

APPENDIX IV.3

TRADITIONAL KNOWLEDGE IN THE NA YAGHE REGION: AN ASSESSMENT OF THE SNAP LAKE PROJECT

**Traditional Knowledge in the Nâ Yaghe Kué region:
An Assessment of the Snap Lake Project**

FINAL ASSESSMENT REPORT

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Submitted to:

De Beers Canada Mining Inc.



Submitted by:

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STUDY SUMMARY

The *Traditional Knowledge in the Nâ Yaghe Kué Region* study took place in April - July 2001. The study was based upon the premise that Denesôâine (Åutsÿl K'e Dene) oral histories, knowledge and experiences concerning the Nâ Yaghe Kué region would form an important basis for the direct environmental assessment, by Denesôâine Elders, of the De Beers Snap Lake Diamond Project.

The initial step in the study was to meet with the Wildlife, Lands and Environment Committee and Åutsÿl K'e Elders to devise a plan of action for assessing the potential impacts of the Snap Lake Project upon the study region. It was decided that the study would involve two main components: (1) the gathering of Elders stories about the Nâ Yaghe Kué region and its importance to the Denesôâine way of life, and (2) the assessment of the Snap Lake Project by Denesôâine Elders.

Elders' stories about the region were gathered in myriad of ways. Initially, Community Researchers searched the local Wildlife, Lands and Environment databases to uncover any previously documented stories pertaining to the study region. Gaps in this database were identified by the Project Director and Project Consultant. Home-visit interviews were conducted by Community Researchers to fill these gaps. As well, stories were gathered during on-the-land workshops conducted in the Nâ Yaghe Kué region. Using these methods, the history and knowledge passed on from previous generations as well as the Elders' experiences living and travelling in the area were gathered.

The environmental assessment of the Snap Lake Project involved a 1-day mine site visit / aerial survey followed by a 4-day workshop at the mine site and in the Nâ Yaghe Kué region. During these periods, the Elders visited any areas of the mine they wished, as well as key areas in the surrounding study area. De Beers personnel were available at all times to explain the mine operations. Using the knowledge gained in these workshops in conjunction with the Denesôâine knowledge about the study area, the Elders predicted the possible impacts of the mine upon the valued features in the region. They also suggested means of mitigating and monitoring these impacts.

Two 2-day workshops were held in Åutsÿl K'e to further develop and verify the knowledge gathered from the Elders. Descriptions and recommendations were verified by consensus among the Elders, and then finally approved to be included in this report.

TABLE OF CONTENTS

STUDY SUMMARY	1
TABLE OF CONTENTS	2
ACKNOWLEDGEMENTS	5
FOREWORD	6
1.0 STUDY DESCRIPTION	7
1.1 STUDY OBJECTIVES	8
1.2 METHODS	8
1.3 CHRONOLOGY OF ACTIVITIES	11
2.0 THE NÂ YAGHE KUÿ STUDY REGION	12
3.0 VALUED FEATURES IN THE NÂ YAGHE KUÿ REGION.....	15
3.1 GEOGRAPHY	17
3.1.1 Land.....	17
3.1.2 Water	20
3.2 WILDLIFE AND PLANTS	21
3.2.1 Caribou.....	21
3.2.2 Birds	23
3.2.3 Fish.....	25
3.2.4 Fur-bearers.....	26
3.2.5 Plants.....	29
3.3 DENESÔÂINE	30
3.3.1 Travel routes, cabin sites and traplines.....	31
4.0 RECOMMENDATIONS FOR MITIGATING AND MONITORING THE IMPACTS OF THE SNAP LAKE PROJECT UPON THE NÂ YAGHE KUÿ REGION	34
4.1 SEWAGE TREATMENT FACILITY AND ASSOCIATED WETLAND	34
4.1.1 On the effectiveness of the wetland as a filter.....	35
4.1.2 On the plants and animals in and around the wetland	35
4.1.3 Recommendations for mitigation	36
4.1.4 Specific recommendations for monitoring	37

4.2	MINE WATER CLARIFICATION POND.....	37
4.2.1	On the effectiveness of the clarification pond.....	37
4.2.2	On animals in the clarification pond.....	37
4.2.3	Recommendations for mitigation.....	38
4.2.4	Specific recommendations for monitoring.....	39
4.3	MINE SITE SEEPAGE AND RUNOFF.....	39
4.3.1	On the effectiveness of the runoff and seepage collection system.....	39
4.3.2	Recommendations for mitigation.....	40
4.3.3	Specific recommendations for monitoring.....	40
4.4	UNDERGROUND MINING ACTIVITIES.....	40
4.4.1	On groundwater flows.....	40
4.4.2	On dust underground and exiting through the portal / vents.....	41
4.4.3	Recommendations for mitigation.....	41
4.4.4	Specific recommendations for monitoring.....	41
4.5	SOLID WASTE (MINE ROCK AND TRASH).....	42
4.5.1	On erosion from the North Pile.....	42
4.5.2	On the incineration of trash.....	42
4.5.3	Recommendations for mitigation.....	43
4.5.4	Specific recommendations for monitoring.....	43
4.6	AIRSTRIP AND SITE ROADS.....	43
4.6.1	On dust.....	43
4.6.2	On the disturbance of animals.....	43
4.6.3	Recommendations for mitigation.....	44
4.6.4	Specific Recommendations for monitoring.....	45
4.7	SOUTH ESKER QUARRY AND ESKER ACCESS ROAD.....	45
4.7.1	On wildlife and vegetation in the area of the esker.....	45
4.7.2	On dust from quarrying activity.....	46
4.7.3	On the esker access road.....	47
4.7.4	Recommendations for mitigation.....	47
4.7.5	Specific recommendations for monitoring.....	47
4.8	LUPIN WINTER ROAD AND THE WINTER ACCESS SPUR.....	47
4.8.1	On caribou movements.....	47
4.8.2	On road traffic.....	50
4.8.3	Recommendations for mitigation.....	51
4.8.4	Specific recommendations for monitoring.....	52
4.9	FURTHER EXPLORATION ACTIVITY.....	52
4.9.1	On exploratory drilling.....	53

4.9.2	<i>Recommendations for mitigation</i>	53
4.9.3	<i>Specific recommendations for monitoring</i>	53
4.10	EMPLOYMENT	53
4.10.1	<i>On the employment of aboriginal people</i>	53
4.10.2	<i>On shift work</i>	54
4.10.3	<i>Recommendations for mitigation</i>	54
5.0	CONCLUSION	56
	BIBLIOGRAPHY	57
	APPENDIX 1: MAPS.....	58

* **Cover Photo** - (L to R) Ernest Boucher, Madeline Drybones, Liza Enzoe, Joe Michel, Bertha Catholique, Louie Abel, Brenda Parlee and Alice Michel tell stories near MacKay Lake.

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FOREWORD

This report attempts to represent the knowledge and experience of the Denesôâine Elders as it pertains to the potential relationship between the Snap Lake Project and the Nâ Yaghe Kué region. In this interest, very little interpretation or explanation has been offered beyond what the Elders themselves have to say. We have not tried in this report to interpret the words of the Elders. We are merely trying to transmit the knowledge and experiences of the Elders in as true a fashion to the Denesôâine way of knowing, a way that is fundamentally oral and experiential. As such, much of this report is simply the Elders words organized into relevant sections. Much of the text in the report serves only to form linkages between the various Elders' quotes. Elders' words were only edited in order to introduce some clarity or grammar. Otherwise, they stand on their own.

Though we believe that we have attempted to remain true to the Denesôâine way in this report, we must remind ourselves that the words of the Elders do not have the same power on paper as they do orally. To truly understand the meaning and importance of the Elders words, it is necessary to simply spend time with them, sharing their experiences. This is the true way, the true way of knowing what it means to be Denesôâine, what it means to be part of and akin to the land.

This report and the study from which it arose are a step in the right direction towards a better understanding of Denesôâine knowledge and experience. Let us only hope that by truly listening to the words of the Elders, we will all make wiser decisions.

1.0 STUDY DESCRIPTION

Back from 1918 - I can remember how things looked. It was so different. Some people who don't care so much won't notice the changes. How we do things is also changing. We are supposed to be working together. My grandfathers used to sit around together and think about these things and predict what would happen. That is what we are doing now; elders can predict what will happen in the future. Maybe our children will be very poor. We talk about a lot of things. What we are talking about is very important. Our grandfather used to talk about these things. (ML 11 05 00)

The way of life of the Denesôâine (Åutsÿl K'e Dene) is based on ways of knowing that have been passed on for generations. In addition to the socio-economic, cultural and spiritual relationships that exist among people, the Denesôâine have a complex and sacred relationship with the land around them. By respecting this sacred relationship and recognizing the richness of the knowledge held by the Elders about their traditional territory, much can be learned about the health of the land and how it is changing.

This study is based on the premise that documenting and understanding Elder histories, experiences and knowledge is an essential component of understanding the complex relationships between the land and the people. From this rich knowledge base, we can seek to better understand the changes that are or may happen upon the land.



Joe Michel and Louie Abel on the barrenlands

The specific focus of this study is the potential relationship the Snap Lake Diamond Project may have with the land and the Denesôâine people. The project proponent, De Beers Canada Mining, is currently

involved in a licensing process that may see a diamond mine begin production in the Nâ Yaghe Kué region of the traditional territory of the Denesôâine. In order to assess how the proposed project will impact the Nâ Yaghe Kué region and the surrounding landscapes / watersheds, it is vital that the rich knowledge of the Denesôâine be considered in environmental assessment. The Denesôâine have a unique and in-depth understanding of the ecology and natural variation in this area, as well as time-tested wisdom concerning a healthy relationship between human and natural activities.

The people of Åutsÿl K'e are in a unique position to share this knowledge and wisdom, as many community Elders have lived and traveled in this region in the past. Only through the careful consideration of what they have to share can it be ensured that the wisest decisions are made regarding the environmental assessment and potential implementation of the Snap Lake Project.

