

Mackenzie Valley Environmental Impact Review Board
Report of Environmental Assessment and
Reasons for Decision On
Ur Energy Inc.
Screech Lake Uranium Exploration Project
(EA 0607-003)



Mackenzie Valley
Environmental Impact
Review Board

May 7, 2007

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Review Board Environmental Assessment Decision

To make its decision in this environmental assessment, the Mackenzie Valley Environmental Impact Review Board (Review Board) has relied upon all the information on the Public Record. Having considered the evidence, the Review Board has made its decision in accordance with section 128 of the *Mackenzie Valley Resource Management Act* (MVRMA).

It is the Review Board's opinion that this development, in combination with the cumulative effects of other present and reasonably foreseeable future developments in the Upper Thelon basin, will cause adverse cultural impacts of a cumulative nature to areas of very high spiritual importance to aboriginal peoples. These impacts are so significant that the development cannot be justified.

The Review Board has recommended, pursuant to section 128(1)(d) of the MVRMA that that the project be rejected without an Environmental Impact Review.

Gabrielle Mackenzie-Scott

Gabrielle Mackenzie-Scott
Chairperson of the Mackenzie Valley
Environmental Impact Review Board

July 7, 2007

DATE

Executive Summary

The Mackenzie Valley Environmental Impact Review Board (“Review Board”) undertook an Environmental Assessment of a uranium exploration development proposed by Ur Energy Inc. near Screech Lake in the Upper Thelon River basin. The proposed development involves using a helicopter-portable drill to drill up to 20 holes in targets ranging from 1.5 to 20 kilometres from the Thelon River during winter and spring. A small camp is proposed and all access will be by helicopter from Yellowknife.

The Review Board has heard from aboriginal groups, NGOs, government, ecotourism operators and members of the public. During a public hearing at Łutsël K’e, NT; many cultural and social concerns were raised based on the long history of aboriginal land use in the Upper Thelon River basin¹. These include concerns about the cultural importance of the Upper Thelon taking into account the spiritual significance of “the place where God began”, as well as concerns about wilderness values and disruption of an ecotourism destination that is “one of the most spectacular wildlife areas left on the planet”². The people of Łutsël K’e described their distress at the prospect of industrial development of an area they wish to pass on to their children as they inherited it from previous generations. Parties to the environmental assessment also expressed concern that development was happening in the Upper Thelon before land use planning has taken place.

Concern was also voiced by the Government of the Northwest Territories and the Beverly Qamanirjuaq Caribou Management Board, stating that the proposed development is on the main caribou migration route of the Beverly caribou herd, and the proposed development would be operating during the pre-calving migration period when pregnant caribou are particularly vulnerable.

The Review Board considered the evidence of cultural impacts from the people of Łutsël K’e and other aboriginal groups. This included traditional knowledge shared by the Elders. In the view of the Review Board, the Upper Thelon area is of high spiritual and cultural importance to the Akaitcho and other aboriginal peoples. They see industrial development, including this proposed development and others, as a desecration of a spiritual area of intrinsic value. The Review Board is of the view that although the proposed development is physically small, the potential cultural impacts are not.

The Review Board also notes the potential for reasonably foreseeable future developments in the Upper Thelon. In the view of the Review Board, it is appropriate to

¹ Throughout this document, the term “Upper Thelon” refers to the Upper Thelon River basin meaning the hydrological basin or watershed, and not the geological basin, unless otherwise specified

² For full text of quotations and citations, see section 7.2 of this Report of Environmental Assessment.

view the Upper Thelon as a culturally important landscape. The Review Board agrees that the potential for industrial development of the area is not compatible with the aboriginal values of this cultural landscape. The Review Board concludes that the impacts of the proposed development in combination with the combined impacts of all other past, present and reasonably foreseeable human activities in the area are likely to have a significant adverse cultural impact on the aboriginal peoples who value the Upper Thelon.

This impact is so significant that the Review Board recommends rejecting the proposed development, as per s128(1)(d) of the Mackenzie Valley Resource Management Act.

Based on the evidence on the public record, the Review Board also identified other significant adverse environmental impacts that would require mitigation were the proposed development not rejected. These include the following:

- The social impact of widespread distress that would significantly affect the mental well-being of the people of Łutsël K'e;
- Socio-economic impacts on ecotourism operators and their clients using the area; and,
- Project-specific impacts on migrating caribou.

Although none of these impacts are the basis for the Board's recommendation to reject this development, the Review Board notes that these impacts are prevented or reduced by the rejection of the development. Were this development not to be rejected, mitigation measures would be required for these significant impacts. Because of the rejection recommended by the Review Board, no measures were identified.

The Review Board further notes that the recommended rejection prevents this development from contributing to cumulative effects on the Beverly caribou herd. The Board believes that an assessment of cumulative effects of development on the Beverly caribou herd, and corresponding planning and management of the area, could provide a basis to mitigate cumulative impacts on the Beverly caribou herd in the future. For this reason, the Review Board suggests that a Caribou Cumulative Effects Study be conducted, including an examination of the health and sustainability of the Beverly herd.

