their own Indigenous-led study in 2022. KFN’s fieldwork included Ma’hingan-specific research, in attempts to begin addressing CNL’s lack of effort and documentation of eastern wolf presence, population and prey-predator relations.

The research work took place on Algonquin unceded lands near Point du Baptheme and Ouiseaux Rock on the Kichi Sibi, as well as the CNL site which are areas of particular cultural jurisdictional significance to Algonquin peoples. These sites represent an important portal to past relationships and laws of the land that both Ma’hingan and Anishinaabeg Peoples are struggling to maintain.

KFN’s fieldwork included wolf DNA sampling, non-invasive wolf tracking, and preliminary prey-surveys through real-time camera trapping in the NSDF footprint. An important environmental assessment undertaking that CNL and CNSC have not fulfilled is understanding how eastern wolves (C. lycaon) interact with diverse ecosystem values in and around the NSDF. This work is necessary to protect important ecological services wolves provide and to safeguard and maintain both ecosystem balance and their dietary needs. Read our final report here.

http://www.kebaowek.ca/NSDF.html
There is an urgent need to identify and protect the community of fish and freshwater mussels living in the area comprised between Pembroke and upstream towards Chalk River. The same goes for what appears to be one of Canada’s most significant freshwater mussel communities downstream of Pembroke, near the historic Algonquin stronghold of Morrison and Allumette Islands at the Rapides Paquette, Fitzpatrick Island. The segment of the Kichi Sibì between Rolphton Hydro Dam and Bryson Hydro Dam is home to large populations of endangered Hickorynut mussels (Obovaria olivaria), who (with other mussels) purify millions of liters of water of endangered Hickorynut mussels (Obovaria olivaria), of Pembroke, near the historic Algonquin strong-hold of Morrison and Allumette Islands at the Paquette Rapids where the underwater caves are located, also contains an abundance of at-risk species such as the Hickorynut mussel and the Lake Sturgeon. Such an ecosystem must never be put at risk as it represents a unique place in our country. Inventories of mussels and fishes are needed in order to better understand this unique ecosystem, including the populations of Hickorynut mussels and Lake Sturgeon in the area of Chalk River and Deep River, an area dominated by large fluvial sand deposits which are well recognized as the ideal substrate to the Hickorynut mussel and the juvenile stage of Lake Sturgeon, the presumed host of this endangered mussel. Last and not least, we need to understand how radionuclides and man-made isotopes can bioaccumulate in the shells of freshwater mussels, since this bio-accumulation stays on the top of the sediment after the animals die and therefore remain for decades in place in the benthic community. With densities of freshwater mussel commonly in the range of 50 to 200 individuals per m2, we need to understand better how radionuclides and isotopes will remain accumulated in all this shell material. This research is necessary but yet to be completed to understand the long-term effect and potential impact of the proposed nuclear waste disposal on the benthic and pelagic community of organisms living in that segment of the Ottawa River.

In Anishinabe traditional knowledge, this relationship shows that all living forms are important on Turtle Island, as each of them is a part of the greater life of all. Both the American eel (Anguilla rostrata) and Lake Sturgeon are two significant cultural species that KZA and KFN have fished since time immemorial. However, they are now threatened and missing from the river. KZA and KFN can no longer rely on fishing these species as a livelihood, and further contamination of the Kichi Sibì increases this possibility. KZA has already halted the fishing of these species as a precautionary measure in order to preserve them, but increased impacts on their population could have a more permanent impact on these species. There is a serious risk that they disappear altogether.

KFN members surveyed defined fishing as an important food source activity for members. KFN members caught an average of 62.48 fish a year. Most learn where, when, and how to do so from elders and relatives. Fishing is done by rod and by net. Winter is no obstacle, as members regularly ice-fish. With 42% of 113 KFN members surveyed saying they fished pickerel, lake trout, pike, bass, catfish, rock bass, sunfish, sturgeon, silverfish, smelts and whitefish in the CRL area the maintenance of the quality and quantity of fish resources around Chalk River is a main focus for the Kebaowek Lands and Resources Department.
**CHIGWATIK - KING of THE PLANTS**

“...this individual- was the provider for everything growing on the land. There are a lot of stories about Wiskedjak - many legends that some people would talk about. This guy was the one that named things as he traveled. Naming the trees and shrubs and the places where these things would grow. Wiskedjak indicated that chigwatik (white pine) as the tallest one would be the leader among the plants. Chigwatik asked Wiskedjak to be placed on the mountain to be up high- the reason was so Chigwatik’s roots could extend to the water and feed other shrubs that couldn’t get to the water (Toby Decoursay, 2019, Algonquins of Barriere Lake).