1.1 STUDY OBJECTIVES

The objectives of this study are as follows:

1. To identify valued environmental features of the Nâ Yaghe Kué region from the perspective of Åutsÿl K'e Elders and land-users.
2. To compile and record the environmental knowledge and wisdom of the Åutsÿl K'e Dene Elders regarding valued environmental features in the Nâ Yaghe Kué region.
3. To analyze, under the direction of Elders, the potential environmental impacts of the proposed Snap Lake Project in light of the collected knowledge.
4. To develop, under the direction of Elders, specific recommendations for the mitigation and monitoring of the predicted impacts using the collected Denesôâine knowledge.

1.2 METHODS

The methods used in this study were a form of Action Research, involving the *participation* and *direction* of community Elders and the Wildlife, Lands and Environment Committee, the *training* of community members and *coordination* with the local leadership.

TASK 1: Selection of Elders' Committee

An Elders' Committee was established to direct the study. The Åutsÿl K'e Dene Elders are recognized in the community as the primary holders of traditional knowledge about the study region. Their expertise distinguished them as the best suited to advise on the appropriate focus of interview questions, methods of data collection, evaluation and verification of results.

Meetings were held with the Wildlife, Lands and Environment Committee (WLEC) and the Elders' Committee to discuss the composition of the Elders' Committee, the direction of the study and how the data gathering should be conducted. The decision of the Elders was to include all of the Elders in the Elders' Committee. The Elders' Committee therefore functioned more like an "experts pool" that the study team called together to discuss aspects of the project. The study team depended most heavily on the elders with the most experience in the study region.



Elders meeting

TASK 2: Identification and description of valued environmental features in the Nâ Yaghe Kué region

In order to develop specific recommendations for the design of the Snap Lake Project, it was important that information gathered be centered around valued environmental features as determined by the Elders' Committee and the WLEC. Simply, Elders provided richer and more detailed information when discussing features of interest and concern to them. Also, having the Elders *direct* information gathering around features of interest/concern to them gave them *control* over how their knowledge is revealed and shared. The identification of valued environmental features in the Nâ Yaghe Kué region (and the boundaries of this region) was done via an Elder visit to the Snap Lake Project site and environs, followed by a 1-day workshop in Áutsýl K'e.

Descriptions of valued environmental features in the Nâ Yaghe Kué region were gathered through Elders' stories about the region. Community Researchers searched the local Wildlife, Lands and Environment databases to uncover any previously documented stories pertaining to the study region. Gaps in this database were identified by the Project Director and Project Consultant. Home-visit Elder interviews were conducted by Community Researchers to fill these gaps. As well, stories were gathered during the on-the-land assessment in the Nâ Yaghe Kué region (Task 3). Using these methods, the history and

knowledge passed on from previous generations as well as the Elders' experiences living and travelling in the area were gathered.

TASK 3: Project assessment in the Nâ Yaghe Kué region

The Elders and study staff participated in a 4-day workshop at the Snap Lake Project site. In light of the knowledge shared during the previous Task, they evaluated the proposed Snap Lake Project and began to develop specific recommendations for monitoring and mitigation.

The project assessment was based at the project site and in important areas of the Nâ Yaghe Kué region. The Elders spent time in areas relevant to the valued environmental features they previously identified (Map 2). The Elders traveled and experienced the mine and the land during the day, coming together in the evening to discuss their observations. This Elders' Committee observed first-hand the natural and industrial activity at the site, allowing them to better develop ideas for the mitigation of industrial impacts upon valued environmental features. The Elders moved about by foot, vehicle and helicopter.

The Elders visited most of the on-site facilities at the Snap Lake site, including the sewage treatment plant and wetland, the Mine Water Clarification Pond, the mine portal and ramp, and the processing plant. Assessments in the region were done at the South Esker Assessment Site (Map 1), the Portage River Assessment Site (Map 1), and the stream outflow from Snap Lake.



LizaENZoe and Madeline Drybones look at plants

The Elders organized themselves by gender into small-groups during the on-the-land assessment activities. The female researchers worked with the women while the male researchers worked with the men. Individual interviews were conducted with participating Elders in Áutsýl K'e following the on-the-land assessment.

TASK 5: Analysis of collected information, Development of specific recommendations

The results of the Task 3 and 4 were reviewed, analyzed and synthesized by study staff. This knowledge was then verified by the Elders during a 2-day workshop in Áutsŷl K'e. They, along with the WLEC, finalized specific recommendations for the mitigation and monitoring of the Snap Lake project.

1.3 CHRONOLOGY OF ACTIVITIES

April	Preliminary meetings with the WLEC to develop study
May 2001	Preliminary meeting with the Elders seeking direction for the study Establishment of participating Elders 1-day site visit and regional assessment (by air) 1-day follow-up workshop to the site visit
June 2001	Compilation of previous knowledge about the region 4-day project assessment on site and in the region
July 2001	Home-visit interviews Analysis of results 2-day results verification workshop Report writing Approval of the report by Elders and WLEC



Jonas Catholique, JB Rabesca and Joe Michel look at maps

2.0 THE NÂ YAGHE KUÉ STUDY REGION

This land is our land. It does not belong to the government. We should be the ones giving out permits. Snap Lake is in Áutsýl K'e's traditional territory. (AM 25 05 01)

The area called Slave Geological Province by geologists and mineral resource developers is home to the Denesôáine. They call much of this land Denesôáine Nýne, or Chipewyan land. This study focuses upon the area of Denesôáine Nýne known as Katthinýne - the rich land. Straddling the border between the boreal forest and the tundra, Katthinýne is an ecosystem rich with a diversity of wildlife, and vegetation communities from many distinct eco-regions (Map 1).



Life in the Katthinene

The Katthinýne is the heart and spirit of the Denesôáine way of life. Within this area, cultural and environmental features of value to the Denesôáine people are represented, existing today much as they were in the days gone past. It is here that the Denesôáine people have lived, laughed and loved over the centuries. The Elders describe this region as rich with resources. People would always go to this area to harvest caribou, to trap for furs, to gather berries, etc. - traveling by dog team, by canoe and on foot. People always knew they could find food in this area. This is the breadbasket of the Denesôáine people.

Nâ Yaghe Kué is located within the region of Katthinýne (Map 1). It comprises the land of rocks, eskers, rivers and lakes roughly bordered by MacKay Lake to the north, the East Arm of the Great Slave Lake to the south, Camsell Lake to the west and Margaret Lake to the east. This region is considered by the Elders to be very rich in fur-bearing animals, and is criss-crossed by Denesôáine traplines. It is also a

region through which many of the Denesôâine have travelled to access hunting grounds and historic gathering sites.



The Na Yaghe Kue region

The *Lockhart River watershed* is a key spatial reference point for the study of the Nâ Yaghe Kué region. The watershed of Katthinÿne is within the large Mackenzie Valley drainage basin and the sub-basin of Great Slave Lake. The Lockhart River or Desnedhé Che is the largest of the river systems flowing into Great Slave Lake flowing west to east from its headwaters at MacKay Lake. These waters including all waters that flow into these areas are considered sacred by the Denesôâine.

The *land use of the Denesôâine* is also an important geographical reference for the study. Historical land use as well as current hunting and trapping routes have been documented over the last decade. Place names around Nâ Yaghe Kué and throughout Denesôâine Nÿne tell stories of what it was like to live and travel in the region.



JB Rabesca chopping wood

Another key spatial reference for the study is *the migration route and over wintering grounds of the Bathurst caribou herd*. Straddling the treeline and over-wintering grounds of this herd, this area has provided the Áutsýl K'e Dene with food, shelter and other resources needed for survival for thousands of years. The crossing of the caribou into the region has always been a sign of health in the natural cycle of caribou migration as well as a sign of the benevolence of the Creator. Of key importance to this study are the caribou crossings and trails north of Nâ Yaghe Kué at MacKay Lake as well as those found south towards Great Slave Lake. The potential for activities at Nâ Yaghe Kué to impact on the health of the caribou and their migration is of key concern to the community.

Other key spatial references include the *eskers in the north and south of the Nâ Yaghe Kué region*. These eskers are of significance not only for the denning of wildlife in the region but also as landmarks in travel and as shelter to the Denesôâine.

The Elders have focused their study of the potential impacts of the Snap Lake Project to the *Nâ Yaghe Kué region*, a unique and important part of Denesôâine Nýne.



The Na Yaghe Kue region

3.0 VALUED FEATURES IN THE NÂ YAGHE KUÉ REGION

When the loneliness comes to you, you've got to do something to take your mind off it. Maybe take a walk out in the forest. When you get up to the top of the hill and you see all the beautiful scenery around you, like the trees, mountains, lakes and shores, its so beautiful, it makes you wonder, "Who did this all for me?" (ML 21 04 97)

Among the most important lessons learned from the Elders is the importance of respecting the land. Researchers learned that those people who respect the land and live according to the knowledge of the Elders benefit from what the Creator has provided. Respecting the land for the Elders is a way of expressing thanks to the Creator for the land, water, and wildlife. Part of that respect is built upon a cultural identity that is closely connected to the land. Stories of Áutsýl K'e Dene history on the land are very powerful for the Elders. It is very important to them that others understand that they were born and survived on this land. Elder Pierre Catholique describes his history at æedacho Kue (Artillery Lake):

This land here is our land as I have said before. I grew up here at æedacho Kue (Artillery Lake). I'm very experienced in this area and I've been every where and have seen it all. I know my way around this area very well. Some people talk and tell stories then say they have seen the area around here but they have never been here. I myself grew up here with Jonas Catholique, Joe Michel, (Dzo dzi) John Michel and some have passed away - we all grew up together at our homes here at æedacho tãaze (Timber Bay). (PC 15 09 99)

Respect is also based on a spiritual connection or a deep understanding of the land, water, and wildlife as alive in the same way that people are alive. Many Elders speak about how the Dene share a common language and song with the animals and the land. Elders Pierre Marlowe and Madeline Drybones explain this connection:

In the olden days, all the animals including the birds used to talk like people. This was at the same time in history when the fire was alive. If you wanted a fire, all you had to do was call to the trees and the wood would come running and make a fire for you. One time a piece of wood hit a man by mistake. The man got very mad and started hitting the stick. After that the wood would not longer make fires for the people. (PM 03 06 99)

I know a few stories about the land being alive. There was a man – Gahdȳle, he used to talk to plants and animals. Everything is alive, even the rocks and sticks. Sometimes if you catch a rock in your net – its alive. Near Āutsȳl K'e, there is a big rock that comes out of the lake. People saw it. It made a big noise when it came out of the lake. On Dog Island, Billy's dad was visiting his nets. He was using his canoe and he noticed that the water was moving rapidly. He thought that it was an animal. He went back to his camp and came back with people to see it – all the time it was a rock. You could see how it had crawled up out of the water. (MD 16 06 01)

The Elders tell many stories about the value of respecting the land, water and wildlife and the implications of not showing respect:

In the past, people used to really watch things - respect. They knew not to chase the caribou too far. If they chased a caribou on one day - they knew they would have to shoot it on the next day. If people chase the caribou with the skidoo, they become stressed...it affects their lungs. They become sick - like pneumonia. We should teach the young people these things... Our main source of food is the caribou. If we lose the caribou, we will be pitiful. (ND 18 09 99)

Upon hearing geese flying overhead at Artillery Lake, Elder JB Rabesca recounts a story about what happened to a man who did not show respect for migrating geese.

