



Oral Presentation

Submission from the Clearwater River Dene Nation

In the Matter of the

Orano Canada Inc. – Cluff Lake Project

Application for the renewal of the Uranium Mine Decommissioning Licence for the Cluff Lake Project

Commission Public Hearing

May 15, 2019

Exposé oral

Mémoire de la Clearwater River Dene Nation

À l'égard d'

Orano Canada Inc. – Projet de Cluff Lake

Demande de renouvellement du permis de déclasserement de la mine d'uranium de Cluff Lake

Audience publique de la Commission

Le 15 mai 2019

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Clearwater River Dene Nation
Comments in Respect License Renewal for
Orano Canada Inc.'s Cluff Lake Project

April 18, 2019

1.0 Clearwater Dene First Nation Request to Intervene and Appear

The Clearwater River Dene Nation (“CRDN”) provides this submission and seeks to participate in the Canadian Nuclear Safety Commission (“CNSC”) review of Orano Canada Inc.’s (“Orano”) application for the renewal of the Uranium Mine Decommissioning Licence for the Cluff Lake Project. CRDN members historically depended upon the project area for hunting, fishing, trapping and gathering of food and resources, and for the exercise of their Treaty 8 rights. The Cluff Lake mine disrupted this use and CRDN has a vested interest in ensuring that decommissioning and reclamation of this project is carried out properly and in a way that is responsive to their ongoing rights in the area.

CRDN’s principle interest in engaging in this license review at this time is to develop a firm understanding of the status of the mine site’s reclamation program, any long term human health and safety issues associated with the site and make both the CNSC and Orano aware of ongoing community perceptions related to radiological and toxicity matters. In CRDN’s view this objective is aligned with CNSC’s management direction for the Cluff Lake site:

“The Cluff Lake Project has now met the objectives identified in the DDP. As part of adaptive management, CNSC staff will continue to work with Orano to minimize the possible impacts of uncertainty in their long-term modelling (100 to 500 years)... It should be noted that Orano will be submitting a post-decommissioning, long-term environmental monitoring program to the Province of Saskatchewan and to the CNSC. This will include, among other things, surface water monitoring downstream of Snake Lake and Claude Lake, to verify recovery of contaminated surface water and long-term predictions”.

(Source: CNSC Staff Report to CNSC Commission, March 2019 - e-Doc 5762208 (WORD))

CRDN’s overarching concern is that the mine, despite being seemingly well advanced in terms of decommissioning and rehabilitating the biophysical impacts of the mine, nonetheless continues to impact upon CRDN members. In particular, CRDN members continue to have concerns about the safety of harvesting food and resources from this area, and have concerns about whether this area is appropriate for the exercise of Treaty rights. This concern is exhibited through avoidance of this area, whereas CRDN’s traditional use evidence indicates that the entirety of this area was once used by its members.

CRDN participates in this proceeding to share this concern and relevant information to advocate for changes to Orano’s licence and oversight of its decommissioning activities to ensure that the decommissioning process is carried out in a manner that is responsive to CRDN’s rights to, and dependence upon, these lands. Put another way, to date Orano and the CNSC have focussed on promoting a decommissioning process that aims to meet safety and environmental concerns,

but the actual use of this land for the exercise of rights has not been adequately considered. CRDN would like to suggest additional ways that Orano and the CNSC can work together with CRDN to ensure that the impacts of the mine on its exercise of rights are addressed.

In particular, at the conclusion of this submission, CRDN requests that licence conditions be developed to require Orano to (i) co-develop (with CRDN) public information programming specific to CRDN and in particular, its land users (ii) establish programs to support harvesters in accessing the mine area for the exercise of Treaty rights and (iii) expand the scope of studies on country foods and other resources that CRDN depends upon so that CRDN members' faith in the safety of consumption of those resources can be restored.

We look forward to working with both the CNSC and Orano through this licence review process. In particular, CRDN requests that these written submissions be considered by the CNSC and that CRDN be able to appear before the CNSC during the hearing of this matter on or about May 15, 2019.

2.0 CSNC Staff Conclusions and Recommendation

CRDN has reviewed and given consideration to Orano and CNSC staff generated reports in relation to the matter and understands the scope of what is being applied for by Orano and CNSC staff views, conclusions and recommendations in respect to the application. CRDN highlights the following for both CRDN community and CNSC Commission clarification:

Orano's Cluff Lake Project is currently licensed under UMDL-MINEMILL-CLUFF.01/2019, which authorizes the licensee to modify and decommission the site. The licence specifically authorizes the licensee to possess, manage, and store nuclear substances, and to possess and use prescribed equipment and prescribed information.

Orano has applied to the CNSC for a five year licence renewal to the uranium mine and mill decommissioning licence. The application [1] included a request for the following four amendments to the current licence:

- a new CNSC licensed area that only includes parcels of land on which CNSC licensable activities will continue;
- replace the completed Detailed Decommissioning Plan (DDP) with the submitted Detailed Post-Decommissioning Plan (DPDP) [2];
- reduce the financial guarantee to reflect the completion of decommissioning activities and the conduct of ongoing monitoring and maintenance activities proposed in the DPDP; and modernize the licence to better reflect the post-closure activities on site.

In respect to this application, CNSC staff recommend that the Commission:

- accept the new licensed area provided in appendix A of the proposed licence;
- accept CNSC staff's conclusion that the objectives of the Detailed Decommissioning Plan have been met and accept the new Detailed Post-Decommissioning Plan;
- accept CNSC staff's recommendation to approve the revised financial guarantee of C\$3.5 million for the Cluff Lake Project; and
- accept CNSC staff's recommendation to renew the CNSC licence issued to Orano Canada Inc., UMDL-MINEMILL-CLUFF.01/2019, with a standardized licence conditions handbook for a period of five years, expiring July 31, 2024.

CNSC staff conclude that Orano's PIDP meets the regulatory requirements for public information and disclosure. CNSC staff continue to oversee Orano's implementation of the PIDP to ensure that they meet their obligations regarding dissemination and notifying the public and Indigenous communities regarding their licensed activities. CNSC staff also encourage Orano to review and update their PIDP on a regular basis to meet the changing information needs of their target audiences

CNSC staff conclude that:

- an Environmental Protection Review under the NSCA and its Regulations was conducted for this application. CNSC staff conclude that the licensee will make adequate provision for the protection of the environment; and
- Orano Canada Inc. is qualified to carry on the activity authorized by the licence and will, in carrying on that activity, make adequate provision for the protection of the environment, the health and safety of persons and the maintenance of national security and measures required to implement international obligations to which Canada has agreed.

CNSC staff recommends the Commission take the following actions:

- accept the new licensed area provided in appendix A of the proposed licence;
- accept CNSC staff's conclusion that the objectives of the Detailed Decommissioning Plan have been met and accept the new Detailed Post-Decommissioning Plan;
- accept CNSC staff's recommendation to approve the revised financial guarantee of C\$3.5 million for the Cluff Lake Project; and
- accept CNSC staff's recommendation to renew the CNSC licence issued to Orano Canada Inc., UMDL-MINEMILL-CLUFF.01/2019, with a standardized licence conditions handbook for a period of five years, expiring July 31, 2024.

3.0 Project History Summary and Location

The Cluff Lake Project is located in northwestern Saskatchewan, approximately 75 kilometres south of Lake Athabasca, 15 kilometres east of the Alberta border, and 900 kilometres north of Saskatoon. Mining activity commenced at the Cluff Lake Project in 1979 and ceased in 2002. Decommissioning began at the site in 2004 and was completed in 2006.

The Cluff Lake Project consisted of two underground mines, four open pit mines, an above ground tailings management facility, a mill and other support facilities. These facilities were located within the boundaries of two watersheds:

- the Cluff Creek Watershed where the mines, waste rock piles and Germaine Camp facilities were situated; and
- the Island Creek Watershed where the mill, tailings management area (TMA) and effluent treatment system were located.