The Review Board noted that cumulative impacts to the landscape must be managed soon, or land use plans will be unable to effectively deal with cumulative cultural impacts from future developments in the Upper Thelon watershed area. It also noted the concerns resulting from what appears to be a conflict between the federal government's duty to consult and the free-entry system of the Canada Mining Regulations. The Review Board has made suggestions regarding both of these subjects.

Non-Technical Summary

Ur Energy Inc. ('Ur Energy' or 'the Developer') is a company that has applied for a permit to explore for uranium in the Upper Thelon near Screech Lake, approximately 300km east of Łutsël K'e. The Developer wants to drill up to 20 holes 1.5 to 20 kilometres from the Thelon River. The Developer also wants to set up a small temporary camp for on-site staff and support personnel. The company is proposing to use helicopters for transporting equipment, people and supplies.

Ur Energy applied to the Mackenzie Valley Land and Water Board, which referred the proposed development to the Mackenzie Valley Environmental Impact Review Board ("the Review Board") for an environmental assessment.

An important part of the environmental assessment included a January 2007 public hearing in Łutsël K'e. Many Łutsël K'e residents, including Elders and youth, told the Review Board their concerns about Ur Energy's proposed development.

Representatives of the following aboriginal groups attended the hearing and made presentations to the Board:

- Łutsël K'e Dene First Nation
- Deninu Kué First Nation
- Fort Resolution Métis Council
- Athabasca Denesuline (from Saskatchewan)
- Treaty #8 Tribal Corporation

Representatives of the following organizations also attended the hearing and made presentations to the Board:

- World Wildlife Fund
- Government of the Northwest Territories
- Beverly & Qamanirjuaq Caribou Management Board
- Ecotourism companies that run canoe trips in the Upper Thelon
- Department of Indian Affairs and Northern Development

Other members of the public also attended the hearing and shared their views about Ur Energy's proposed development. People from outside the NWT, and some from outside of Canada, presented their views to the Review Board in letters and emails.

Through many presentations and submissions, the Review Board heard that the proposed uranium exploration is in an area that is rich in wildlife and is where aboriginal people have lived for countless generations. People told the Review Board of the long history of aboriginal land use in the Upper Thelon basin. They described how important it is to their culture and how spiritually important it is. Many people described the Upper Thelon as "the place where God began", and "the heart and soul" of the Łutsël K'e

people. The people of Łutsël K'e described this area as one they wish to pass on to their children as they inherited it from previous generations. They described their distress at the idea of the Upper Thelon being used for industrial development. They also warned the Review Board that there has been no proper planning for the Upper Thelon yet.

Ecotourism operators and wilderness guides told the Review Board that the Upper Thelon is one of very few remaining areas that is truly wild, and that tourists come from around the world to see this spectacular pristine wilderness.

The Review Board carefully considered what it heard about the potential effects of the proposed development on the people of Łutsël K'e and other aboriginal groups. The Review Board paid particular attention to the Elders' traditional knowledge about the Upper Thelon.

Based on this information, the Review Board concluded that the Upper Thelon is a uniquely important place, spiritually and culturally, for aboriginal people who have lived on and used the Upper Thelon for many generations. The Review Board recognizes that these people have a connection to the Upper Thelon that goes beyond the physical landscape.

Aboriginal people told the Review Board that they are worried that development by Ur Energy and others will cause lasting effects on the Upper Thelon. The Review Board understands that at the heart of this issue is the belief that the Upper Thelon is a spiritual place that must be protected from any type of desecration. In the Review Board's view, although the proposed development is small, its potential impacts on aboriginal culture are not.

The Review Board finds it is reasonable to believe that other industrial developments will take place in the Upper Thelon. The Review Board agrees that the potential for industrial development of the area is incompatible with the aboriginal values of this spiritually significant cultural landscape. This would harm "the heart and soul" of the people of Łutsël K'e. The Review Board concludes that there will be an impact from the development as proposed in combination with the combined impacts of all other past, present and reasonably foreseeable human activities in the area. This is likely to be a significant cultural impact on the aboriginal peoples who value the Upper Thelon.

The Review Board recommends that this proposed development be rejected because its potential for significant adverse impacts on the culture of the aboriginal peoples is so significant that it cannot be justified. The Review Board recommends this rejection in accordance with section 128(1)(d) of the *Mackenzie Valley Resource Management Act*.

Based on the evidence on the public record, including the evidence presented at the public hearing in Łutsël K'e, the Review Board also concludes the proposed development

has other potentially significant impacts. If the proposed development was not rejected, it would have the potential to cause the following:

- Widespread distress among the people of Łutsël K'e that will affect their well-being;
- Socio-economic impacts on ecotourism operators and their clients using the area; and,
- Physical impacts from disturbing Beverly caribou during the migration to their calving grounds.

Although those potential impacts are significant, the potential cultural impacts are the ultimate reason for rejecting this proposed development. These other impacts are largely avoided by the rejection of this proposal. For this reason, the Review Board identified no measures.

The Review Board notes that the recommended rejection prevents this development from adding to the cumulative impacts of other developments, including future developments, on the Beverly caribou herd. To avoid future problems and uncertainties regarding the herd, the Board suggests that the effects of human activities on the health and sustainability of the Beverly caribou herd be studied thoroughly. The results of this study should be used to manage cumulative impacts on the herd.