Hey! - Geese you can hear them! In the olden days when you hear them fly over, they would say "hey - come fly over me again next year." They would tell them. This is what has been told. One time when everyone was calling out like this, there was this one person who was skeptical about believing. So he said, "Hey! Next year don't fly over me again!" The next spring before the geese flew over that man died. And this is what happened. So this is why you have to talk to the geese well when they are coming from the south or the north. These are important words in the Dene language. (JBR 15 09 99)

The way of life of the Denesôâine people is founded upon this profound respect for the land and all it contains. Their words echo the belief that to disrespect the land is to disrespect the Creator. The outcome of such disrespect can only be the demise of the Denesôâine as a thriving culture. On the other hand, showing proper respect for the land will insure health of the Denesôâine people and their ways for generations to come. The integrity of the land is intimately tied in with the health of the people and their lifestyle.

The following sections contain the words of the Elders pertaining to the features of value to the Denesôâine in the Nâ Yaghe Kué region. They describe these features, as well as why they are so important to the Denesôâine way of life.

3.1 GEOGRAPHY

Nâ Yaghe Kué means "really rocky land". The Elders describe this region as full of boulders and sharp rocks. However, they also describe the many eskers that run through this region, providing corridors through the rocky country where animals and people tend to congregate. They also stress that the Nâ Yaghe Kué is a "land of water", full of ponds, lakes, creeks and rivers. The words of the Elders in this section elaborate upon the geography of this area.

3.1.1 Land

The Nâ Yaghe Kué region, as described by the Elders, is a land with two primary types of landscape: Thai kŷl, or land that is good for walking, camping and travelling in all seasons (eskers), and Na Yaghe, or land that is really rough because of all the sharp rocks and boulders. Both these types of landscapes feature aspects of importance to the Denesôâine way of life.

Eskers are tremendously important for a number of reasons. The Elders stress their import as wildlife habitat:

Those little bushes, T'â bathe (bog birch), that is where the bears stay in the summer, in the shade. That's why it is said to never go downhill off eskers quickly, because bears might be there. (LE 17 06 01)

There is usually fishing in these thai ya kué (little lakes on top of eskers). Fish live in these lakes - how did they get there? Maybe an eagle was eating a fish and the eggs fell into the water. (JBR 17 06 01)

Eskers are the main places where wolves make their dens. Also you can find fox and ground squirrels holes in eskers. (JF 17 06 01)

Caribou always move along eskers when they are travelling through this kind of land. Musk-ox too. That is because it is smooth travelling compared to the rough rocks elsewhere. (JM 17 06 01)



Esker in the Na Yaghe Kue region

As well, eskers serve as important travel corridors for the Denesôâine :

You can find good rocks for tools around eskers. Old-timers would sit on eskers and make arrowheads. Maybe we'll find one today. Also you can find really heavy black rocks, but there aren't too many of them. They are good for pounding meat. (JM 17 06 01)

These small groups of trees near eskers (ts'u za æaze) are very important for us. We always camp by them because there is firewood, water and a flat spot. You can tell by the axe-marks on trees that people stayed there. In the wintertime, you can see just the tips of the trees because of all the snow. (EB 17 06 01)

Trees are only along eskers. They follow them, this is their land. Even in a big blizzard dogs [on a dog sled] will take you home, following the esker. If you look hard at these eskers, you will find mostly Chipewyan artifacts. (AnM 25 05 01)

We used to take the dog teams between Æedacho Kué (Artillery Lake) and Tha Gai Kué (Aylmer Lake) – it would take one night by dog team. We would follow the eskers so we would know the land. We don't have maps but we know where we are and where we are going. I traveled lots with my father all around this area. The trees seem much shorter then – now they are much taller. (JM 25 05 01)

The other primary type of landscape in the region is the really rocky terrain that gives the region its name - Nâ Yaghe. The Elders describe this sort of landscape as very rough for travel by both people and wildlife:

This land is very rocky, it is hard to travel on. We came here by ski-doo this April, was it ever hard to drive on these rocks. We had to travel mostly on the lakes. (AnM 25 05 01)

See how rocky it is here? Caribou have real trouble going through this kind of land. It is really rough for them. If there is an esker they can pass through. (JF 19 06 01)



Rocky area around the mine site

Though hard to travel through, the Denesôâine people use the very rockiness of this terrain to their advantage:

The water in these rock crevices is the best - it is really clean and cold. Even in the middle of the summer you will find good water in there. (LA 18 06 01)

Some of these really deep cracks between the rocks have ice in them all year round. It lasts a really long time. You can keep fresh meat in there for a really long time. You just put a whole gutted caribou in the crack, tied to a rope. Then you cover up the hole with spruce. It will keep all summer, just like brand new. (JM 18 06 01)

Eddy Catholique and me went to the barrenlands in the wintertime. Eddy found a pile of rocks with steam coming out of it. Eddy warmed up his hands in the steam. But they never found the place again. This was just east of here [Portage River Assessment Site]. (JM 18 06 01)

These terrain types are the predominant ones in the region. However, the Elders stress that the defining feature of this region is not really the land at all, but rather all the water in the lakes and streams crisscrossing the area.

3.1.2 Water

Snap Lake is within the Lockhart River watershed, a system of waters that flow through many lakes in a great arc to finally end up in the East Arm of the Great Slave Lake. In its travels towards Tu Nedhe (Great Slave Lake), Desnedhé Che (Lockhart River) must pass through Nadida Kué (MacKay Lake), Thai Gaí Kué (Aylmer Lake), Áué Da Kué (Clinton-Colden Lake), Gasba Kué (Ptarmigan Lake) and æedacho Kué (Artillery Lake). On it's final journey from æedacho Kué (Artillery Lake) into the East Arm, all the waters of the Lockhart River system must tumble over the cataract near the end of Desnedhé Che (Lockhart River), the great spiritual site of the Denesôâine people where the Old Lady sits - Ts'ankui Theda (Parry Falls). Elder Maurice Lockhart tells a story of the importance of the waters in this river system:

The Lockhart River has been here a long time, our ancestors (Old Lady sitting in the falls). Some times she feeds people by killing big game, caribou, moose, by drowning them in the river and sending it down the river for people to pick it up at the mouth of the river. Until today it's still the same, if you ask for help, she'll hear you any where you are, she's there to help people. When I was a young man I remember traveling with my parents (deceased) by canoe paddling. We would sometimes paddle to the mouth of Lockhart River and find dead floating caribou. The old lady had fed us today and we give thanks. The caribou was fresh and the weather was good at that time. Not long ago she gave us moose floating down river; that time there were a lot of people traveling. All the people ate moose meat and gave thanks. We have good use for her to be among us out here at Lockhart River. She helps people in every which way she can. Today we still visit her every summer to pay our respect for our people, our health and to be strong in our spirit. The Denesôâine believe she's a spirit that helps all walks of life, even nature and animals. If someone is sick people help that sick person in taking him or her to the falls and leave him or her over night to heal, that time there was a teepee set up back then. In order for her to help you would have to confess all your sins, just like going to church for confession. That is how it's been done to this day. During the winter you can see smokestack from a distance that has caused the rocks around the falls to darken. People who travel looking for caribou during the cold winter months ask her for help if they can't find the caribou around the Lockhart River. The smoke points straight up and at the tip it bends in every which way it points and that's where the caribou is. The people go that way to find the caribou. Once we built house around the mouth of the river, that time we had good life then, some of the log cabin is still standing, there are all types of stories about the Old Lady in the falls. (ML 08 00)

The Elders have often described how water is the most important element of life, how it ties all life together. Indeed, it is upon the water that all other valued features within this region depend. Without the water remaining in a pristine state, all other features in the area will suffer. Elders Alice Michel and Pierre Catholique reinforce the importance of maintaining the quality of the water in this region:

I used to travel around here when I was younger. We are mostly concerned about the water. Water is important for everything. I heard on the news that water down south is contaminated. This region is the last resource of clean water. We must make sure that it stays good and clean. All the Elders have the same concern. (AM 25 05 01)



Riffle in the Portage River near MacKay Lake

You should protect the areas and waterways that flow into the Lockhart River. Even as far as McKinley Point to MacKay Lake should be protected. At one time in the dry years – it may not seem like the water flows that way but in the spring you can see it - it all flows into Great Slave Lake. (PC 29 01 01)

3.2 WILDLIFE AND PLANTS

The Katthinÿne is full of the animals and plants that are essential to the Denesôâine way of life. All of these are found in greater or lesser abundance in the Nâ Yaghe Kué region. The words of the Elders in this section describe these plants and animals, stressing their importance in the cycle of life.