(Source: CNSC Staff Report to CNSC Commission, March 2019 - e-Doc 5762208)



Cluff Lake Project Operational Site

(Source: CNSC Staff Report to CNSC Commission, March 2019 - e-Doc 5762208 (WORD))

4.0 Clearwater River Dene Background

By way of background, the CRDN are a Dene speaking people. At the time of contact our ancestors were present, occupying, utilizing and in possession of a large swath of land centered on the Clearwater River watershed and the Patterson Lake area and extending north from Patterson Lake to areas within the Carswell and Old Fort Rivers watersheds.

As part of our usual practices carried out before and at the time of the signing the Treaty 8, our ancestors hunted, trapped, harvested and fished a wide range of animal, bird, fish and plant species for subsistence, and for cultural, economic trade social and spiritual needs. Certain species and plants were of greater significance to fulfill these needs, but all species and plants were important to our way of life.

Whitefish Lake, now called Garson Lake, was already an old established Dene village of 50 people in 1880. On August 4, 1899 the residents were gathered in Fort McMurray and selected Adam Boucher as headman to represent them in the signing of Treaty 8.

The descendants of this group from Garson Lake became known as the Portage La Loche Band. At the La Loche Mission in 1907 these families asked that treaty payments be made to them at La Loche or Buffalo River so they wouldn't have to travel all the way to Fort McMurray. On July 17, 1911 they received their treaty payments at Portage La Loche (West La Loche). In 1920 the Portage La Loche Band (now known as the Clearwater River Dene Nation) had 66 members.

Our people adhered to Treaty 8 following the main signing of the Treaty that occurred at Lesser Slave Lake in 1899. Through oral promises of the parties and the written terms of Treaty # 8, the Treaty established a set of reciprocal rights and obligations owed by the Crown to the Indigenous people, including our ancestors. In addition to guaranteeing the ongoing right to hunt, fish, trap, harvest and pursue their traditional livelihood, the treaty also provided rights to carry out activities incidental to the exercise of these rights including, but not limited to:

- rights to unrestricted access to preferred lands and waters of a sufficient quality and quantity necessary to exercise rights within their traditional lands;
- rights to sufficient and culturally appropriate land and resources to support the exercise of rights;
- rights to participate in the management of natural resources within their traditional lands;
- rights to gather various natural resources, including plants and

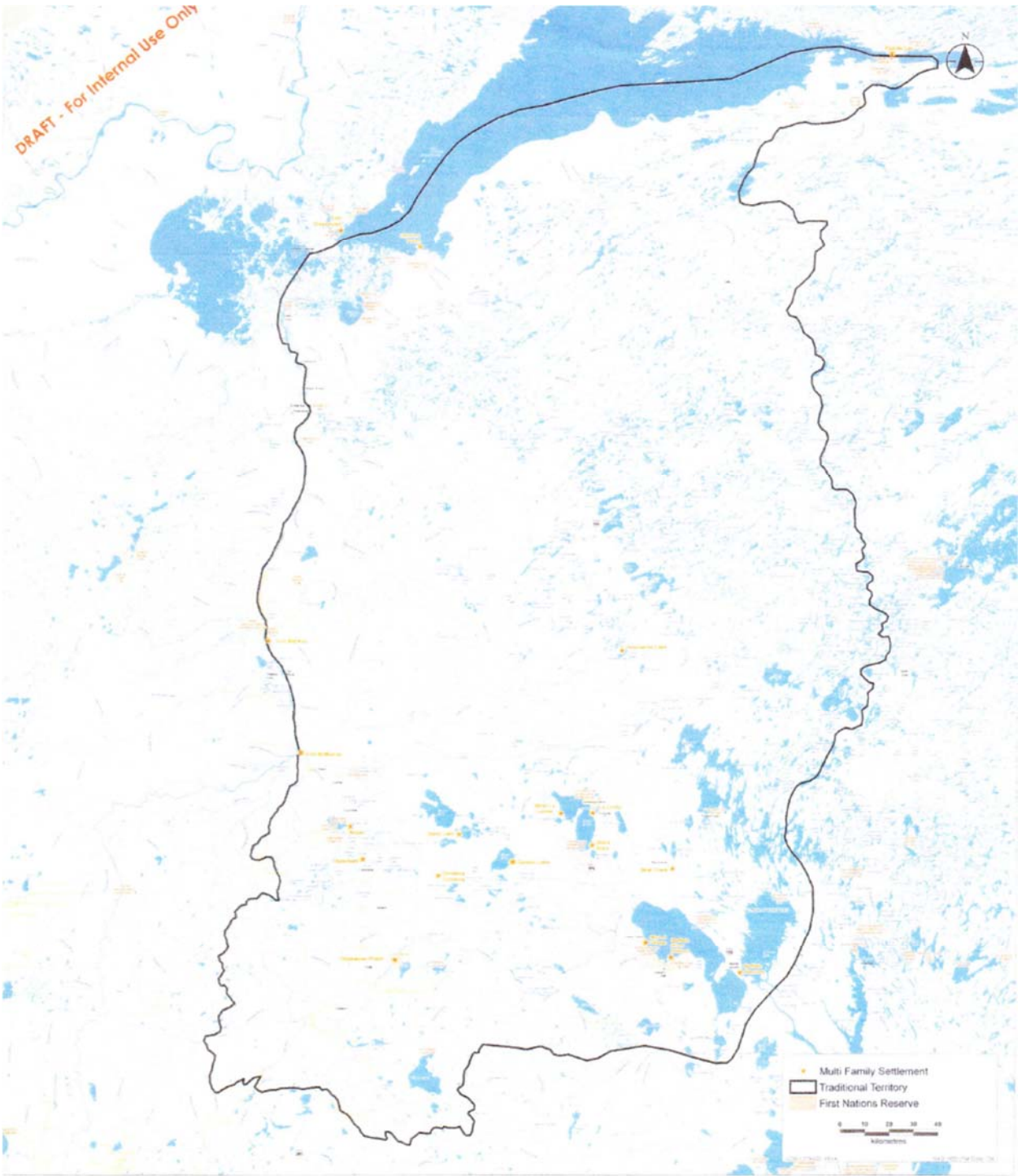
berries, within their traditional lands;

- rights to establish the infrastructure necessary to exercise rights, including by building trails, cabins, camps, traps; and
- rights to maintain and access sites where CRDN's culture and way of life can be taught to subsequent generations.

Our community members continue to actively exercise these treaty rights through our traditional territory. To this day, our families depend on our ancient lands for a range of cultural, sustenance, livelihood, spiritual and socio-economic purposes. Our ability to depend and rely on our lands is still critical to our community. Our families generally face high levels of unemployment and must continue to depend on the land to put food on the table. Any impact, disruption or diminution of our community's ability to rely on our wildlife, fish, berries, plants, forests and water resources can result in serious impacts and ramifications.

In recent years, the CRDN had the opportunity to conduct an initial traditional land and resource use study. The resulting maps and information confirm our people's historic, current and ongoing use of our traditional territory. Of significance, a locus and concentration of community land and resource utilization occurs around Patterson Lake, in and on Patterson Lake and areas extending north and south of the Patterson Lake area.

Based on information relayed to us by our elders, knowledge keepers and active land users, the CRDN is able to delineate a Traditional Territory within north-western Saskatchewan and north-eastern Alberta. The location of the Cluff Lake site in relation to the CRDN Traditional Territory is depicted below.



CRDN Traditional Territory (Tentative)

The CRDN notes that this Traditional Territory map is considered “tentative” and will be updated as additional historical, current land and resource use and cultural information is incorporated through community based research. The CRDN also highlights the fact that its members have the ability to exercise their Treaty rights and meet their livelihood and cultural needs outside of these bounds and that they

actively do so. The CRDN also acknowledges that other Indigenous people, being their relatives and neighbors also exercise their rights and practice their culture within this identified area. The CRDN honor their right and continues to welcome them to our traditional and ancient lands.