1 Introduction

This document is the Mackenzie Valley Environmental Impact Review Board's *Report of Environmental Assessment and Reasons for Decision* ("*Report of Environmental Assessment*"), regarding Ur Energy Inc.'s proposed Screech Lake Uranium Exploration Project. (EA 0607-003). It is issued pursuant to subsection 128(2) of the *Mackenzie Valley Resource Management Act* (MVRMA).

This document is organized as follows:

Section 2 provides background information on the Mackenzie Valley Environmental Impact Review Board (Review Board), the referral of this development³ to the Review Board for an environmental assessment and the requirements for an environmental assessment under the *Mackenzie Valley Resource Management Act* (MVRMA).

Section 3 provides an overview of the environmental setting for the development and a brief description of the development proposal.

Section 4 sets out the Review Board's EA process and describes the role of each environmental assessment phase in the determination made by the Review Board under section 128 of the MVRMA.

Section 5 outlines the Review Board's determination of the scope of the development and the scope of the environmental assessment. These sections consider the components of the development that the developer was required to describe in its submissions in the environmental assessment, including effects predicted on the biophysical and socio-economic environment.

Sections 6 to 8 summarizes the evidence considered by the Review Board regarding socio-cultural and biophysical issues, and includes the Review Board's conclusions about the impacts of the proposed development and their significance.

Section 9 provides a general conclusion to this *Report of Environmental Assessment*.

³ The term "development" is used throughout this document as it is applied in the MVRMA, meaning "any undertaking, or any part of an undertaking, carried out on land or water...". This includes mineral exploration activities.

2 Development Referral

Ur Energy Inc. ('Ur Energy' or 'the Developer') initially applied for a land use permit (MV2005C0007) from the Mackenzie Valley Land and Water Board (MVLWB) in March, 2005. That initial application was referred to environmental assessment on the basis of potential public concern. On June 22, 2005, the developer withdrew its application. The Developer reapplied for a Land Use Permit (LUP MV2006C0019) on July 6, 2006. The MVLWB carried out a preliminary screening of the proposed development according to s124 of the *Mackenzie Valley Resource Management Act* (MVRMA).

On August 29, 2006, the MVLWB referred the development to the Mackenzie Valley Environmental Impact Review Board (or 'the Review Board') for environmental assessment on the basis that it might be a cause of public concern.

On September 11, 2006, the Review Board sent out a general notice that it had commenced an environmental assessment (EA0607-003) of Ur Energy's proposed Screech Lake mineral exploration development. The notice stated that the public record for the previous environmental assessment (EA0506-003) of this development would be transferred to the public record for the present environmental assessment (EA0607-003).

2.1 Requirements of the Mackenzie Valley Resource Management Act

The Review Board administers Part 5 of the MVRMA and has decision-making responsibilities in relation to the proposed development.⁴ The Review Board is responsible for the conduct of an environmental assessment, which considers the biophysical, socio-economic and cultural impacts of the proposed development in accordance with s114 and s115 of the *MVRMA*. The conduct of this environmental assessment was based on the Review Board's *Rules of Procedure* and *EIA Guidelines*.

Pursuant to s117(1) of the MVRMA, the Review Board must determine the scope of the development. It must also address the factors set out in s117(2) subject to any consultation with responsible ministers, if such consultation is requested. In the case of this environmental assessment none was requested. The Review Board is also required to prepare and submit a Report of Environmental Assessment in accordance with s128(2), as well as a decision under s128(1), with written reasons for the decision, required by s121, to the Minister of Indian Affairs and Northern Development (DIAND).

⁴ The Minister of the Department of Indian Affairs and Northern Development (DIAND) and responsible ministers decide whether to accept the Review Board's recommendation.

3 Development Overview

3.1 Development Description

Unless otherwise noted, the following details are derived from the developer's July 13, 2006 application to the Mackenzie Valley Land and Water Board (PR#1)⁵ and responses to information requests (PR#67). The proposed development is a uranium exploration program located in the Upper Thelon watershed, near Screech Lake (see *Figure 1* and *Figure 2*). The program consists initially of five drill holes, potentially increasing to twenty drill holes depending on preliminary results. Each hole will average 750 m in depth to a total of 3400 m of drilling distance. These five initial holes will be drilled within 1.5 km of Screech Lake with additional drill targets located within 9 km of Screech Lake. The exploration drill targets occur approximately 1.5 to 20 km from the Thelon River. All proposed drilling will be on the land. Activities will take place in the winter and spring, during months with snow cover. Ground surveys and other preliminary exploration work will also be a component of the development. Initially, the developer had proposed work during the month of May, but it later committed to conducting no operations in May in response to concerns about impacts on caribou (day 2, pp10-11).⁶ The developer has proposed a summer program as an alternative timing for the exploration activities (PR#67, p3).

The Developer will access the development site using helicopters flying from Yellowknife. A camp site two kilometers north of Screech Lake will be constructed at Looksok Lake. The camp will be self contained and consist of nine tents, housing a work force of approximately 12 to 15 individuals. All camp materials will be removed after the period of the land use permit unless written authorization is received to do otherwise (PR#1).