3.2.1 Caribou

The lifeblood of the Katthinÿne region is the caribou. The massive Bathurst herd migrates throughout the Nâ Yaghe Kué region, travelling to their calving grounds to the north in the spring, and back to

their winter feeding grounds south of the treeline in the fall. Elder Pierre Catholique describes this abundance as he tells a story from his youth:

...and my grandfather (Gahďýle) said, “We are going to see caribou now - Look around,” he said. He knew the caribou were here. Sure enough you could see caribou on the hills and at (tha cho k’e) a little further down from there we went ashore and there were many caribou there...The hills were covered with caribou migrating, coming this way. After harvesting a few of them we traveled back to our camp -after dark that time. (PC 15 09 99)

Jason Michel tells of the caribou migration routes:

The bulls migrate close to MacKay Lake and around the area, then the cows come down and meet them there [in the spring]. Then they do it all over again in the fall. I worked at MacKay Lake this past September and there were a lot of caribou there - all mixed, some cows, bulls and young new born calves. They were heading east towards (æedacho) Artillery Lake and some migrated south to the north shore of (Kaché Kué) Mcleod Bay and some migrated west towards the (Samba K’e) Yellowknife area. (JM 12 11 99)

As these tremendous numbers of caribou migrate through the region, they inevitably encounter the rivers and lakes that lace the land. It is in these areas where the great caribou crossings occur, often in the same spot year after year - across a narrowing in a lake, an esker bisecting a river or a calm spot in a torrent of rapids. These are the places that the Denesôâine people gathered during migration time, relying on the caribou to cross at the same place as they have in the past. In this way it was insured that enough meat would be harvested for the following season. Elder Jonas Catholique tells of a caribou crossing in the Aylmer Lake region:

There is a place where the caribou cross at Aylmer and that caribou crossing is called Leryah da (the ice is moving slowly). The caribou cross between the ice when the ice is crystal. When they cross they are covered with crystal ice, at the sides of the river there is lots of ice where it falls off the caribou. When the caribou come out they are covered in crystallized ice. (JC 29 01 01)



Caribou trails near MacKay Lake

In total the Elders have identified seven major caribou crossings throughout the Katthinÿne. Four of these are within the Nâ Yaghe Kué region, three on MacKay Lake and one on the western side of Aylmer Lake (Map 3).

3.2.2 Birds

The birds that polulate the Nâ Yaghe Kué region are recognized by elders and land users as integral to the natural cycle of life. Predatory birds, shore birds, song birds, gulls and ravens all have a role, as depicted in stories and legends. The birds' sight is very much respected and valued as traditional medicine. Elder Joe Michel tells a story about the traditional medicinal power of the yellow billed loon:

One woman was fixing a caribou hide - scraping. The dust from the scraping blew into the eyes of a man standing nearby. He left her and went down to the lake. The Yellow-Billed Loon said to him, "What happened to you?". The man told him what had happened. "Climb on to my back," said the Loon " and I will make you see again." The man did as the Loon suggested. Then the Yellow-Billed Loon dove under the water three times. That was how the man was able to see again. (JM 03 06 99)

Elder Pierre Marlowe talks about the importance of the eagle:

Eagles are very much respected. A lot of people used to use eagles for medicine. This medicine was very strong. A lot of people chose to heal people instead of hurting people. It was hard for people to sleep when they were bothered by strong medicine. But not all eagle medicine is the same. Some medicine is good; some is bad. If you use the medicine in a good way, it will come back to you in a good way. (PM 03 06 99)

Elder JB Rabesca tells a story depicting the importance of respecting birds including the raven:

One guy went trapping and caught a raven in his trap. There was a kid there who poked the raven in the eyes. The raven went blind and was flying around, bumping into trees. It is not right to think a common bird like the raven is nothing. The eyes of the bird are sacred. (JB Rabesca 03 06 99)

The raven actually received its black coloring in the region of the north shore of Mcleod Bay [southern part of the Nâ Yaghe Kué region]. Elder Joe Fatte relates this legend:

On the north shore of Mcleod Bay, that's where raven was thrown in ashes and grease. The raven was white and proud in the olden days. One time he captured all the caribou and made a fence out of wood and kept them for himself in the mountain from the people. But the caribou were released by the people using medicine power.

One time he was invited to a drum dance by the people and some animals, back then animals talked like humans. The dance continued all night - the plan was to throw the raven in ashes and grease as revenge for taking the caribou. At first the raven sat back and watched people and animals dance to the drum music. Then one Elder challenged the raven to a dance.

The raven was powerful in medicine powers and he told the people and animals that his medicine power is above the clouds and his songs were good as well. He began dancing and singing and it has been said that he danced and sang very well. The ash and grease had been set up for dawn. They captured him and then he was thrown into ash and grease. Then the Dene people and animals rushed out of the teepee, because it is said that the raven was good at throwing rocks and an accurate shot. (JoF 09 01 01)

The big lakes and waterways in the Lockhart River watershed serve as important flyways and staging areas for many types of migratory birds as they travel to their nesting grounds in the north and their winter feeding grounds in the south. Elders Louie Abel and Madeline Catholique tell of the importance of this land to the bird migration:

In mid-March, most kinds of birds come back each year. They come up north in the springtime. Some birds go to the barrenlands such as ducks, geese, old squaw, ptarmigan, snowbirds and loons. They stay in the barrens until fall time, until it gets cold for them. Then they go back down south. I used to live at Margaret Lake in 1957. I used

to hear all kinds of birds. I saw longspurs and snowbirds. The snowbirds go there all year. (LA 17 05 99)

We used to stay at Artillery Lake. That is the route we used to take into the barrenlands – through Aylmer Lake... that area is also very important for migratory birds, loons, swans, geese – that is what it means to us. Sometimes there are so many that the sky and lake are just white with them, you see all sorts of white. That is why that area is called Thai Gaí Kué (Aylmer Lake). (MC 29 01 01)

The Denesôâine people depend upon the vast numbers of migratory birds that pass through the Lockhart River watershed during the period when the ice is turning black and rotting on the lakes. The caribou have passed on their migration to the calving grounds to the north, and the fish have yet to become easily caught. It is a sure sign of spring when one can hear the noisy chatter of the birds upon the lakes and the smiles on the Elders' faces.

3.2.3 Fish

Fish are one of the staples of the Denesôâine diet. The waters of the Lockhart River watershed provide a good portion of these fish. Elder Noel Drybones describes a place where he has gone to harvest fish:

This place here [in Aylmer Lake] is (Kaldēle) place of fish and it almost never freezes over. On the north side I made a marker using rocks piled on top of each other. They should still be there on top of each other. This place has a lot of fish. You cut through the thin ice using only an ax and the water is about four feet deep. You can see lots of fish down there in the clear water. You can set a hook there and as soon as you do you will catch fish right away. You can take as many fish as you want. (ND 07 02 00)



Åutsŷl K'e youth with a large Lake Trout

Prior to going into the Nâ Yaghe Kué region to trap fur-bearing animals, the Denesôâine would often go fishing in order to stockpile food for their dogs and themselves during the long, cold trapping season. Elder Madeline Drybones describes this:

I went fishing all around the Ft. Reliance area - Fairchild Point, and up to Bigstone Point and the Barnston River, Bedford Creek, Hoarfrost River and all along the north shore [of the Great Slave Lake]. This is where we went fishing with nets, but when I go with hooks I go to Maufelly Point - this is where you can catch lots of fish. Also there is a lot of fish at Glacier Creek for going fishing with hooks. Going up to this place [in the barrenlands], you have to go through one small lake and then pass two portages and go through this narrow lake where there is a lot of fish and we would especially go to this lake to catch fish on their way up travelling back up to the barrens - just before we would go out there trapping, and then we would set one more net at Artillery Lake to stock fish for the barrenlands trapping. (MD 24 05 01)

Though the Denesôâine do not fish that much in the Nâ Yaghe Kué region proper, the waters of this region flow through most of the important Denesôâine fishing areas. Elder Joe Michel speaks to the value of maintaining the cleanliness of this water for the fish:

This water [in the Nâ Yaghe Kué region] is important, because of all the fish and drinking water. Everywhere you go through all these lakes [in the Lockhart River watershed] there are lots of fish - whitefish, grayling, loche, pike and lake trout. (JM 19 06 01)

3.2.4 Fur-bearers

The Nâ Yaghe Kué region is particularly important as habitat for the many species of fur-bearing mammals that are harvested for furs by the Denesôâine. These furs are tremendously important the Denesôâine way of life, both as raw material for clothing as well as trade items. Perhaps most importantly, trapping the fur-bearing animals requires the practice of the Denesôâine land-based culture. Elder Noel Drybones describes where these fur-bearers live, and how he traps them:

The people followed the eskers to direct them when traveling on the barrenlands. Near the big eskers there are little narrow eskers which are sand only and no rocks. This is where the white foxes raise their pups in their dens. This is where I will set my traps. White foxes mate near rough terrain on the tundra around boulders and rocks. They

make dens under snow - they might even have a wife under there. But this is not their regular den site - it's like a rough cliff with broken -up rocks.

The wolves too make their dens on the eskers, just about anywhere on the eskers. You can see them in the springtime if you are traveling around. My wife knows about it because she used to travel around with me looking for wolves. At the time they had a bounty on their head and we used to collect the ears for money. Because of this my wife knows about it pretty well what I'm talking about.

The Grizzly Bears, from what I have seen, never have their dens on the eskers. They have their dens on the outskirts of the eskers where there are these small patches of hilly sand. And another thing too is that they don't make their dens on the south side, only on the westside where the wind blows.

The wolverines have their dens just about anywhere - inside cracks of cliffs, anywhere where there is rough terrain. I went after one wolverine because I had wounded him. At the time I was a young man and I was good at walking around. I kept on going after him and he stopped at some moss-covered marsh with small labrador tea plants (nagothe Æaze). You can see that he had paused there because he had been eating these small labrador tea (nagothe Æaze). (ND 06 02 00)

Elder Pierre Catholique describes the rhythm of life for fur-bearing mammals:

This cycle of small fur bearing animals - to me it seems that they go underground and they come back from underground - this is how they were created at the beginning of creation.