5.0 CRDN's Exercise of Rights

The CRDN have and continue to exercise a wide range of rights and cultural practices throughout their Traditional Territory. Livelihood and cultural practices that existed at the time of contact and at the time of the signing of treaty continue to the present day. There clearly has been some level of cultural change and modification in how these rights are exercised on the ground. With that said, the majority of CRDN members continue to need to be on the land, are required to be on the land and wish to be on the land as their ancestors and prior generations did. Trapping clearly spiked as an economic and trading activity as European demand for furs escalated through 18th century and into 19th century. Trapping has since declined in importance as principal economic and trading driver since the 1970's however numerous CRDN members continue to harvest fur bearers for a wide range of purposes.

It is possible to set out examples of CRDN rights exercised within its Traditional Territory and summarize these in the following way:

Right Exercised / Integral Activities / Cultural Practices	Species Utilized / Value Referenced
Right to Hunt Large Mammals - General	Large Mammals - General
Right to Hunt Moose	Moose
Right to Hunt Caribou(Woodland/Barren Ground)	Caribou (Woodland/Barren Ground)
Right to Hunt Mule Deer	Mule Deer
Right to Hunt White Tailed Deer	White Tailed Deer
Right to Hunt Kodiak Bear	Kodiak Bear
Right to Hunt Black Bear	Black Bear
Right to Hunt / Trap Small Mammals	Small Mammals - General
Right to Hunt / Trap Rabbit	Rabbit
Right to Hunt / Trap Beaver	Beaver
Right to Hunt / Trap Otter	Otter
Right to Hunt / Trap Muskrat	Muskrat
Right to Hunt / Trap Lynx	Lynx
Right to Hunt Wolverine	Wolverine
Right to Hunt Badger	Badger
Right to Hunt / Trap Weasel	Weasel
Right to Hunt / Trap Squirrel	Squirrel
Right to Hunt / Trap Marten	Marten

Right to Hunt / Trap Wolf	Wolf
Right to Hunt / Trap Coyote	Coyote
Right to Hunt / Trap Fox	Fox
Right to Hunt Birds - General	Birds – General
Right to Hunt Partridge	Partridge
Right to Hunt Grouse	Grouse
Right to Hunt Geese	Geese
Right to Hunt Ducks	Ducks
Right to Hunt Swan	Swan
Right to Harvest Duck Eggs	Duck Eggs
Right to Fish – General	Fish – General
Right to Fish Jackfish / Northern Pike	Jackfish / Northern Pike
Right to Fish Grayling	Grayling
Right to Fish Pickerel / Walleye	Pickerel / Walleye
Right to Fish Ling Cod	Ling Cod
Right to Fish Whitefish	Whitefish
Right to Fish Trout	Trout
Right to Harvest Berries – General	Berries – General
Right to Harvest Saskatoon Berries	Saskatoon Berries
Right to Harvest Wild Strawberries	Wild Strawberries
Right to Harvest Blueberries	Blueberries
Right to Harvest Raspberries	Raspberries
Right to Harvest Chokecherries	Chokecherries
Low Bush Cranberry	Low Bush Cranberry
High Bush Cranberry	High Bush Cranberry
Right to Harvest Plants – General	Plants – General
Right to Harvest Wood – General	Wood – General
Right to Harvest Wood for Cabins	Wood for Cabins
Right to Harvest Wood for Domestic Use	Wood for Domestic Use
Right to Harvest Wood for Tepees	Wood for Tepees
Right to Harvest Wood for Overnight Shelters	Wood for Overnight Shelters
Right to Harvest Wood for Fuel - Camps	Wood for Fuel - Camps
Right to Harvest Wood for Domestic Heating	Wood for Domestic Heating
Right to Quarry Rock – General	Rock – General
Right to Quarry Rock - Pipestone	Rock - Pipestone
Right to Quarry Rocks – Ceremonial Purposes	Rock – Ceremonial Purpose
Right to Collect Potable Water – For Camp	Water – For Camp
Right to Collect Potable Water – Domestic Purposes	Water – Domestic Purposes
Right to Construct / Maintain Cabins	Cabins
Right to Construct / Maintain Camps	Camps

Right to Construct / Maintain Overnight Shelters	Overnight Shelters
Right to Travel to / Access Hunting, Fishing, Trapping and Harvesting Areas	Travel to / Access Hunting, Fishing, Trapping and Harvesting Areas
Right to Build, Use and Maintain Trails	Build, Use and Maintain Trails
Right to Use Land / Water Travel Routes to Access Hunting, Fishing, Trapping and Harvesting Areas	Use Land / Water Travel Routes to Access Hunting, Fishing, Trapping and Harvesting Areas

6.0 Exercise of Rights in Hosting Landscape: Prior / During Mine Operation

To date, CRDN has not been afforded the opportunity to undertake comprehensive rights and cultural research. Through 2010–2014, the CRDN was able to undertake an initial level of baseline what can be best described as traditional land and resource use research. A limited number of community members were involved in one-on-one map biography interviews and a series of thematic maps were produced depicting documented geo-spatial data. The focus of that initial research effort was related to a proposed oil sands development proposed west of Descharme Lake in areas along the Saskatchewan – Alberta border. CRDN Indigenous use and knowledge information contributed by CRDN elders, knowledge holders and land users were categorized into the following thematic areas:

- Dene Place Names
- Settlements
- Gathering Places
- Camps
- Cabins
- Rest Spots
- Land and Water Based Travel Routes
- Hunting
- Fishing
- Trapping
- Berry Harvesting
- Plant Harvesting
- Medicinal Plant Harvesting

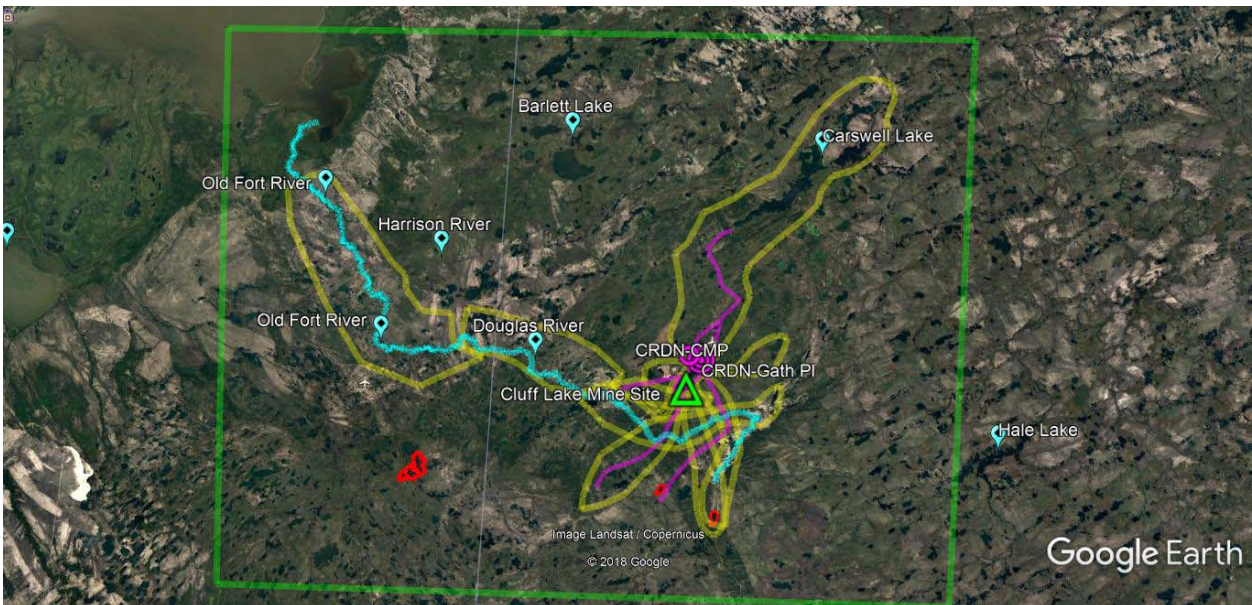
As with all studies, CRDN and its principle researcher had to contend with limitations in respect to budget, time, resources and community member availability. Clearly much more needs be done. With that said, the research completed does provide some strong indicators of past and ongoing community land and resource use patterns. The Traditional Territory (tentative) map encompasses and is constructed upon data gathered during that research initiative in addition to other information and knowledge contributed by the community to researchers.