The drilling program will follow a method that is similar to that used in diamond exploration programs, unless uranium mineralization is encountered. In that case, the Developer will follow best practices as set out in Saskatchewan's Mineral Exploration Guidelines to minimize the impact of potentially radioactive material. This will include such practices as disposing of core down the drill hole, sealing uranium mineralization intersections with cement and plugging drill holes that produce water.

⁵ References to documents on the Public Registry will be referenced throughout this document with the acronym PR followed by the registry number of the document (for example, "PR#1").

⁶ References to statements from the Review Board hearing in Łutsël K'e will be referenced throughout this document with the day of the hearing followed by the page of the transcript where the statement is recorded (for example, "day 2, p12").

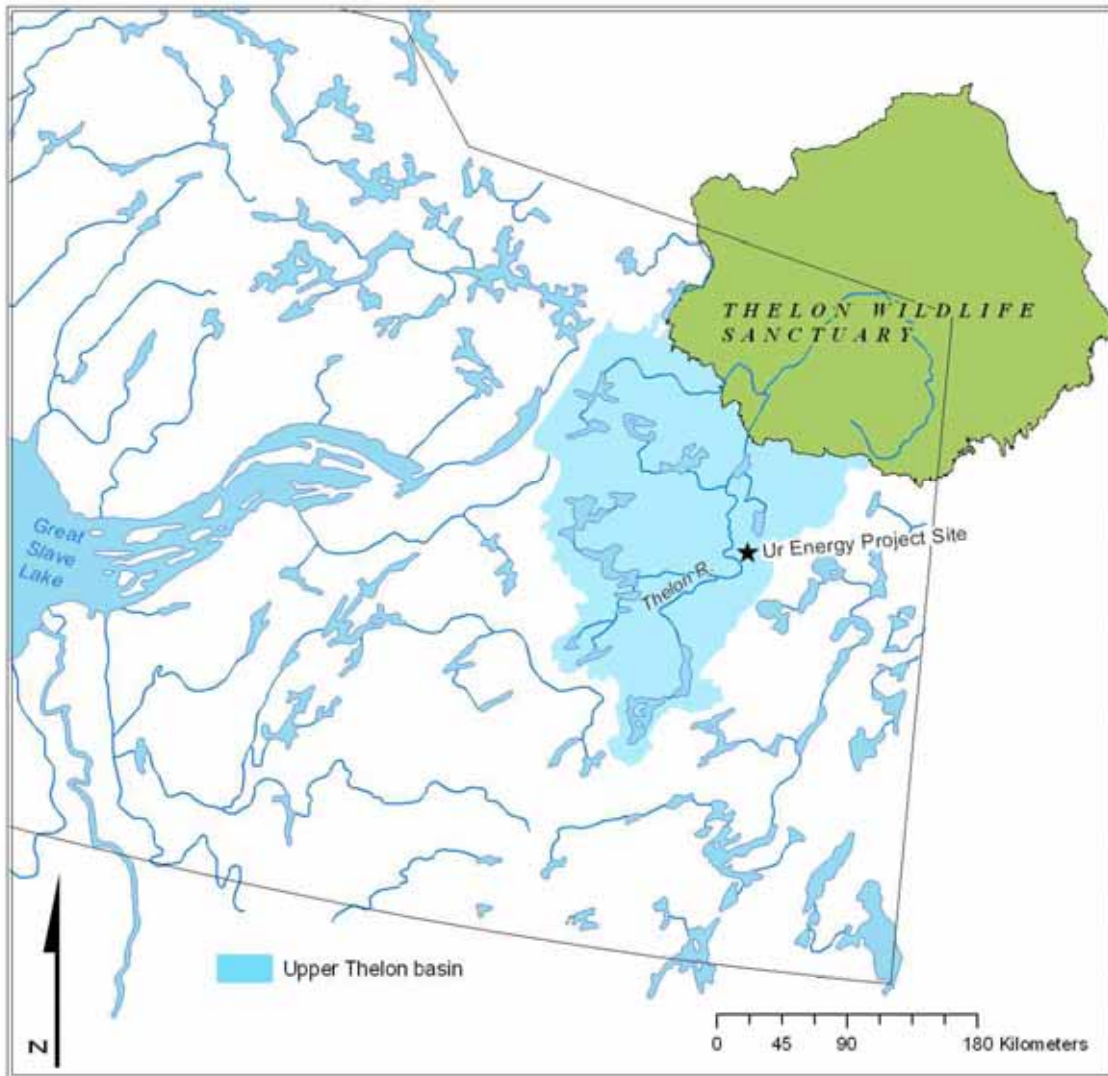


Fig. 1: General Area of the Development



Fig. 2: Project Location

3.2 Environmental Setting

This description of the environmental setting of the proposed development is based on the broad definition of 'environment' set out in the MVRMA. This encompasses the land, water, air and living organisms, and the interacting systems that include these components. This section also includes a description of the social and cultural environmental context of the region.