The caribou is a little different because they live on top of the ground along with the moose. It is these small fur bearing animals - the foxes, martens, muskrats, beavers, and fishers which all have a cycle that they go through every few years. This one year at the Simpson Islands, to the west of here around those islands, there were a lot of fishers. They could be seen everywhere and I don't think they were ever all killed. Then they just disappeared all of a sudden. And it has been like this from time immemorial.

The animals seem to go underground and the mice too have their cycles. Some summers there are a lot of mice and other times there is nothing around here in Åutsÿl K'e. Its like they go underground. There is a lot and then there is nothing, and the way they are put on this earth by the Creator this is how it is. (PC 08 02 00)



Ground squirrel hole

The Elders recount many stories of the trapping days in this region:

Using over twenty dog teams the people would go out trapping for white foxes on the barren lands and meat, dried meat, is brought along too. A lot of people were trapping and only for white foxes. I myself too trapped white foxes for about twenty years and this is how the people lived that time. Sometimes it was hard when there is no meat at all then they would go to the barren lands to hunt, and maybe two nights the dogs didn't eat. The people would go hunting for caribou in different directions and caribou would be killed. They say that the people survived pretty well being lucky and all and fine in the end is the truth. For myself, I had a pretty good time back then even when the weather wasn't nice. (JM 16 09 99)

I myself had spent the night without fire wood because you couldn't see anything. Sometimes I slept in the sled and never went any where without your sleeping bag its also good for when its real cold out there, then when its time to travel home, you just had to get in your sleeping bag and its warm. Only when the weather gets real bad does the lead dog get lost on the trail. And this is how I had worked- when two white foxes are trapped in one day you were happy - the meat is good and when ever a fat caribou is killed this is fixed to use for food. And this is how we had worked for ourselves. (ZC 27 09 99)

The last time I remember a lot of Dene people trapping for white foxes was in the year 1942. It was on the barrenlands - in all this area over here to the east and northeast around Campbell Lake, Ptarmigan Lake, and also in this area here around MacKay Lake; and this here is Fort Reliance (Kache Kue). The late Louie Drybones [Noel Drybones brother] trapped in the area too; and Joe Nelson was trapping also around

there. That year, 1942, a lot of people from Fort Resolution (Deninue kue) and Rocher River passed through here going to the barrenlands to trap for white foxes; and they trapped a lot. My father too trapped many white foxes and at the same time there was caribou everywhere on the barrenlands. The late Louie Drybones was probably the last one to trap for white foxes on the barrenlands. It was in 1957. That year while I was keeping a tourist lodge at Taltheilei Narrows I heard there was a lot of white foxes. So I went there too to trap white foxes and did pretty well myself. But then the white foxes went south. They come the same way the caribou migrates and they don't stay in one place for very long. They are always following the caribou. Some years there is lots and other years there is none. Like everything else, they grow and multiply and no one knows where they come from. (PC 08 02 00)

Though trapping activity in the barrenlands is of less intensity than it once was, fur-bearing animals still maintain a very important role as an essential element of the Denesôâine way of life. The identity of the trapper remains a vital archetype in the culture.

3.2.5 Plants

Plants play a critical role in the livelihood of the Denesôâine. Initially, they are highly respected as a food source for animals, especially the caribou. Elder Jim Fatte describes a certain type of lichen as the mainstay of the caribou diet:

This lichen you see all around on the rocks is the main food of the caribou. They eat it all the time. Sometimes where there is lots of caribou the rocks will be just bare, because the caribou have eaten all the food. These are called ts' âju. (JF 17 06 01)

The plants found in the Nâ Yaghe Kué region are also used for a variety of purposes by the Denesôâine people. They are used as food, to fashion a variety of tools, and as traditional medicine:

Ts' ââchogh (blueberries) are good for jams and for eating right there. These berries are better in the barrenlands then below treeline. There are two kind of these - some really black, some are really blue. Black ones grow on higher bushes, but there are more blue ones on their bushes. (MD 19 06 01)

The new leaves on nagoth cho æaze (medium-sized labrador tea) are the best for tea. Drinking it is just like good medicine, when you have a cold or even a headache. (LA 18 06 01)

K'alisín (green alder) like this is good to cook fish on. You put the fish on k'ai dedlin (basket willow) and set it on top of the fire made with k'alisín - this gives it a good smoked taste. This is how we cook on the barrenlands. We don't need no grill. (JM 18 06 01)

Dried up tth'al delgi (red sphagnum moss) is very good for diapers. That's how we did it in the old days. (AM 17 06 01)



Alice Michel points out the moss that is good for diapers

This plant with the purple flower is kuzi hala (northern bog laurel). It only grows near water. It is really good medicine. You boil the whole thing and then put it on sores. (MD 17 06 01)

nitâ'ÿr (cranberries) that are purple or black after a winter on the bush, they are really good for sugar-diabetes. (MD 19 06 01)

Elder Alice Michel effectively sums up the great importance of insuring that the plants found in the Nâ Yaghe Kué region are not negatively impacted:

We should also look at the vegetation - berries. We don't want it spoiled. We eat it - and the little birds eat it too. (AM 28 05 01)

3.3 DENESÔÂINE

The Nâ Yaghe Kué region is an area traditionally used by the Denesôâine. Many people travelled throughout the region in search of fur-bearing animals, as well as to hunt caribou at the great caribou crossings at MacKay Lake and Aylmer Lake. This section features the stories of the Elders describing their use of the area.

3.3.1 Travel routes, cabin sites and traplines

Many of the Denesôâine Elders have travelled and lived throughout the Nâ Yaghe Kué region. They stayed in the region in order to trap the valuable fur-bearing animals such as white fox and wolverine, as well as to hunt caribou at the crossings. As well, they travelled through the area along the eskers from the historic Denesôâine villages in the east around Clinton-Colden Lake and Artillery Lake towards the winter caribou hunting grounds in the west (Beaulieu River, Gordon Lake). Some even travelled north towards the Coppermine drainage basin. Elders Maurice Lockhart, Madeline Drybones, Noel Drybones and August Enzoe recall stories of their travels in the area:

Our ancestors travelled around the Snap Lake area in the olden days, people have seen the diamonds but they did not know what to do with the diamonds. Now the white people think that our ancestors did not know about the diamonds. Well, all they thought was these are nice rocks. Our ancestors traveled around Snap Lake, many times in the olden days in winter and summer they had travelling routes into the barrenlands - my late father traveled with his parents and relatives - he was ten years old at the time. This was springtime before the ice melted, they travel a long ways to where animals have their young ones at the Thelon Game Sanctuary. Our ancestors traveled on foot most of the time but to cross rivers they used one canoe in order to bring people across. People used to name places in our language - places like Artillery Lake, Ptarmigan Lake, Fletcher Lake, MacKay Lake and Aylmer Lake. Our ancestors were the first to discover the diamonds. I used to travel that way in my younger days. I went with other younger people hunting caribou in summer and trapping fur-bearing animals in winter until people started staying at Áutsŷl K'e. (ML 11 07 01)

Not long ago I remember people stayed around here on the north shore of Mcleod Bay. Louie Drybones and his two brothers Michel and Morris Baniya – they were the last ones to stay here. They stayed at the Waldron River along the shoreline. People used to take care of what they gained and had in the olden days. Some people starved around here because of the meat shortage. Sometimes it was hard and difficult because of the cold winter weather, the lack of food. When there was no caribou it was tough. Abele Nitah also stayed here. He had a cabin at Bedford Bay. These canoe routes and trails into the

barrenlands have been here for generations. Our ancestors used these routes and trails. Now we still use them to go hunting for caribou. It has been passed on from our great ancestors to today – from Taltheilei to Fort Reliance. (ML 31 08 00)

We used to travel far and wide, and you still see the old camp sites. Margaret Lake, that's where they used to trap too, all over that area. From there to where Louie Drybones house is - I can't remember the name of the lake. Across from there [MacKay Lake], his house is there. There is this lake and close to there is where Alice Michel and her family stayed. We passed by there once, a place where you can paddle and you could not see the other side, it was like being on the ocean, an endless sight - no land for miles [Aylmer Lake]. Across this lake we went to get dry wood. We slept one night and went on. To work like that in those days is a lot of work. We use to boil ice to get water, and when there was little wood, we use to get willows and burn them slowly with green wood. We use to sleep around it. We just put up a tent anywhere. We slept one night and moved on in the barrens and the hunters killed musk-ox, set traps to kill minks, foxes, wolves, and other animals. Eddy use to be with us then, my son, he had his own dog team, from there we moved on to travel the river (Thelon River) where our camp was and then Louie Drybones went back to his own camp which is more than one nights sleep. (MD 11 07 01)

From Aylmer Lake to Snap Lake, in the spring when the caribou comes back, it was fun travelling on the land. Paddling down the river with my dad, down Aylmer Lake, we had an 18-foot canoe, its probably still out there. My brother Louie Drybones he had a 16 ft canoe, you walk and then paddle to get to Margaret Lake, my house was at Margaret Lake. We used to travel back and forth from there and back. There was this big bunch of trees around one of the lakes in the area. This is where the people would camp and make dried meat with all these caribou travelling around. We would travel through big bunches of bushes and then there would be flat land to travel on to an area where all the old timers get together. (ND 18 07 01)

In the old-timers days I used to live around there [Nâ Yaghe Kué]. My uncle Louie and other Drybones. In 1944 –45, around MacKay Lake, my uncle Louie had a house. Louie and I used to live there every year. We would trap all around there. I remember it in bits. It's like a dream. I was young then. (AE 26 07 01)

As evidenced by the Elders' memories, the history of Denesôâine use in this region is a storied one. They are intimately tied to the land and waters in this region. It is of the utmost import that the features of

value within this region remain relatively unaffected by industrial development. The very health of the Denesôaine way of life depends upon it.