As with all Indigenous people, water plays a key role in their history, culture, use of

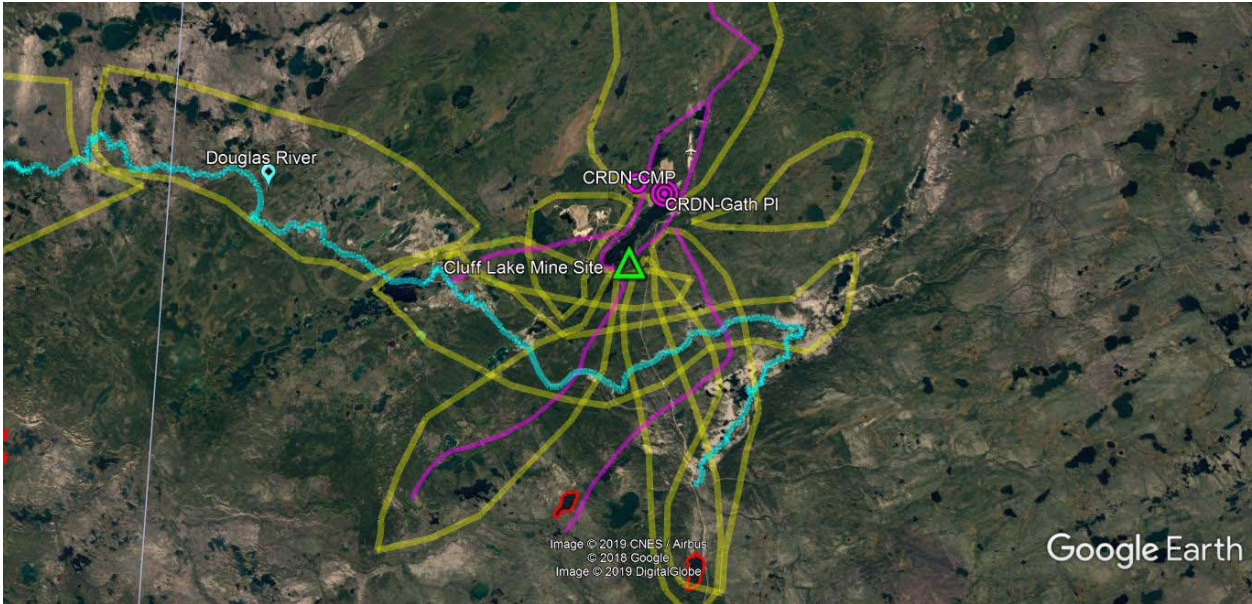
lands and resources and movement across their ancient lands and territory. Water bodies and sources of water have and continue to play a key role in determining how CRDN rights are exercised and how cultural practices occur on the ground. Water plays a key role in determining where, how and in how much density key fish, wildlife and plant communities manifest themselves across the various landscapes within CRDN's Traditional Territory. Based on prior community research, the following water bodies in the northern portion of the CRDN Traditional Territory act as important anchor to the CRDN's culture and way of live. Some of these water bodies within the northern portion of CRDN's Traditional Territory include:

- Davy Lake
- William River
- Tuma Lake
- Carswell Lake
- Bartlett Lake
- Harrison River
- Old Fort River
- Douglas River
- Agar Lake

CRDN presents a snap shot of some of the resulting community information from the 2011-2014 study as it relates to the Cluff Lake mine site and the landscape that plays host to the Project. Information was reproduced and plotted with Google Earth Pro:



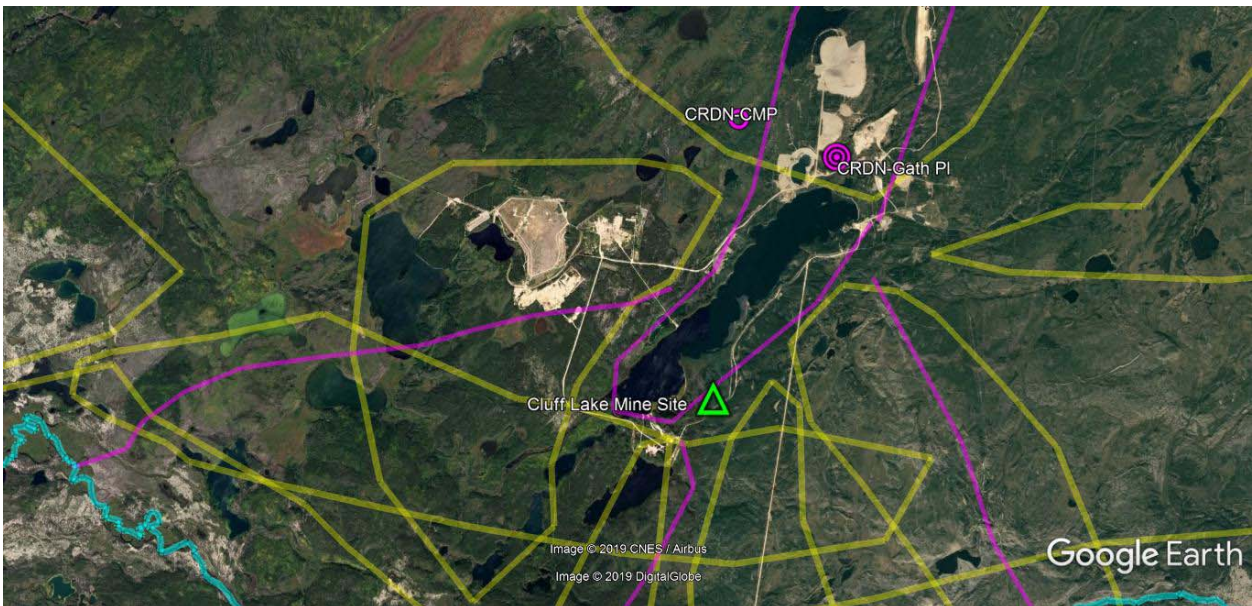
**Identified CRDN Community Use within Hosting Landscape:
Derived from Limited Set of CRDN Community Interviews
(Source: Google Earth Pro Project, April 2019)**



**Identified CRDN Community Use within Hosting Landscape:
 Derived from Limited Set of CRDN Community Interviews – Close Up #1**
 (Source: Google Earth Pro Project, April 2019)

Legend

- | | |
|---|---|
| Yellow Lines – Hunting Areas | Red Polygons – Fishing Areas |
| Purple Lines– Land Based Travel Corridors | Blue Lines – Water Based Travel Corridors |
| Hollow Purple Point Feature – Cabin Site | Purple Point Feature – Gathering Site |



**Identified CRDN Community Use within Hosting Landscape:
 Derived from Limited Set of CRDN Community Interviews – Close Up #2**
 (Source: Google Earth Pro Project, April 2019)