The following brief outline of the environmental setting for this proposed development has been compiled from the developer's application in combination with evidence from the public hearing. The development is located in the Akaitcho region of the Northwest

Territories. The project is located approximately 300 km east of Łutsël K'e near Screech Lake, which is part of the Upper Thelon watershed and located within the Upper Thelon Basin. The Thelon River has been designated as a Canadian Heritage River since 1990. The region is one of North America's largest remaining wilderness areas. It has been and continues to be used for hunting and harvesting by aboriginal peoples.

The project is located over the Thelon formation, a sandstone depositional feature that overlays granitic Canadian Shield basement geology. The surficial geology of Screech Lake is characterized by sandy deposits and numerous sand eskers. The Upper Thelon is unique in North America for its high concentration of eskers. Also noteworthy is that the area is an isolated treed region in the barrens over one hundred kilometers north of the treeline.

This is an area of Arctic climate, with mean temperatures in mid-January of -28°C and mid-July of 13.8°C. The project is located in the Taiga Shield Ecozone, characterized by low, open climax forest with short shrubs. Drier areas have lichens and moss as ground cover; wetter areas support more sphagnum mosses and sedge grasses as ground cover.

The region exhibits a high richness and diversity of wildlife relative to the surrounding tundra. It is used by many species of wildlife, including ungulates (such as caribou, musk-oxen, and moose), birds (such as migratory songbirds, raptors, and waterfowl) and carnivores (such as wolves, wolverine, and grizzly bear). Barren ground caribou migrate through the region and use the whole of the Upper Thelon as migratory corridors, calving areas and congregation centres.

The region has a recorded history of human use extending back thousands of years. The Thelon Basin is known as 'Thaydene Nene' to the Chipyewan, meaning "the land of our ancestors". It is an area of cultural importance to the aboriginal peoples of the NWT and also the Denesuline of northern Saskatchewan. The area also holds special significance to canoeists and wilderness enthusiasts in Canada and abroad. As one of the last stands of pristine wilderness in North America, it is a territorially important destination for ecotourism.

4 Environmental Assessment Process

4.1 Parties to the Environmental Assessment Process

There were eleven parties to this environmental assessment, including the Developer. The remaining ten registered parties were composed of first nations, non-governmental organizations and government bodies. They were:

1. Łutsël K'e Dene First Nation (the LKDFN);
2. Deninu Kue First Nation (the DKFN);
3. Northwest Territory Métis Nation;
4. NWT Treaty #8 Tribal Corporation (the Treaty 8 Tribal Corporation)
5. Athabasca Denesuline
6. Government of the Northwest Territories (GNWT);
7. Department of Indian Affairs and Northern Development (DIAND);
8. Beverly & Qamanirjuaq Caribou Management Board;
9. World Wildlife Fund (WWF); and,
10. Environment Canada (EC).

During the EA process, representatives of government departments had the opportunity to identify their interests and to notify the Review Board of their intent to participate in the proceeding as a responsible minister, as defined in section 111 of the MVRMA. The responsible ministers also play a role in the decision-making process and include Environment Canada, Indian and Northern Affairs Canada and the GNWT as represented by the Department of Environment and Natural Resources. The Minister of DIAND is the federal Minister as defined by the MVRMA and plays a central coordinating role for the decision-making response to a report of environmental assessment.

4.2 Environmental Assessment Approach

The Review Board began this environmental assessment with more information than is typically available early on, as the record of EA0506-003 (the file from the developer's previous application for this development⁷) had been merged into the public registry.

⁷ See section two, page 10 for details.

Development of the Work Plan

The Review Board issued a Draft Work Plan for the EA on Sep. 21st, 2006. This was distributed to organizations that chose to remain on the distribution list.⁸ Comments on the Draft Workplan were received from the Developer, DIAND, the Beverly & Qamanirjuaq Caribou Management Board (referred to herein as ‘the Caribou Management Board’), GNWT and the LKDFN.

The final Work Plan was issued on Oct. 13th, 2006. The Work Plan established the milestones and identified the Review Board’s timelines and expectations for the completion of the EA.

Information Requests

The Review Board issued one round of information requests. The Review Board invited parties to submit information requests on Oct. 16th, 2006. The Review Board received submissions from the Treaty Eight Tribal Corporation, the LKDFN, the Caribou Management Board, DIAND and GNWT. The Review Board issued 13 information requests to the developer and parties on Nov. 16, 2006. Responses were received between Dec. 12th, 2006 and Jan. 8th, 2007. Additional information was submitted by the Developer on Feb. 13th, 2007.

Pre-Hearing Conference

Review Board staff hosted a pre-hearing conference in Yellowknife on Dec 13th, 2006. Parties to the assessment and the public were invited to attend. An audio recording of this pre-hearing conference was posted on the Review Board web site.

The pre-hearing conference was devoted to a discussion of the hearing process and procedures and to setting a draft agenda for the public hearing.

Public Hearing

The public hearing for this EA was held in Łutsël K’e on January 16th and 17th, 2007. The public was notified of the public hearing by means of public radio announcements, posters in the community and newspaper ads. These hearings were broadcast on the internet. The principal goal of the public hearing was to allow potentially affected communities, parties, and the general public an opportunity to hear and participate in a discussion of issues unresolved during the environmental assessment process leading up to the hearings. It was also an opportunity to enable members of the public to speak directly to the Review Board on issues they considered to be important.