4.0 RECOMMENDATIONS FOR MITIGATING AND MONITORING THE IMPACTS OF THE SNAP LAKE PROJECT UPON THE NÂ YAGHE KUÿ REGION

Whatever we say we say from experience. Its good to work together to cooperate. This is the first time I have been at Snap Lake [the mine site]. I see the beautiful land. It would be very sad if anything happens to the water and the land. (AM 25 05 01)



The Snap Lake Project

During the course of this study, the Elders were called upon to use their intimate and detailed knowledge of the Nâ Yaghe Kué region to identify possible impacts the Snap Lake Project may have upon the regional environmental features of value to the Denesôâine. They used their profound knowledge of the land to define specific mitigative measures to deal with these impacts, as well as very specific suggestions for monitoring these impacts.

This section is organized so that predicted impacts are grouped according the respective Snap Lake Project components that may be their cause. Relevant project components are briefly defined, followed by Elders' words concerning the potential impacts upon valued environmental features. Recommendations for mitigation and monitoring follow the description of potential impacts.

4.1 SEWAGE TREATMENT FACILITY AND ASSOCIATED WETLAND

The new sewage treatment plant replaced the old facility. During construction the plant's capacity will be doubled. At the peak of construction there will be 450 people on site. The plant breaks down waste through natural bacteria. It separates out water from the solid sludge. Then the solid sludge is incinerated or put in the North Pile, whereas the leftover effluent is deposited in a nearby wetland.

4.1.1 On the effectiveness of the wetland as a filter

I see that there is a small amount of water [from the sewage treatment facility] leaking out here into this area [wetland]. I can smell this water, not as much as inside the building, but its still not pure water. This wetland is supposed to act as a filter for the water, but you can see that the water is just sitting on top of the ground. It is not soaking in very well, maybe because of permafrost or maybe just because there is too much water. In the wintertime, this will be even worse. The water will just sit on top and freeze, then runoff into the lake in the spring. (LA 16 06 01)

Where they are dumping that water, there is permafrost. It won't filter itself naturally and if it overflows - its going to go straight into the lake. That sewage area runs right off into the lake. I even saw a little creek running off into the lake. (EB 16 06 01)

The water in this wetland is dirty. Usually water in the muskeg is clear and cold. You always know that there is good water to drink in pools in the muskeg. Not here though. (JM 16 06 01)

Water seeps wherever there is trees. That's where the water goes into the lake from the wetland. Its just above where the mine gets its drinking water from. (JF 16 06 01)

At another mine the water from the sewage treatment plant is so clear...you can drink it. (EB 16 06 01)

4.1.2 On the plants and animals in and around the wetland

Many plants in this wetland are dying - they have black leaves. It could be from the water being put in here, or maybe from the dust. (MD 16 06 01)

At the sewage outflow, we can't really say right now what is happening. The plants are dead, but they haven't really started to grow this year. It's still cold. (JBR 16 06 01)

The intake pipe from the lake - do they treat the water with chlorine? Maybe it is the chlorine that is killing the plants. Maybe that [chlorinated] water, as well as laundry water, goes into the sewage, and then gets dumped into the wetland. We really have to think about it before we make any recommendations. (LE 16 06 01)

Right in the wetland I saw three different sets of caribou tracks. Also, around the wetland I saw arctic hare and ptarmigan droppings. (JF 16 06 01)



Caribou tracks around the wetland

People told us that there are no caribou around here, but we can see lots of caribou tracks everywhere, even in the sewage area - they could be eating from there. (LE 17 06 01).

4.1.3 Recommendations for mitigation

The wetland area will not filter the dirty water before it gets to the lake. There is too much dirty water, and the wetland is either frozen in the winter or has permafrost [partially frozen] in the summer. (EB 16 06 01)

At BHP, they have straight clean water coming out of the hose [effluent]. The guy even drank the water! They should have a plant like that here. (JM 16 06 01)

If it isn't clean water getting put onto the wetland, it should be just contained within a pond or something. As long as the dirty water stays in one place and doesn't leak into the lake. (LA 16 06 01)

To keep animals away from this wetland, maybe we need a fence around the whole area. As long as the fence is small enough so that the caribou don't get caught. (AM 16 06 01)

The plants aren't growing right now in the wetland. But we cannot tell until later in the summer if this is because the land is spoiled. (JBR 16 06 01)

4.1.4 Specific recommendations for monitoring

It would be good to monitor this wetland to see if there are any changes in the next few years. We should tell the environmental people here to watch these plants, and they can tell us how they are doing [the plants in the wetland], then we can tell them why the plants are having problems. (LE 16 06 01)

Those plants around the wetland have black leaves, like they have been flooded or dying. If these black leaves stay there later in the summer, we know that something is killing those plants. (AM 16 06 01)

They need to sample the water where it flows into the lake down at that creek with all the small trees [outflow from wetland]. You can hear the water flowing through the rocks there. (EB 17 06 01)

4.2 MINE WATER CLARIFICATION POND

Water from the underground mine gets pumped into the Mine Water Clarification Pond. As well, runoff water from the mine site is routed into this pond. The sediment in the water is supposed to settle in the pond. When most of the sediment has settled, water from this pond is pumped into Snap Lake. The pond is contained on two sides by dams made of crushed kimberlite and waterproof liners.

4.2.1 On the effectiveness of the clarification pond

You can see that the water is very green and cloudy right now. That's because the wind is stirring up the bottom of the pond. This will happen every time there is wind. On the barrenlands there is wind all the time. (JM 17 06 01)

This pond won't hold all the mine water in the future. Even if they make it bigger, there will probably be times when the pond is too small for all the water. There must be overflow from this tailings pond, even beavers have overflow. Even when the ice is thick, it can still overflow. (AnM 25 05 01)

4.2.2 On animals in the clarification pond

They say that the water does not contain any chemicals. But we can't be so sure. Seeing ducks and muskrats in that pond is not very good. We can't be sure that the water is clean. (LA 17 06 01)

We can check the water there too. The ducks go there on the water - they need to be careful. Even the muskeg - its important to look at it. If its contaminated - it will be contaminated for a long time. (PC 28 05 01)

The thick ice cracks on the pond because of the changes in water level. This is dangerous for animals in the winter, even for people. Animals shouldn't walk on this pond in the winter. (EB 25 05 01)



Mine Water Clarification Pond in winter

4.2.3 Recommendations for mitigation

There needs to be a filter to keep the dirty water from going down into the lake. My number one recommendation is to filter this water so that it is really clean. Åutsŷl K'e drinks that water and so do the animals. (AnM 25 05 01)

They should only let water out of the pond when the water is really clear, maybe after many days of settling. (JM 19 06 01)

A good, solid fence should be built around this pond, so that the small animals like muskrats can't get in. Also people. I'm not sure how to keep birds out though. Maybe some sort of scarecrow-like thing that moves and makes noise. (EB 19 06 01)

4.2.4 Specific recommendations for monitoring

Even if the ground is contaminated, it can be fixed. But if the water is contaminated, everything will be affected. We need to watch [monitor] even the smallest streams. (JBR 25 05 01)

All living things need water - the plants, lichens and people too. The caribou eat the lichens and it gets into the food chain that way. We should be doing tests to see if the water is contaminated or not. Especially in the springtime, there is lots of water. At the end of August, the water goes away [some streams dry up]. (PC 25 05 01)

There won't be a problem with water in the Lockhart River Watershed now, but maybe in 10-20 years there will be. We need people doing regular sampling in the pond [Mine Water Clarification Pond], where they put the water into the lake, as well as in the streams where the water flows out of the lake. Also by MacKay Lake where the water goes. It is a long lake, MacKay Lake, big and long. (JM 18 06 01)

4.3 MINE SITE SEEPAGE AND RUNOFF

Water will continuously be seeping and running off from the mine site, particularly the North Pile (where all the waste kimberlite will be stored). Water running off from the North Pile will be collected via a series of berms, ditches and sumps which will eventually discharge this water into the Mine Water Clarification Pond.

4.3.1 On the effectiveness of the runoff and seepage collection system

When you blast and take rocks out of the pit, the run-off will go into the land, into the lake. This has to be watched. (LA 25 05 01)

You cannot detect all the little streams going in and out. (AM 25 05 01)

I don't want the water to be contaminated. If a little bit of land is contaminated, its OK, but if the water is contaminated everything suffers. I am concerned about dirty snow melting and entering the watershed. (JBR 25 05 01)

These ditches don't catch all the dirty water. Oil spills on the roads will just get washed away into the water. Also, the exhaust from the trucks - it lands on the snow and also affects the water. (LA 18 06 01)

We were at Snap Lake [in early April] for two days. It looks pretty good, but some dirty water was leaking, and a little lake [Mine Water Clarification Pond] was overflowing. A lot of dirty water was going into the main lake. (AnM 10 04 01)

If the water gets polluted, it would take a lot of pollution and a long time for it to get down to Artillery Lake and the East Arm. Right now, I'm not too worried about it. Snap Lake is just a little pond, it [the water] has to go through big lakes like MacKay and Aylmer. But we always have to be on the safe side and watch it well. (LA 19 06 01)

4.3.2 Recommendations for mitigation

All the dirty water from the mine should be caught in ditches, and maybe run into a pond. But they [ditches and pond] have to be really waterproof, so that nothing can leak out. Maybe they can put cement or something in [as a liner] to make it waterproof. If they clean the water, it's OK to put it into the lake, but if not they should just keep it in that pond so that it doesn't effect the main water [Snap Lake]. (LA 18 06 01)

4.3.3 Specific recommendations for monitoring

They should take water samples all over the mine site, wherever there is water flowing that could get spoiled. (LA 18 06 01)

4.4 UNDERGROUND MINING ACTIVITIES

Mining activity at the Snap Lake Project will occur underground, as will a lot of the kimberlite crushing. A lot of groundwater seeps through the mine tunnels, whereas other water is used in the drilling process. This underground water makes up most of the water going to the Mine Water Clarification Pond.