Legend

Yellow Lines – Hunting Areas

Purple Lines– Land Based Travel Corridors
Corridors

Hollow Purple Point Feature – Cabin Site

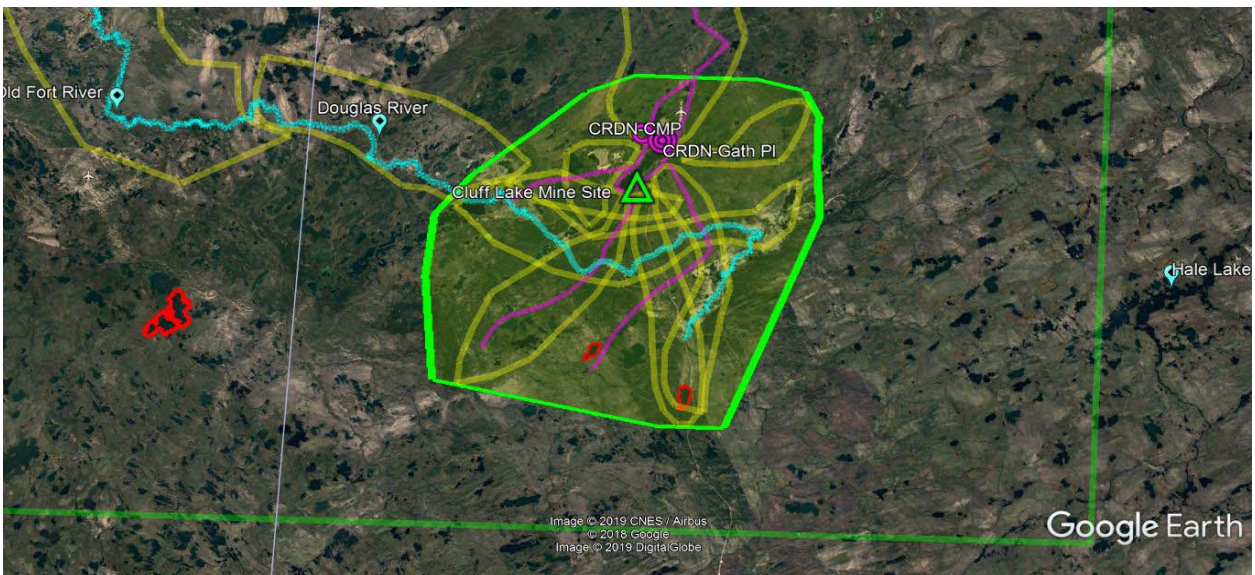
Red Polygons – Fishing Areas

Blue Lines – Water Based Travel

Purple Point Feature – Gathering Site

The temporal scope for the prior research was based on a recall period of “within living memory” – where community participants identify examples of their use of lands and resources from the earliest time they can recall to the present time. Depending on the age of the CRDN member interviewed in 2011-2014, the information could be derived from use that occurred over a period of approximately 50 / 60 years. Thus if the interviews occurred as of 2011 – 2014, the information could be held to apply to current land use occurring as of 2014 stretching back to past land use activities that could have occurred around 1954 on average. In addition some information is based on the actual activities of the interview participant and in some cases, the interview participant was sharing knowledge transmitted to them from an elder or a family member who had firsthand knowledge of the place, event or activity being described.

Based on the above information derived from the 2011 – 2014 interviews, it is possible to delineate an area of concentration of cultural use by a limited number of CRDN members in relation to the Cluff Lake area. The area of concentrated CRDN community use in the Cluff Lake mine site is demarcated in light green:



CRDN: Identified Area of Concentrated Community Use in Cluff Lake Mine Site Area:
Past and Current Use
(Source: Google Earth Pro Project, April 2019)

7.0 Exercise of Rights in Hosting Landscape During Mine Operation / Closure

In March 2019, the CSNC made a limited amount of funding available to the CRDN to undertake some additional in community research related to Orano's relicensing application. This research has the following objectives:

- Review existing traditional land and resource use information as it related to the Cluff Lake mine site and host landscape
- Identify an initial group of community members able to contribute Indigenous use and knowledge information related to the Cluff Lake mine area and host landscape
- Investigate, identify and document any community issues, concerns and interests related to the Cluff Lake mine site and host landscape
- Identify areas of concentrated community use where the exercise of rights and practice of culture exists as of the present day related to the Cluff Lake mine area and host landscape, and
- Invite recommendations community recommendations to be incorporated into a report to be transmitted to the CNSC and Orano for review and consideration

The result of this work is summarized below to assist in issues analysis.

Historical Exercise of Rights and Practice of Culture

Prior to the time of when government asserted control over Indigenous people in the north-west, CRDN's ancestors were distributed as families or clans in an axis between Garson Lake and Lake Athabasca.

The general patterns of CRDN family use and occupancy has remained consistent from the time of contact, to the time of the CRDN ancestors' adhesion to Treaty #8 to the present day.

CRDN families stayed at, camped and moved between key water bodies such as Barney and Graham Lake, North and South Watchusk Lake, Birch Lake, Garson Lake Gipsy Lake, Gordon Lake, La Loche Lake, Mclean Lake, Peter Pond Lake, Linnall Lake, Turnor Lake, Mcbeath Lake, Wedgewood Lake, Wasekamio Lake, the Clearwater River, Careen Lake, Langley Lake, Lloyd Lake, Johnston Lake, Big Fish Lake, Descharme Lake Agar Lake, Preston Lake, Mirror River, Forrest Lake, Patterson Lake, Harrison Lake, Minto Lake, Dunning Lake, Brudell Lake, Snare Lake, McTaggart Lake, Hale Lake, Laurier Creek, Shae Creek, Agar Lake (North), James Creek, Cluff Lake, Sandy Lake, Old Fort River, Carswell Lake, Tuma Lake, Lake Athabasca and other creeks, rivers and smaller lakes.

As with other areas of the northern Boreal region, mammals distributed themselves widely over the landscape as a survival tactic and due to lower levels of biological productivity. Mammals moved and migrated in seasons and in response to seasonal

and larger weather cycles. Former CRDN generations actively planned, strategized and moved to where they knew they had optimal chances of procuring larger mammals, fish and other desired and needed food and materials from the land. As a result they were highly mobile in the lands between Garson Lake in the south and Lake Athabasca to the north.

As a result of their movements, CRDN families came to know and become related with other Indigenous people of the region who planned and implemented their land use strategies, patterns and seasonal round of cultural activities. Pre-contact networks of trade were in existence between CRDN families and neighboring Indigenous people and the fur trade attached itself to this pre-established network and grew and succeeded as a result.

The lands and waters between Garson Lake and Lake Athabasca essentially formed a north – south cultural corridor for CRDN families. Forrest Lake, Patterson Lake, Harrison Lake, Minto Lake and Shae Creek were located at the centre of this cultural arc and can be viewed as the core of the CRDN's Traditional Territory.

CRDN families moved along this north-south axis, travelling to and spending periods in the summer on Lake Athabasca given the plentiful supply of fish. They camped, fished and hunted with northern Dene families. As a result of these summer travels, CRDN families began to travel to and spend time in the Carswell Lake, Cluff Lake, Douglas River and Old Fort River areas. People would gather and camp at Cluff Lake and travel to Old Fort and spread out along Lake Athabasca.

Over the past fifty years, CRDN family land use patterns and trends changed and modified due to the creation of reserves, the establishment of permanent community, the creation of seasonal / all-weather road networks, the decline of commercial trapping and the growth of a cash based economy.

Notwithstanding this change, CRDN families continued and continue to be strongly attached to the traditional lands continuing to exercise their rights of hunting, fishing, trapping, harvesting and gathering. The CRDN's livelihood and culture is intimately connected to their traditional lands. Due to lower local and regional employment opportunities, a high percentage of CRDN families continue to depend on their traditional lands to meet family's sustenance needs.

While the locus of CRDN's traditional land use and cultural activities remained (and remains) in the Forrest Lake, Patterson Lake, Harrison Lake, Minto Lake and Shae Creek, the Cluff Lake area was steadily utilized by CRDN families into the 1990's. The area was predominately used as a seasonal hunting area with fishing occurring in area lakes, streams including the Douglas and Old Fort River and its tributaries.