Sacred Forest—Sacred Landscape

The role of trees and forests in Algonquin cultural and spiritual life has always been significant. Under the Quebec and Ontario Forest Acts, socially acceptable forest management strategies depend on understanding and harmonizing the Algonquin cultural significance of tree species before any forestry operations occur.

A first step toward achieving this goal was taken by Ke-baowek First Nation to culturally document the proposed NSDF forest landscape. KFN undertook two forest field surveys: Survey 1 was from November 01, 2022, to November 08, 2022, where a representative sampling method was employed to provide a general representation of the forest Diameter Breast Height (DBH) and species composition. Survey 2 took place on May 24 and 25th, 2023 where 10 upland and lowland 15m diameter forest plots were established to determine the presence or absence of culturally significant tree and under-story plant communities as well as identify vegetation species at risk.

In Survey 1 a total of 147 trees were measured using a diameter measuring tape at breast height. The largest tree was found to be a chigwatik (white pine) with a DBH of 118cm. The average tree DBH sampled was 52.6cm. This reflected Algonquins of Barrier Lake elder Decoursay’s legend about chigwatik, as well chigwatik provides habitat for wildlife species, and it is a prominent part of this sacred landscape supporting cultural connectivity and kinship with makwa (bear) and wolf (Ma’hingan).

It was found that a large proportion of the proposed NSDF footprint contains old-growth pine and oak. There are also stands of black ash free of emerald ash borer and American beech without signs of beech scale. Healthy old-growth ash and beech forests are not common across the CNL landscape or the province of Ontario. Furthermore, KFN wishes to emphasize that this particular forest provides a vital high protein diet of oak and beechnut for resident bears as well as vital winter habitats for moose, lynx, wolf and deer as seen in our numerous photos and maps of wild-life land use in this document.

Survey 2 A total of 10, 5m-radius circle forest plots were conducted within the proposed NSDF footprint to correlate under story plant communities to forest stands. Four plots were conducted in upland sites, four in lowland sites, and two in mid-slope sites. As per the CNL Forest Management Plan Survey KFN also identified numerous black ash in standing water in the lowland plots.

http://www.kebaowek.ca/NSDF.html
Canada’s Responsibilities for Redress

The proposal for this site and the underlying assumption that the project will be approved is an affront to the jurisdiction of Algonquin First Nations. Our Nations were not properly consulted when nuclear facilities were originally installed, and we are holistically and disproportionately impacted by cumulative effects of their projects and activities.

Algonquin First Nations persist and assert title to regain decision-making authority throughout their territories. This is a centuries-long effort in pursuit of environmental, social, and legal justice which continues for the benefit of all Peoples and future generations.

2015 Truth and Reconciliation Commission Calls to Action

Call to Action 92 of the TRC CTA reads as follows:

92. We call upon the corporate sector in Canada to adopt the United Nations Declaration on the Rights of Indigenous Peoples as a reconciliation framework and to apply its principles, norms, and standards to corporate policy and core operational activities involving Indigenous peoples and their lands and resources. This would include, but not be limited to, the following:

i. Commit to meaningful consultation, building respectful relationships, and obtaining the free, prior, and informed consent of Indigenous peoples before proceeding with economic development projects.

2018 MMIW Supplemental Quebec Report

The Murdered and Missing Women and Girls Inquiry issued several reports and recommendations in 2018, including a supplemental report that addressed the specific situations of violence and colonialism which impact Indigenous women in the province of Quebec. The report noted that dispossession, land loss, and gendered discrimination all affect the holistic wellbeing and safety of Indigenous women and girls in Quebec. The report shared findings that women described that “violence and indifference are everywhere” and this profoundly affects the ability to recover from and cope with existing colonial harms affiliated with land degradation.