4.4.1 On groundwater flows

We don't know where the groundwater goes in this area. All that dirty water underground will go into the groundwater. They can't catch it all and pump it all out. Maybe that dirty water will come out someplace else through a hole in the rocks [spring], maybe on land or into another lake. (LA 19 06 01)

There are some fast-moving streams underground in the mine, and a lot of the rocks are wet. Lots of water was falling from the ceiling. There is really lots of water moving down there. (LE 19 06 01)



Looking at the water flowing underground

4.4.2 On dust underground and exiting through the portal / vents

With all this mining activity underground, where will all the dust go? Especially when they start crushing underground. (LA 19 06 01)

Even if you try to keep all the dust underground, it will still come out through the holes to the surface. All around those vent holes there will be dust on the plants. This is especially bad if the caribou eat it. (AnM 25 05 01)

4.4.3 Recommendations for mitigation

They should try to keep that mine dust underground. All that dust that comes out of the mine holes, it can kill plants. The caribou and the foxes eat that stuff and they get sick. (PC 11 07 01)

If there is just small amounts of dust and it is spread around real good, it should be OK. (AE 26 07 01)

4.4.4 Specific recommendations for monitoring

Where does all that underground water go? If it leaks through the rocks, it must come out somewhere. They need to find out where that water is going, and make sure to sample it to make sure it is not getting contaminated. (LA 19 06 01)

4.5 SOLID WASTE (MINE ROCK AND TRASH)

53% of all the processed kimberlite will be deposited into a large pile (North Pile). The North Pile will have a maximum height of 27 m. The pile will be composed of coarse and fine rock, deposited as a water / rock mixture (paste).

Hazardous waste will be shipped to an approved disposal site. Most trash will be burned in three oil-fired incinerators. Trash that will not burn will be buried in the North Pile.

4.5.1 On erosion from the North Pile

When I was at the BHP mine in May, we saw how dust was blowing from the dried-up ponds where they dump the waste kimberlite. This will probably happen with this North Pile. With all the winds on the barrenlands, maybe most of that pile will just blow away. (EB 10 07 01)



Small pile of processed kimberlite

4.5.2 On the incineration of trash

At the Gahcho Kué (Kennady Lake) advanced exploration camp, the snow is just black from the incinerator. Those guys in the camp lived in constant ash falling from the incinerator fires. (AnM 10 07 01)

I've worked at the mine last spring, Winspear [De Beers - Snap Lake] from what I've seen about ten-mile radius north, west south and east, toward the north east side about ten miles radius I've walked. When I was walking around I sunk my feet in to the snow. I kind of wondered about it. Two days later I traveled in a helicopter around the area and noticed dust that fly from the trucks that haul gravel. At that time the wind was mostly coming from the north. I've noticed the dust particles fly at least ten miles radius to the eastside on to the ground, which will effect the environment and caribou habitat. (JD 18 12 00)

4.5.3 Recommendations for mitigation

They should only be incinerating trash on calm days with almost no wind. That way maybe the ash won't get blown all around camp and the land. (AnM 10 07 01)

The small rocks that are put on the big pile should be made into a sort of cement, so that they won't blow away that easily. (PC 11 07 01)

4.5.4 Specific recommendations for monitoring

They should watch [monitor] to see in which way the dust mostly blows, and how far from the mine site. They should make sure that this dust does not turn the plants black, or sometimes white with so much dust. (JD 10 07 01)

4.6 AIRSTRIP AND SITE ROADS

The airstrip at the Snap Lake Project site is currently 914 m long. It will be expanded to 2000 m in order to accommodate larger aircraft. There are also a few roads on-site for mine vehicles. They are either one- or two-lanes. Both the airstrip and the site roads are made of gravel. Dust will be suppressed using water from nearby lakes.

4.6.1 On dust

One of my main concerns is dust and the cumulative effect on vegetation. The dust will be blowing from many different places, year after year. It will affect the vegetation. (LA 28 06 01)

4.6.2 On the disturbance of animals

Some animal dens have been destroyed. They said that the fox [seen at the airport] was flooded out of her den. Some people are saying that there are too many foxes at Ekati and that they have to catch them [live] and take them to the treeline. What do they do with foxes here? Do they trap them also? I know that when they move them, a lot will just come back. (LE 16 06 01)

Ground squirrels and mice are in the big rocks at the side of these roads. That is why the foxes and other small predators hang around. At the other mines like BHP, they are using live traps to catch the foxes, and then they send them south of the treeline. (EB 16 06 01)

Wildlife don't stay in one place. They migrate. People used to kill a lot of fox. But nobody is keeping their population down nowadays. For wolves, you can find wolf dens in eskers - where there are trees. But the fox dens are found anywhere - even in big boulders and rough places. (MD 16 06 01)



Driving down a mine road

4.6.3 Recommendations for mitigation

They should use local trappers to trap out the small animals that hang around the mines, like foxes and wolverines. These animals get used to people, and they just hang around. They could even be dangerous. If you move them, they will just come back. They should trap these animals out. It would help out the local trappers too. (LE 16 06 01)

The trappers should make a deal with the company and come here and trap the foxes in the area. We should recommend that this be done. As long as we don't trap the wolves. That way we can do something. (LA 17 06 01)

I stayed at the Lockhart Camp [Lupin winter road], there was lots of foxes that were tame and well fed. Some even had names. These are nice prime furs. We should be able to trap on mine sites. We should be able to trap the animals out. (LC 02 01)

They have to try and keep the animals away from the mine site. They have to keep garbage hidden away and make sure people don't feed and touch the animals. Or else they will stay at the mine and never leave. (ND 18 07 01)

4.6.4 Specific Recommendations for monitoring

One or two trappers could check out the animals that lived around the mine every season. From the animals they catch in their traps they would have a good idea of the number of animals hanging around. (AE 26 07 01)

4.7 SOUTH ESKER QUARRY AND ESKER ACCESS ROAD

Sand for the construction and maintenance of the Snap Lake Project will be obtained from an esker located 9 km south of the project site. Access will be via a winter road between the project site and the esker.

4.7.1 On wildlife and vegetation in the area of the esker

Here there are a couple of sets of wolf tracks right on the esker, right near where they are getting the sand. There are some caribou tracks as well. Over there is a muskrat den near the trees and that little pond. Some of those trees have been chopped off a long time ago by old-timers. These little groups of trees are called t'su za æaze - they are where people would camp on the barrenlands. (EB 17 06 01)

Wolves and foxes, around this time, they have pups in the eskers. Ground squirrels too - you can eat them, they're real fat. They put berries in their holes in the fall time. I saw a fox den, a fresh one, with old caribou bones around it. There are not many birds around, but we did see a falcon and a little brown singing bird. (LA 17 06 01)

Around here there are three kinds of berries and three kinds of labrador tea. Also there is the white lichen that caribou like to eat all over the place. That black lichen is good for soup - you make a broth with fish and fish eggs. People used to even dig in the snow to get it. (JF 17 06 01)

These here are musk-ox tracks. You can tell by the wide shape of the print and the little holes that the back "toes" make. I only can see one set of tracks. There are caribou around here, but they don't hang around. They just pass through. (JM 17 06 01)



Quarry and access road on the South Esker

There is not too much wildlife around this area. Maybe it is not on the main travel route. Or maybe it is not the right time of year. (JF 17 06 01)

As long as the environment is clean, digging up the esker would be fine. We didn't see much sign of animals or people. We'd see more of that around MacKay Lake. (MD 17 06 01)

If they keep using that esker, than maybe that whole esker will be gone. (LE 17 06 01)

4.7.2 On dust from quarrying activity

Dust from the mine and the quarry could settle on this stuff [caribou lichen], and they would still eat it. Maybe this is why some of them are so skinny and have pus in the meat this year. (JM 17 06 01)

Dust from the mine couldn't come this far yet. Leaves go black from the dust. Only when mines are blasting can you see dead plants. They are not blasting a lot at this mine yet. (JF 17 06 01)

4.7.3 On the esker access road

You can see where the winter road went. There is the mud turned up from underground (ṭhai k'etḥ), the broken trees (dechŷn naké) and the areas where the ground is torn from truck tires (Ni na1 chŷ1). (AM 17 06 01)

4.7.4 Recommendations for mitigation

As long as they don't dig this esker so much that it is mostly gone, it should be OK. They should make sure they don't dig up dens, old campsites [archaeological sites] and the little esker ponds (ṭhai ya kué), where there is really good water. (JF 17 06 01)

4.7.5 Specific recommendations for monitoring

We should just come out here every spring after they dig in the esker. We can just check around like we did today and it would be good. We [the Elders] can tell if any animals are being effected, if anything is happening to the land and the animals. (LA 17 06 01)

We need to check around that area during the times when the caribou are migrating through the MacKay Lake area. (AE 26 07 01)

4.8 LUPIN WINTER ROAD AND THE WINTER ACCESS SPUR

Mine supplies such as fuel and lumber are shipped in the winter along the Lupin Winter Road from Yellowknife. The 35 km winter access spur to the Snap Lake Project branches off from the main road at MacKay Lake. About 6.5 km of this road is over land, whereas the rest is on frozen lakes.