Longstanding CRDN Community Cultural Attachment to Cluff Lake Area

Based on prior interviews conducted with CRDN members, a strong and long-standing

connection between the CRDN people and the Cluff Lake emerges. CRDN provides a high level summary of information provided by CRDN elders, knowledge holders and land users:

Despite the fact that the Cluff Lake area was a considerable distance from Laloche, the area was intensively used by CRDN trappers and hunters prior to uranium exploration started in the 1960's and initial mining operations commenced;

The "Semchuk Trail", which went to become Highway 955, was built on the ancient ancestral trail that ran between Laloche, Cluff Lake, Carswell Lake, Fond du Lac and the area that became known as Uranium City;

People would travel on the ancestral trail and up to the Cluff Lake area to trap and hunt with dog teams and on foot. Several community members recall that it would take approximately a month to travel by foot from Laloche to Fond du Lac, if one travelled dawn to dusk each day;

There were a large number of trappers in the area and at Laloche in the 1950's. One community member recalls a conversation with the local Hudson Bay manager who told him that there 260 trappers working in the area. The community member knew a lot of these people came from Laloche;

Given the importance of trapping, the Government of Saskatchewan used to contract planes to fly trappers to and from trapping areas and Cluff Lake area. Thus speedy and regular access to the Cluff Lake area continued into the 1960's;

Once mining exploration activity occurred in the area and the highway to the Cluff Lake area was upgraded, the Government of Saskatchewan ceased flights in the 1970's. Over time, CRDN members began to procure ski-doo's and trucks which assisted them in accessing the northern trapping areas and the Cluff Lake area;

When community members speak of "Cluff Lake", there are generally referring to or referencing a broader areas or landscape that includes Cluff Lake, Saskatoon Lake, Carswell Lake, Sandy Lake and Douglas River;

Cluff Lake was an important area that was used and occupied by Indigenous People from Laloche, Fort Chipewayn and Fond Du Lac. Trappers and hunters from these three home communities would travel, gather, spend time with one another and trap and hunt with one another in all seasons;

Several community members recall that many trappers used to meet, gather and camp at Saskatoon Lake, near Cluff Lake. There were a number of permanent cabins on Saskatoon Lake;

Most community members interviewed state that the main trapper that spent a lot of time at Cluff Lake and had a cabin on the south side of Cluff Lake was “Alex Flett” from Ft. Chipewayn;

Trapping activity declined in the area following a severe fire in the area that took out a lot of the productive habitat and fur prices dropped;

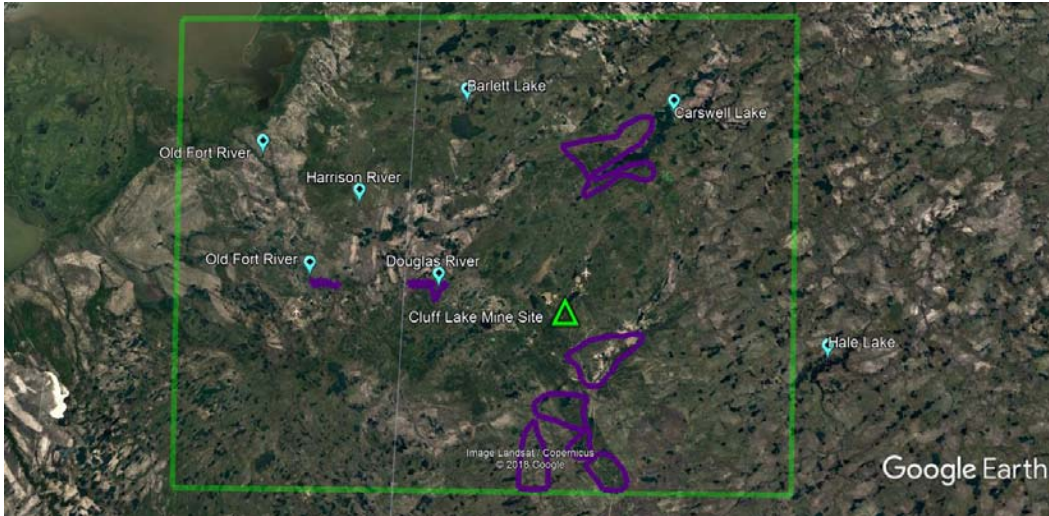
In the 1950’s and 1960’s Barren Caribou herds would migrate near Cluff Lake and people would hunt them; and

Despite the decline in fur prices, CRDN community members continued to travel to and use the Cluff Lake area well into the 1980’s and early 1990’s

Current CRDN Community Land Use Patterns

CRDN members have identified current (a.k.a. more recent, ongoing) land use activities that occur around the Cluff Lake area and host landscape. Some current land and resource use areas were discussed, identified and marked on maps. This includes:

- Community members continue hunt for moose in an area north of Cluff Lake, up to and around Carswell Lake. This generally occurs in the late summer and early fall;
- Moose hunting still occurs in the lands as far south as Minto Lake up to the Douglas River. Hunting for geese and ducks occurs on the south side of the Douglas River. This too occurs in the late summer and fall;
- Moose hunting also occurs south of James Creek through to the Shea Creek areas. Geese and duck hunting also occurs in this area;
- Hunting for smaller mammals, birds and fur bearers also occurs in the above noted areas in the course of hunting for larger game; and
- Fishing continues in the Old Fort River downstream of the Douglas – Old Fort confluence. This occurs in the summer.

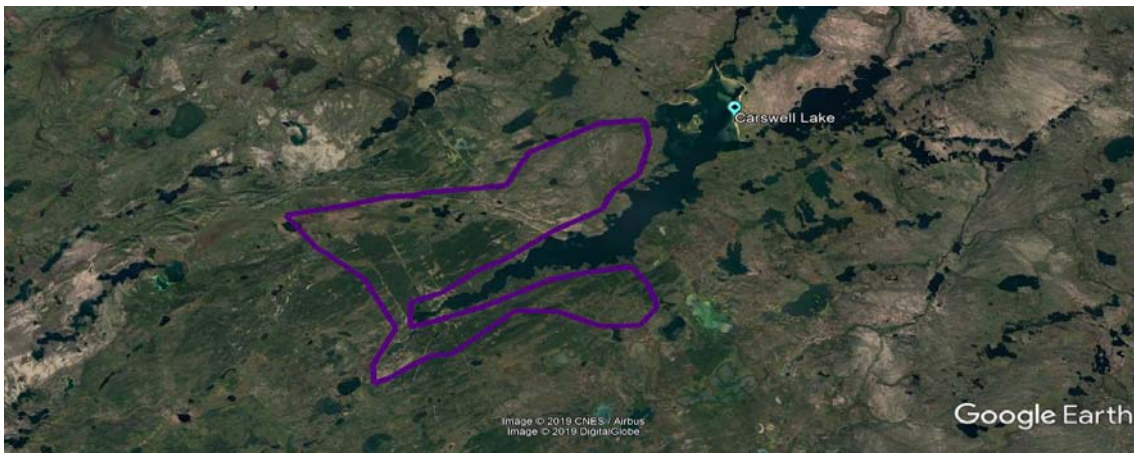


Current and Ongoing Hunting CRDN Areas Near Cluff Lake Mine Site / Host Landscape

(Source: Google Earth Projection: April 2019)

Legend

Purple – CRDN Current Hunting Areas



Current and Ongoing Hunting CRDN Areas Near Cluff Lake Mine Site / Host Landscape:

Carswell Lake Area Recent Areas

(Source: Google Earth Projection: April 2019)