2021 United Nations Declaration Act, Canada

While UNDRIP (2007) is an imperfect instrument with its own complex history, we see several UNDRIP articles as having potential application to continue expanding and retaining our jurisdictional capacity. All aspects of our history and perspective must be included. All UNDRIP articles are relevant, and must not be read in isolation, and yet we find these segments particularly relevant.

Federal Commissions

Over several decades, Canada has been forced to examine its relationships with First Nations people because of conflicts that have often initiated and perpetuated in the name of Canada’s territorial claims and practices, including the Royal Commission on Aboriginal Peoples and others. Above are comments related to federal commissions in recent years; there is also the recent Bill C-226 on Environmental Justice.
Conclusion Arguments

KFN and KZA submit that in the circumstance:

• The Commission has not fulfilled the duty to consult;
• CNL’s EIS and licensing application lack essential information necessary to fulfill the requirements of CEAA 2012 and the NSCA; and
• Approving CNL’s licence amendment in these circumstances, without a willing host for the NSDF, would violate Article 29.2 of UNDRIP.

For these reasons, the Commission should find there is insufficient information to assess the NSDF’s environmental effects or, in the alternative, the NSDF is likely to cause significant adverse environmental effects and the question of whether the adverse environmental effects are justified in the circumstance must be referred to the Lieutenant Governor in Council as required under CEAA 2012.

Need for an Environmental Justice Lens

Environmental justice requires that a project’s impacts be borne equitably amongst all people. However, due to colonialism, racism, and economic inequality, many Indigenous communities are disproportionately located near contaminated and degraded industrial sites.

Title Rights and Interests

The right to clean water for drinking, spiritual, subsistence, and economic reasons, the right to clean water free from pollutants including tritium and heavy metals.

Inherent Benefit

The right and responsibility to Stewardship of the territory for the benefit of present, future, and past generations.

Asserted Title Rights and Governance

The right to possess our territory and exclusively occupy and use it for the benefit of the Kitigan Zibi and Kebaowek First Nations, exercising authority and jurisdiction over its water, land, air and resources in accordance with Onankinewagan.

Subsistence Economy, including stewardship access and harvest or use

The right to access and use natural resources for ceremonial cultural, spiritual, subsistence, and economic purposes including ecosystem services providing staple foods and habitat for the animal nations.

Fish and Wildlife Habitat

The right to healthy interconnected habitats supporting diverse and abundant species free of contamination.

Individual and Community Health

An individual and a community have the right to environmental, cultural, spiritual, social, and economic conditions conducive to their health and well-being.

Environmental Stewardship

The right and responsibility to manage natural resources and the environment in the Kichi Sibi watershed with our own Kichi Sibi Technical Teams/Guardians.

Environmental Integrity

The right to an environment that is not significantly degraded and is well within its capacity to sustain a robust subsistence economy for Kebaowek, Kitigan Zibi and the Algonquin people as a nation.

Cultural Travel

The right to safe, unobstructed travel and access to pointe au Baptheme and Oiseau Rock.

Cultural Transmission

The right to access Pointe au Baptheme and other important places on CNL site for the purpose of knowledge transfer without disturbances of the CNL, violation of privacy, polluted water or contaminated sediment.

Cultural or Spiritual Practices and Places

The right for community members to access Point au Baptheme without having to use boat access with the assurance that they will remain environmentally intact, without disturbances of the view, the quality of the water or contaminated sediment.

Contemporary Economy

The right to derive benefit from the territory and pursue economic development opportunities in a variety of ways including forest and biodiversity ecosystem services.
“It makes me feel like this is home. Even when I’m out and away from home and I come across the Ottawa River. I still always feel safe and feel close to home even if I’m miles away from Kebaowek.” — KFN member

“Being in touch with your inner self to hear the rushing water and sending your thoughts down the river. Makes one feel released from pain and you have said it out loud.” — KFN member

“When I was a young boy, I can remember my grandmother talking about how they used to travel from Brennan Lake down to Mattawa and sometimes Ottawa. They would meet up with other families and they would gather up fish and pick berries for special occasions.” — KFN member

“We are the voice for the voiceless.” — Councillor Justin Roy
ASSESSMENT of the CANADIAN NUCLEAR LABORATORIES NEAR SURFACE DISPOSAL FACILITY and LEGACY CONTAMINATION of ALGONQUIN AKI SIBI.