Presentations were delivered by the developer and other parties to the environmental assessment. All parties to the environmental assessment had the opportunity to question

⁸ This distribution list initially included the distribution list from the previous Ur Energy application and any other groups that asked to be added. The organizations that remained on the list are identified above in section 4.1. Not all organizations on the initial distribution list requested party status in the environmental assessment.

both the developer and other parties. The scope of the hearing addressed the issues highlighted by the parties.

Environmental Assessment Decision

The Review Board submits this *Report of Environmental Assessment* to the Minister of DIAND as per s.128(2) of the MVRMA. The Minister provides it to other responsible ministers. The developer and the other parties also receive copies of the *Report of Environmental Assessment*.

4.3 Determinations of Significance

Section 128 of the MVRMA requires the Review Board to decide, based on all the evidence on the public record⁹, whether or not, in its opinion, the proposed development will likely have a significant adverse impact on the environment or be a cause for significant public concern. The Review Board's determinations in this regard are contained in this *Report of Environmental Assessment*.

The parties to the environmental assessment were asked to assist the Review Board by providing the basis for their conclusions about the significance of the potential impacts of the development. The Review Board asked the parties for their predictions of impacts and descriptions of the reasoning behind those predictions. Ultimately, the Review Board is required to make its own determination on the question of impact significance. In so doing, the Review Board considers, among other things, the following characteristics of any environmental impacts identified:

- Magnitude;
- Geographic extent;
- Timing;
- Duration;
- Frequency;
- Nature of the impact;
- Reversibility of the impact;
- Probability of occurrence; and,
- Predictive confidence level.

The Review Board evaluates that evidence both in its own right and in light of any related determinations made about the significance of the impacts caused by the development if the evidence on the public record raises issues of public concern. Significant public concern is also a test under which the Review Board could refer the development to Environmental Impact Review (under MVRMA s128(1)(c)).

The Review Board makes its significance determinations, based on its values, the MVRMA and all of the evidence as to whether or not the development is likely to cause a significant adverse environmental impact or be a cause of public concern. This may

⁹ The "public record" refers to the part of the public registry that the Review Board considers when making its decisions.

involve comparing quantitative or semi-quantitative predictions to benchmarks, or for the impacts that can not be meaningfully described quantitatively, using the Review Board's own subjective and informed judgment to reach conclusions on the significance of the predicted impact.

The Review Board's analysis and the reasons for its determinations of the significance of the impacts that are likely to result from the proposed development by Ur Energy are described in detail in sections six to nine of this document.

5 Scope of the Proceeding

5.1 Scope of the Proposed Development

The scope of the development describes the elements of the proposed development that were considered in the EA. The scope of development takes into account both principal and accessory development activities.

The Review Board determined the scope to be the development described in the developer's application to the MVLWB for a land use permit and the accompanying screening report. The scope of the development determines the activities which can be undertaken pursuant to any subsequent land use permit, water license or other regulatory instruments. These activities may not exceed the scope of this EA without requiring further preliminary screening.

Based on the developer's evidence, the Review Board determined specifically that the proposed development includes physical work related to the exploration of potential uranium mineralization in the Upper Thelon basin. The Review Board has identified the principal development components to be as follows:

- the use of a heliportable diamond drill rig to drill at least 5 holes, with the drill program potentially increasing to a maximum of 20 holes over 5 years;
- the removal of some material from the ground in the form of drill cores, which could then be deposited on site or removed for further testing;
- the use of helicopters to access the site and to move the drill rig as necessary;
- the use of locally drawn water for both drilling and camp operations; and
- the establishment of a work camp at one location.

5.2 Scope of the Environmental Assessment

The scope of assessment describes the components of the environment that will be evaluated for impacts from the proposed development. In determining the scope of assessment, the Review Board considered the factors under subsection 117(2) of the MVRMA, including:

- the impact of the development on the environment, including the impacts of malfunctions or accidents;
- any cumulative effects that are likely to result from the development in combination with other developments; and,
- comments submitted by members of the public.

The Review Board also had regard to the matters described in s115:

- The protection of the environment from the significant adverse impacts of proposed developments;
- The protection of the social, cultural and economic well-being of residents and communities of the Mackenzie Valley; and,
- The importance of conservation to the well-being and way of life of the aboriginal peoples of Canada.

The Review Board decided on the scope of assessment after considering the relevant information available on the public record.

The geographic scope of this environmental assessment includes the ecological footprint of the proposed development as described above. For the examination of biophysical cumulative issues, the geographic scope of this development is the Upper Thelon basin (see Fig.1, above). The Upper Thelon basin is part of the traditional land use area of potentially affected aboriginal peoples, is ecologically distinct, and is an area frequently cited in the evidence relating to cumulative effects. Where a different area is relevant because of the characteristics of particular valued component, such as migrating caribou, the geographical range considered is the one necessary to include all human activities that may substantially affect that component.