Legend

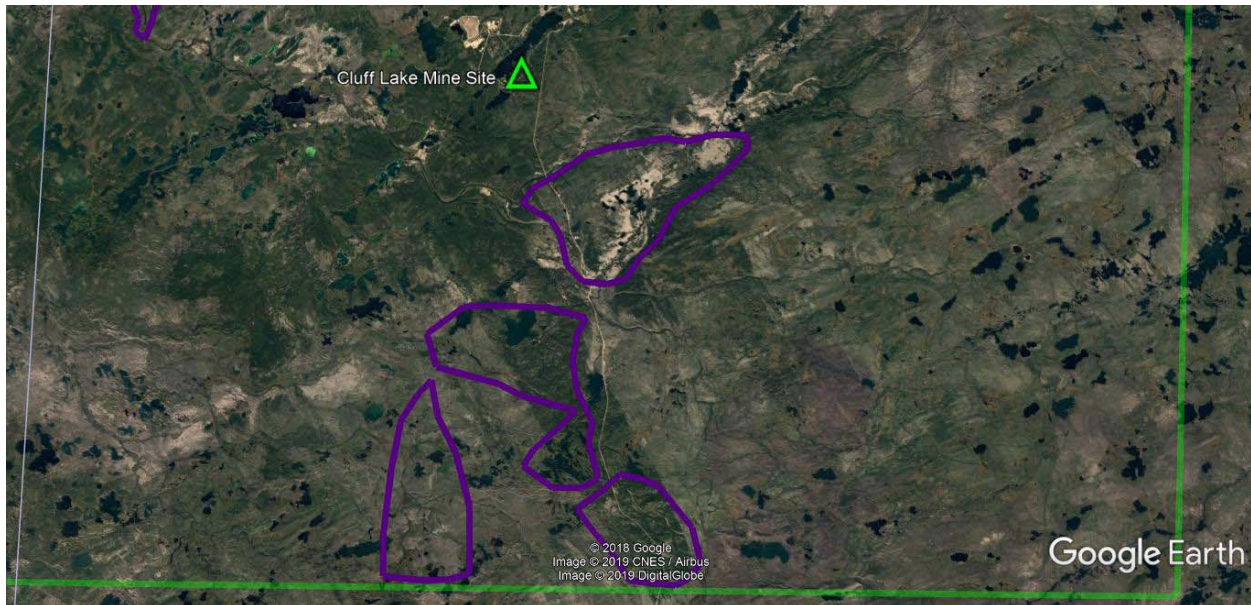
Purple – CRDN Current Hunting Areas



**Current and Ongoing Hunting CRDN Areas Near Cluff Lake Mine Site / Host Landscape:
Douglas – Old Fort Areas**
(Source: Google Earth Projection: April 2019)

Legend

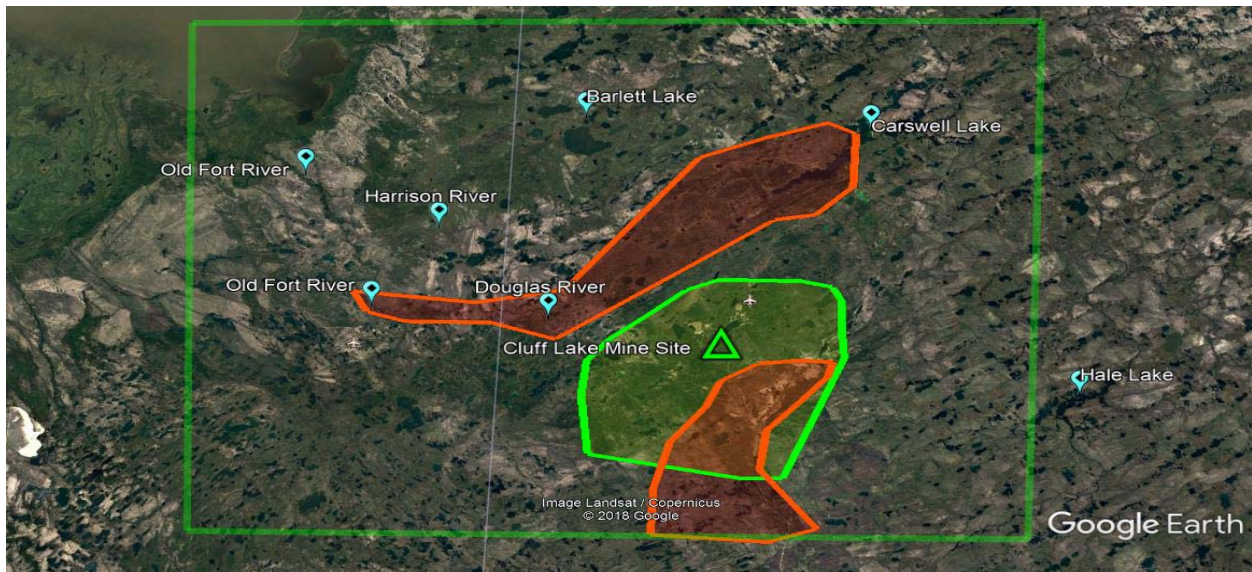
Purple – CRDN Current Hunting Areas



**Current and Ongoing Hunting CRDN Areas Near Cluff Lake Mine Site / Host Landscape:
Areas to South of Cluff Lake Mine – James Creek Area**
(Source: Google Earth Projection: April 2019)

When one compares the current land use trends with those identified based on “the

living memory” recall interval in the earlier set of 2011 – 2014 interviews, some contrast in community land and resource patterns emerges. The newer set of interviews indicates that a shift away from the mine site and water bodies around the Cluff Lake mine site appears to have occurred. It was not within the scope of the exercise to quantify that shift however it is possible to compare and contrast the two areas. The following map depicts reported prior cultural and traditional land use (demarcated in green) contrasted reported current cultural and traditional land used (demarcated in red).



CRDN: Cultural / Traditional Land and Resource Use Shift

Green - Reported prior cultural and traditional land use
 Red - Reported current cultural and traditional land used
 (Source: Google Earth Projection: April 2019)

It is important to consider the potential range of factors that might lead to this perceived shift in community land and resource use in proximity to the Cluff Lake mine site and host landscape. Some of the potential factors might include:

- different people were interviewed in the 2011-14 interviews than those available and involved in recent review of traditional land use;
- differing land use patterns and general change resulting from people’s age, choice and other factors such as availability of fish, game and earth materials; and
- some community members electing to utilize lands and resources in areas more removed from the mine operational / reclamation site for certain reasons.

CRDN Issues and Concerns Associated with Cluff Lake Mine Site

Following the identification of more recent hunting and land use patterns in proximity

to the Cluff Lake mine site, a series of questions were asked of CRDN members related to their perceptions of the Cluff Lake mine site and host landscape. A summary of issues, concerns and interests expressed in that session are summarized below:

- One CRDN elder interviewed between 2011 – 2014 recalls a large public meeting occurring in Buffalo Lake in the 1960's about the proposed mining exploration. He recalls the most people at the meeting, including people and trappers from Laloche were against the opening of the area for uranium mining
- Some CRDN members recall or recall hearing about early mineral exploration that occurred in the Cluff Lake area in the mid to late 1960's. However it wasn't until the late 1970's/early 1980's that community members became more aware of major construction work and mining operations commencing in the area. Some CRDN members remember families travelling to the area and were "startled" by the level of noise and activity. Some can recall a gate being put up where non-workers weren't allowed past. Thus some CRDN members didn't see the actual open pits and mining operations underway. There is recollection of roads being improved and airstrip being constructed but could hear the noise and see the dust in the area from some miles. At this time, it appears that some CRDN families continued to camp and hunt in the area but they opted to not stay at the traditional gathering and camping spot immediately north of Cluff Lake.
- Through 1980's and 1990's, it appears that less families from the CRDN spent time around Cluff Lake. Two CRDN members report that their families simply started to hunt, fish, camp in areas away from the mine given the level noise that seemed to come from the mine site and that there were simply "quieter and nicer places" to be.
- While some CRDN members continue to travel to the Cluff Lake area and spend time fishing and hunting down the Douglas and Old Fort Rivers, this activity appears to happen less as many families stopped travelling north to fish at Athabasca Lake for the summers, although apparently some CRDN members still report that they spend time there from "time to time".
- Some CRDN members report that they know actively choose to avoid spending time around the former Cluff Lake mine site and surrounding areas, as these areas are not perceived to be like what they remembered them to be There are simply more pristine areas to travel to and spend time at.
- Some CRDN members have a perception that the land around the Cluff Lake mine site and creeks and rivers that flowing eastwards from the mine "off bounds" until contamination / radiation levels "drop back down".
- Some CRDN members report that there is too much uncertainty in their minds about whether fish, animals and plants found in the area might contain some

level of “radio-activity” that is unsafe to consume year after year.