4.8.1 On caribou movements

When they [the caribou] migrate to calve, and when they come south, they split up into smaller groups, but when they go up they all go to the exact same calving grounds. They always use the same crossings, they wait around and feed and we go to hunt them. (MD 18 06 01)

As they come south from Lac de Gras, the caribou hit MacKay Lake and split up into two main groups. One group goes east from MacKay Lake towards Aylmer Lake, and they cross the lake at the traditional crossings there. The caribou go towards Artillery Lake. The other group goes along the north shore of MacKay. These caribou come down to

MacKay Narrows and cross there where it is narrow. There are two main crossings. After crossing they follow the south shore of MacKay Lake towards Gordon Lake. The caribou tracks on the south side of MacKay have a northeast to southwest orientation. The caribou that cross in these areas usually go towards Gordon Lake, but now some go directly south towards the north shore of the Great Slave Lake. This is what happened this year - they didn't get any caribou out west. (EB 18 06 01)

The caribou around here [MacKay Lake narrows] don't really pass through the Snap Lake [the minesite]. They pass towards the northwest of the mine. (JM 18 06 01)

Caribou pass through Snap Lake but not where the mine is. They are going towards Cook and Artillery Lakes, on the other side where they pass they go to Yellowknife. They go three directions from Snap Lake. (PM)

One of the women who work here [Snap Lake site] said there were 20 caribou here on June 4. There were even many groups around towards the south-east. They [the caribou] don't move through here [Snap Lake site] in big groups, but in smaller groups, clusters moving through the area. Lots of caribou may pass through here, but in smaller groups. There is lots of food around the south side [around the eskers] and it isn't too rocky. (LE 18 06 01)

Caribou like to go in smooth places, not where it is rough. They go in valleys and on ridges usually. (EB 18 06 01)

No caribou passed this spring at the MacKay Narrows, where we were today. You could tell. The droppings were all smashed flat, the main trails in the muskeg were not all chewed up and wet. In the past this was a place with lots of caribou, but not this spring. (JBR 18 06 01)



Caribou trail near MacKay Lake

Its not like the caribou don't pass here because the land is bad or there is no food. They are getting diverted by Ekati, Diavik and the winter road. (MD 18 06 01)

I have no major concerns with what I saw on the winter road during our trip [in early April]. Around Snap Lake however, there were not wildlife tracks anywhere – no caribou tracks at all [in early April]. I think there are no tracks there because there is naturally not much wildlife in that area. It's not like at Tthe Luz dŷl ghaí Tué (Lac de Gras) where the BHP and Diavik mines are. The caribou always migrate in that area – the mines are in the middle of the migration route. At Na Yaghe Kué there are lots of rocks and it's a very rough area. Even foxes and wolves cannot make their dens there [right at the mine site]– they go north or south where there are eskers. (JF 28 05 01)

Around Snap Lake, there is too much rocks for the caribou. It is really rocky land. (AE 26 07 01)

Lac de Gras is the main caribou movement route. Diavik and Ekati [diamond mines] and the [winter] road are blocking them. Even a rock pile, the caribou will never cross it, it will block them. Just like the corrals we used to make, they would never cross these. The road is just like a big corral. (JM 18 06 01)



Caribou on the Great Slave Lake

When caribou migrate, it is a non-stop movement, straight in-line. When they cross Great Slave Lake, it's in one big line with no gaps. I think they have a hard time when they hit the road. (JBR 21 03 01)

Anytime you block the caribou with a road or piles of rocks or similar things, the caribou can never cross it. On top of that all the noise chases the caribou away. (LE 18 06 01)

In the future, the caribou will change their route again to adapt to the mines. With all the industrial activity, the routes will be different. (LA 18 06 01)

4.8.2 On road traffic

In the wintertime, the traffic disturbs the caribou, with big trucks going back and forth 24 hours a day. (JF 18 06 01)

I used to come around here [Snap Lake] to hunt wolves. The past 2 years I have seen nothing around here, just one wolf track. Caribou migration has changed, caribou move more north now maybe because of the ice road - there is too much traffic. (AnM 25 05 01)

The animals will be destroyed because of falling rocks, oil and other poison substances that drain into our land and lakes [from the winter road]. All this stuff the mines are doing is disturbing the animals with loud noises and all the traffic. I feel sorry for our future children. (MD 11 07 01)

I worked on the winter roads before. I am concerned about oil spills, especially when trucks are parking for the night. Also, I think that truckers might be feeding the animals. We have to watch with all these roads nowadays. (AnM 21 03 01)

Oil spills are hard to spot, but they are there. If you are constantly flooding the ice road when you are maintaining it, the ice just forms over the spills. But all these spills go into the water when the ice melts. (HC 21 03 01)

I went to work around the Lupin winter road this summer doing surveys. I flew all up and down the road. There is lots and lots of garbage lying around. It must be all from the truckers throwing stuff out on the side of the road. There is even lots of truck parts - old tires, pieces of bent metal, etc. Someone should really clean that stuff up. (FB 28 07 01)

4.8.3 Recommendations for mitigation

There is going to be more and more traffic on these winter roads with all these mines. Caribou will have a real hard time crossing. When the main group of caribou pass through the area, the road should shut down for awhile. Just until they pass. Truckers should also slow down and stop whenever there is an animal crossing the road. (JBR 21 03 01)

They shouldn't feed animals. You feed them, you get fired. (EB 21 03 01)

If people park [trucks], they should park on the land, not on the lakes. (AB 21 03 01)

Trucking companies should get big fines for littering and oil spills. All garbage should be cleaned up in the spring, and the spills need to be cleaned before the ice melts. (FB 28 07 01)

Northern people know how to drive winter roads and how they are built. They also know how to respect the land and not feed the animals. But most of these drivers come from down south. They are willing to work for cheap. With more northern people driving that road, you would get less accidents and troubles with animals. (AnM 21 03 01)

While working for an archaeological survey [Kennady Lake], I came across 5 injured caribou. When we see injured caribou, we like to kill them. This is to relieve them of their

pain. But they wouldn't let me. TK should have a say in how these caribou are managed. (LC 02 01)

No matter what you do, caribou will be effected by these mines and roads. The only way to not effect the caribou is to have no mines and roads. If there is a mine, there will be roads. And if you have a road, there will be trucks on it. If they put it through, you can't stop everything for the caribou. But maybe that is what the caribou need. (PC 11 07 01)

Around the mine if they build a big fence, then the caribou won't be so close. If not they will be all over. If they build a fence, it will be good for caribou when they migrate through. The mine is not for caribou. (NA 17 07 01)

In the old days, we put brush 5-6 feet apart and the caribou don't pass through it, they pass along side the brush. I've been around that area [Snap Lake], there were lots of caribou. (JC 02 01)

4.8.4 Specific recommendations for monitoring

You should really monitor in the spring and fall when the caribou move. Concentrate around these times. Moose cross the roads in fall during the rut, and caribou too. They move real quickly around this time. (JBR 21 03 01)

Should monitor for oil and for fish in lakes where the road goes. This would be best in the summer. You could also check the portages around this time, to make sure the land isn't all wrecked. (HC 21 03 01)

We've got to have our own people out here travelling on the land, surveying the roads and the mines by ski-doo in the winter, walking around in the summer. We should do this fairly regular, when the animals are passing through. Land-users can then report back to the Elders, and they can make decisions based upon the information. (AE 26 07 01)

4.9 FURTHER EXPLORATION ACTIVITY

Exploration will continue on the Camsell Lake property. If more diamonds are found and they are economic to mine, De Beers may consider expanding the Snap Lake Project.
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4.9.1 On exploratory drilling

I've seen some drilling on the ice. Lots of times there is oil all over the ice during these drilling programs. I guess in the springtime this oil just goes right into the water. (JD 10 04 01)



Drill site near Snap Lake

4.9.2 Recommendations for mitigation

Wherever there is an oil spill or something else like that salt water spill we saw that killed plants, they need to fine the contractor. (EB 18 07 01)

4.9.3 Specific recommendations for monitoring

The places where they are drilling, these need to be checked out after they are finished. (LA 18 07 01)

4.10 EMPLOYMENT

The Snap Lake Project will employ 350 people during operations (450 during construction). De Beers is committed to employing the maximum number of aboriginal and northern people. They are also committed to helping people with education upgrades and training in order to qualify for mine jobs.

4.10.1 On the employment of aboriginal people

I don't hardly see any native people working here. (AM 16 06 01)

It seems as if native people are just working the low jobs like cleaning dishes and making beds. (AnM 25 05 01)

4.10.2 On shift work

The mines are putting a lot of pressure on families by taking people away from their families. These are the social impacts of the financial benefits of the mines. What about drug and alcohol problems in the community? What about De Beers investing in healthy lifestyles and a healthy community? (JCC 26 02 01)

There is a problem with mine flights not coming directly between the community and the mine site. People just end up blowing all their money in Yellowknife. (AL 26 02 01)

4.10.3 Recommendations for mitigation

Maybe people with little training should get jobs as janitors, etc., but they should take training classes at the same time. That way they could advance in their employment. (LA 16 06 01)

They should have summer students out here, helping with sampling. They should get youth from Áutsýl K'e to do this with this company. (EB 16 06 01)



Herman Catholique at work

We should develop a curriculum for the school about all the plants and about the mine so that the kids will have some incentive to work and maybe become environmental

scientists. All the scientists are white. There should be training on the job. Why is this not happening? They say it is hard to find workers – they should come to Åutsŷl K'e to find workers. (LE 16 06 01)

5.0 CONCLUSION

I have some concerns. I used to work in a mine and I know how they operate. They need to monitor the caribou as well as all the other small animals. Even if we say “no” to the mine, it will still go ahead. So, we need to do research to make sure that it does not affect the water and the wildlife. In the future, there may be more kimberlite pipes, and they will keep exploring and making more mines. We need to have something in place so that our traditional knowledge is included. (PC 25 05 01)

We want to protect the water and the caribou. This is really important to us. If they [De Beers] want to work they can go ahead and work, as long as the land stays clean. (LA 19 07 01)

The Elders wish to insure that the Snap Lake Project does not, throughout its lifetime, have any significant negative impacts upon the features of value within the Nâ Yaghe Kué and Katthinyne regions. They recognize that it is very important for the Denesôâine people to regularly assess the Snap Lake Project during its lifetime, and share their insights on how the mine is impacting the land. From regular assessments of the mine and the study region, the Elders can formulate recommendations on how to mitigate such impacts as they may arise, or even to prevent them from happening. This is how they want to be involved.

The knowledge and experience of the Elders is so deep and vast that it is absolutely impossible to capture all that they have to share, especially in a report of this nature. This report presents some of the words they deemed important enough to speak concerning the Snap Lake Project and the surrounding Nâ Yaghe Kué region. It is hopefully a start to the active involvement of the Denesôâine ways of knowing with the management and monitoring of the Snap Lake Project.

The mine at Nâ Yaghe Kué will be big in the future. Even the picture they have given us showing what the mine is going to look like – it won’t be the same. As long as they protect the land – we can help them. The elders should go out there regularly. In the near future, we will know more about what is happening. We still have to watch over the land. (LA 28 05 01)

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APPENDIX 1: MAPS