No access routes on the ground were considered because the entire development is airborne without the creation of new access routes. However, impacts from the air traffic supporting the development was considered. The geographic scope for social and cultural impacts also includes the potentially affected communities themselves.

The temporal scope of this environmental assessment includes the full timeframe required for good cumulative effects assessment, including the time-span of effects from the past, present and reasonably foreseeable future human activities that may interact to affect the same components as the proposed development does.

6 Introduction to Assessment of Impacts

Sections 7 - 8.3 of the *Report of Environmental Assessment* consider specific issues related to impacts that arose during the environmental assessment. All information is based on material from the public record. For each impact, the Review Board describes:

- the Developer's submissions and predictions (based on its *Environmental Screening Study*, hearing statements and post-hearing cumulative effects report);
- Other relevant items on the public record (such as submissions from parties to the EA);
- The analysis and conclusions of the Review Board pertaining to each issue; and,
- Any suggestions of the Review Board.

The Review Board has considered all issues raised in this EA, pursuant to the requirements of s117 of the MVRMA. The deliberations of the Review Board considered evidence from the hearings at Łutsël K'e, as well as the written evidence on the public record.¹⁰ Issues that the Review Board finds to be adequately addressed by the material on the public record are not discussed in this report. The only issues discussed in detail in this *Report of Environmental Assessment* are those which the Review Board decided warranted further detailed consideration.

The outstanding items addressed in sections 7-8 of this report involve caribou issues, social issues, and cultural issues. The Review Board considers these in both the project-specific and cumulative contexts.

The commitments made by the Developer during the environmental assessment were considered by the Review Board in reaching its conclusions. These include the commitments described in section 8.1, in addition to any commitments made during hearings and in written submissions.

¹⁰ See Appendix B for a full listing of documents on the public registry.

7 Social and Cultural Issues

In section 3.2.2 of the workplan for this environmental assessment, the Board described the following social and cultural issues (p3-6):

Harvesting impacts: *The area has been identified as a traditional and contemporary harvesting area... Concerns over impacts on harvesting are mostly based on the submissions from the Łutsël K'e FN and the Treaty 8 Corporation. The MVRMA's definition of 'impact on the environment' includes impacts on wildlife harvesting. The Review Board is therefore required to consider evidence of such impacts.*

Cultural significance: *The area has been identified as having high cultural significance for Łutsël K'e and the Deninu Kue... The issue was raised by the Łutsël K'e FN, as well as the WWF and several submissions from members of the public outside the Mackenzie Valley. The MVRMA's definition of 'impact on the environment' includes effects on the cultural environment. The Review Board is therefore required to consider evidence of such impacts.*

Cumulative effects: *This development is one of many exploration projects in the Akaitcho region. The prospect of significant cumulative effects exists with all of the identified issues... Cumulative effects were a consistent theme in most submissions to EA0506-003. Section 117 of the MVRMA requires the Review Board to consider cumulative effects. The review of the record indicates that the public concern cited by the MVLWB is to a large extent founded on the fear of environmental effects resulting not only from this particular development but from this development in combination with other past, present and future developments. In the Review Board's opinion, cumulative effects are a key issue in this assessment.*

Conflicts with proposed protected areas and land use planning: *The project area is located between the existing Thelon Game Sanctuary and the proposed East Arm National Park. Efforts are under way to protect the corridor between the two protected areas by way of increasing the national park and establishing special management areas for the game sanctuary. Related to this issue is the conservation first principle... The Łutsël K'e FN, WWF, and Parks Canada submitted evidence to EA0506-003 indicating that a protected areas status is actively being sought. The WWF brought forward the conservation first principle, which says that a decision about which areas to protect and which to open for development*

should be made before development proceeds. ... (A)n assessment may identify measures to protect the special values that make an area worthy of special protection. The Review Board will consider evidence that the project area has special values that require protection beyond the usual regulatory conditions.

Tourism: *The Thelon is a “mecca” for canoeists from Canada and the world. People visit the area because of its wilderness character. Development and associated air traffic are detrimental to the wilderness experience and may deter tourists in the future... The WWF raised the issue of the Thelon... being one of a few remaining pristine wilderness areas.... Negative impacts on tourism may affect the economic, social, and cultural well being of residents in the Mackenzie Valley. This issue is within the scope of the assessment.*

The Review Board’s workplan for this assessment also noted the linkage between caribou and the social and cultural well-being of aboriginal peoples (see section 8 below).

The Board issued Information Requests on several of the above subjects (see PR#39 for details).

7.1 Developer’s Submission

In the *Environmental Screening Study* submitted by the developer as part of its application (PR#1), the developer submitted an overview of socio-economic conditions in Łutsël K’e, describing standard statistics of population, households, education, employment, income, traditional activities and crime. It noted that three quarters of the community of Łutsël K’e participate in the traditional activities of hunting and fishing, and that Łutsël K’e has one of the highest proportion of residents participating regularly in traditional land use activities in the NWT (p57). The developer notes that “the local economy is based on traditional livelihood activities, tourism... and more recently, mining” (p53). The submission noted that the Thelon River is a popular recreational area during summer months, attracting primarily ecotourists interested in wildlife photography, canoeing and kayaking (p51).