- Some community members have heard and are of the opinion that some radioactive materials and waste was left behind after the mine closed was simply buried as the company didn’t want to spend money removing the materials.
- One comment provided relates to the way that mining used to be done, and where ground water may be interacting with the left over tailings which may migrate through ground water and interact with surface water.
- Overall, there is a general perception that even though the site is being reclaimed and “looks better” it will never “be the same again” and should be “avoided in case there is risk to our family’s health and safety”.
- There appears to be some knowledge in the community that some radioactive elements can remain “hot” and “toxic” and persist in the environment for millennia. It appears that this knowledge may come from an external source and where there is some conflation between residual uranium mine tailings and waste rock and spent nuclear fuel remaining at the end of the nuclear cycle.
- There is some knowledge about the Gunnar mine site abandonment and that it appears that government let industry walk away from the site leaving a toxic legacy that has not been addressed. There is some perception that there will be persisting toxic legacy issues arising from Cluff Lake which will be dealt with in the same way that Gunnar is dealt with.
- In general, there appears to be a sense that the Cluff Lake mine site has been irrevocably changed and the area is seen as being “lost” to the community.
- The community has a high degree concern over proposals for additional uranium mines and mills being proposed in the Patterson Lake and mining proposed right in Patterson Lake. Potential loss of the Patterson Lake area, which is very close to the community, is perceived as something that would be harmful to the culture and well-being of families and community.

8.0 Need for Research Related to Avoidance of Landscapes and Best Practices in Community Knowledge Building

The CRDN has reviewed and provided consideration to Orano and CNSC staff level reports prepared for the upcoming hearings for Orano’s application. The CRDN highlights the following important excerpts from the CNSC staff issued report:

- “CNSC staff confirmed that Orano has met all decommissioning objectives established in the Comprehensive Study Report [6]”.
- “Orano continues to maintain a management system applicable to the

decreasing risks associated with the site. Orano's corporate structure is being maintained, and as processes are no longer applicable, these are described in their Annual Reports. CNSC staff have no concerns related to the Cluff Lake management system".

- "With the completion of decommissioning activities at the site (involving remediation of work areas and removal of radiological hazards) and cessation of site occupancy in 2014, Orano entered into a post-decommissioning state... Nevertheless, radiological monitoring of the remediated areas continues throughout the site to demonstrate that post-decommissioning radiological conditions (i.e. gamma and radon) are stable and levels of airborne contaminants are at background levels".
- "The site has no effluent discharges and no longer produces any contaminants or waste. "Orano's environmental performance is directly linked to the successful completion of decommissioning activities for the site. Over the 2016 to 2018 reporting period, Orano has not identified any issues that would constitute a failure of the decommissioning objectives established through the DDP".
- "The Cluff Lake Project has achieved the decommissioning objectives established through the DDP and is currently meeting the DSWQO. The modelled forecast predicts that the natural increase in contaminants in receiving lakes, as the source term moves through the environment, is predicted to remain below the DSWQOs for the long-term. CNSC staff conclude that the licensee will make adequate provision for the protection of the environment".
- "The Cluff Lake Project is a decommissioned site and Orano has met the objectives identified in the DDP. As part of adaptive management, CNSC staff will continue to work with Orano to minimize the possible impacts of uncertainty in their long-term modelling and verify the performance of the actions taken to ensure long-term site safety".

(Source: CNSC Staff Report to CNSC Commission, March 2019 - e-Doc 5762208 (WORD))

Based on the above CNSC findings and conclusions in respect to the Cluff Lake mine site and Orano's mandated reclamation, remediation and monitoring measures, there appears to be good reason for optimism about the long term recovery of the area.

With that said, there is clearly a divergence in the CNSC staff and Orano's views and CRDN's community perceptions of the health, safety and suitability of the mine site following reclamation. Community input from some CRDN members hold that the area is generally:

- not in the state that existed prior to the existence of the mine exploration, development and operations;

- not a suitable place where the community can re-establish its long standing cultural connection and practices;
- while reclaimed, is a potential source of contamination and hazard that could directly harm people that choose to spend time staying in the area;
- is a potential source of contamination and hazard that could indirectly harm people through the process bio-accumulation / bio-magnification; and
- is generally a place now to be avoided given a combination of the above factors

The community's perceptions appear to be manifesting in reduced use of this area, despite assurances that these risks are small or non-existent. This reduced use represents an overall cultural loss to the community and results in a deletion of an important cultural area that the community maintained a connection with over time.

As part of the work plan supported by the CSCN, the CRDN is undertaking a literature search in relation to the matter of landscape avoidance by Indigenous people. While scientific disciplines may be able demonstrate that key environmental receptors are not being adversely affected, perception is enough to result in avoidance, cultural loss and an overall decline in community well-being. The CRDN may be able to obtain important information from prior experience and academic research that can help inform an appropriate way forward in relation to knowledge building and information gathering that the community trusts. Once this synthesis is complete, this will be provided to both Orano and CNSC staff.

In addition, it is clear that the nuclear industry (from the mining, fuel production, power production to the waste management end of the sector) have had to engage with Indigenous and non-Indigenous communities in respect to common human health and risk assessment matters. It is likely that some best practices in community knowledge building and information gathering have been developed that should be reviewed and considered. While direct engagement with industry and regulators helps, it is likely that for community trust to be built with the nuclear material sector, some level of independent inquiry and research must occur. In parallel with the above task, the CRDN will be undertaking a synthesis review of best practices and case examples of community nuclear education. Again, the results of this will be shared with CNSC staff and Orano.

9.0 Discussion and Recommendations

CRDN's perspective is that the goals of decommissioning should not be narrowly construed - the goal must be the rehabilitation of this site so as to allow for the re-commencement of the exercise of Treaty rights in this location. The information shared in this document demonstrates, while the decommissioning process is well advanced from certain environmental perspectives, there remains much work to be done to restore CRDN members' confidence in carrying out harvesting activities in this area.

To address the demonstrated avoidance behaviours of CRDN members, CRDN recommends the CNSC impose additional conditions on the licence, pursuant to s.24(1) of the *Nuclear Safety and Control Act*. CRDN is not in a position to prescribe specific language for these conditions, but suggests that conditions be designed to require the following items.

(1) Co-Development of Public Education Program for CRDN Members

While the CNSC staff report has concluded that Orano's PIDP has identified clear goals and measurable objectives in terms of dissemination of information to targeted audiences – including to Indigenous groups – CRDN members have continued to express apprehension about harvesting in this area, and appear to actively avoid this area for the exercise of rights. This disconnect between the goals of public information dissemination and CRDN's continued perception of risks associated with harvesting in this area should be addressed through a new approach to public education regarding the decommissioning process and the rehabilitation of this area. CRDN suggests that the licence include a condition requiring Orano to co-develop a CRDN specific information program that is aimed at resolving this gap between Orano's understanding of the success of the decommissioning process, and CRDN's continued perception of risk. CRDN suggests that the key elements of such a program would include:

- a more comprehensive study of CRDN's perception of risk in relation to the use of the Orano site and surrounding areas. Such a study could draw on existing traditional use information and gather more comprehensive information on the use of the site in recent years;
- the study of a wider variety of species that CRDN depends upon for the exercise of rights so that CRDN can gain confidence in the ability of its members to harvest those species in this area – this study would benefit from CRDN involvement in setting indicator species and in gathering samples, so that community members trust the results that are collected through this study;
- resources to support community engagement in a variety of modes, so that wider swathe of harvesters and land users may be engaged who may not attend public forums, or read public newsletters. In particular, we suggest that programs be developed to engage elders and youth in particular.

(2) Establish programs to support renewal of traditional harvesting in mine area

Relatedly, CRDN requests that an additional condition be designed to require Orano to assist CRDN in encouraging its members to re-engage in harvesting activities and the exercise of Treaty rights in the vicinity of the mine. This would be assisted by a focused information dissemination campaign that is supported by evidence on the safety of engaging in harvesting activities in this area, but in CRDN's experience, more will be required to encourage members to engage in activities in this rehabilitated area. CRDN suggests that Orano be required to provide resources to support the establishment of cultural and harvesting camps during key seasons, and to work with

CRDN to discuss additional infrastructure and programs that could be put in place to support harvesting in this area.