The developer’s submission included a section on the subject of “traditionally significant and sacred areas” (p45). This section, in its entirety, stated:

The Thelon River, which is considered a sacred area by the Dene, and is described as the ‘place where God began when He created the world’. However, no specific information on traditionally significant and sacred areas near Screech Lake was identified.

Regarding social and cultural impacts, the developer has summarized its conclusions during its presentation at the Łutsël K'e hearings as follows:

(P)otential effects to the Heritage Resources would be localized to the drill sites and the camp site and restricted to the exploration activities.

Next, examine traditional land use practices. Again, the mitigation is that we only have one drill rig. We have a short duration for the drilling activity and we have mitigation measures in place for caribou and all wildlife.

Based on this, we assessed that the residual affects would be localized to the area of activity, would be restricted to the exploration activities and would likely result in a minor change to wildlife and traditional land use.

Fourth, socio-economic. The mitigation that we would put in place is that we would try to use local labour force as much as possible, keeping in mind that this is a small exploration project. And we would, you know, the purchases of goods and services would be in the north.

Therefore, any residual effects would likely be slightly positive and on a regional scale and restricted to the exploration activities.

Łutsël K'e Hearing, Day 1, p28-9

7.2 Other Submissions

The Review Board heard numerous submissions on the importance of the Upper Thelon, due to its ecological value, the past (pre-historic and historic) use of the area, the current use of the area, and its spiritual and cultural significance to First Nations.

7.2.1 PAST USE

The use of this area in the prehistoric, historical and recent past by aboriginal people and their ancestors was raised by numerous participants. In terms of prehistoric use, Elder J. Rabesca of Łutsël K'e told the Board "In the olden days... thousands of years ago our ancestors lived in that area" (Day 2, p37). This was further supported in a presentation by Ray Griffith, former resident of Łutsël K'e and now representing the World Wildlife Fund. WWF cited a publication by Bryan Gordon, former Chief Archaeologist at the Canadian Museum of Civilization, which stated that the Upper Thelon has a concentration of archaeological evidence, and is "an area that people have used extensively since the time the ice ages left the land" (Day 1, p82). Monica Kreiger of Łutsël K'e First Nation stated:

So why is the Thelon important to Łutsël K'e? One obvious reason is for harvesting and land use. There's a long, long history of Dene people travelling towards the Thelon. It was prime hunting grounds. There's a lot of documented trap lines, trails, campsites, cabins, burial sites. There's a lot of both historical European and archeological sites that go back thousands of years. Many of these sites are still undocumented or unknown... If you don't know what you're looking for you can walk right by some of these sites and not even know that they're there.

Łutsël K'e Hearing, Day 1, p15

Several other presenters referred to the historical importance of the area. Elder Bernadette Lockhart spoke of the use of the area by her ancestors, saying:

Thelon River is Thaydene Nene. Thaydene Nene is our ancestors. Our ancestors lived in the paradise where the Creator has created for us from the very beginning for a good reason. Thelon River is where our ancestors lived for a long, long time at the very beginning before anybody was here in Łutsël K'e before this place (Łutsël K'e) was established.

Our ancestors respected Thelon River with their hearts and souls. Where the Łutsël K'e Dene people still do today. Łutsël K'e people are Hai Dene people. The Hai Dene people used to protect this area with their lives. It was their home where they danced and sang with drums and played and feast on the wildlife that was there and pick berries and looked after the caribou and the wolves and et cetera.

Łutsël K'e Hearing, Day 2, pp41-42

Elder Albert Boucher told the Review Board that although it is not immediately visible to the casual observer, thousands of people used to live there. He stated:

When they say they're going to do some drilling, exploration, the reason I don't agree with this is because in the past our ancestors had lived in that area for thousands of years. When our ancestors lived there... people went through hardships around that area as well. The reason that most people won't see... that Dene people lived on the land is because we clean up after ourself. We protect our land. We make sure that we don't damage our land.

Łutsël K'e Hearing, Day 1, pp 63-64

Łutsël K'e Elder Joe Michel made a similar point to the Review Board, saying that there used to be many people living in the area, in tents and cabins, and that the area was an important hunting ground. Elder Michel emphasized that many heritage sites would be impossible to detect in winter. "Winter and summer time's not the same... If you're

traveling in winter, how are you going to see the footprints out there?.. In the summertime... you could see the sites out there.”.

Elder J.B. Rabesca described the importance of the area as an important travel route linking Artillery Lake with the Thelon, and an important trapping area in its own right, with many houses (day2, p36). Several other presenters emphasized that the area has always been historically important. Other submissions on the public record emphasize past use of the area (eg. PR#1, PR#57, PR#58).

7.2.2 CURRENT USE

The Review Board heard from many parties that the land continues to be important for current traditional land uses, such as hunting and trapping. For example, Elder Joe Rabesca stated that he still has three cabins in the area (p32). Elder George Marlowe described the ongoing importance of the area for trapping (p62). Elder Henry McKay from Deninu Kue First Nation described his father’s traveling , hunting and trapping in the area, and reinforced what other Elders had told the Board about land use in the area.

Rosie Bjornson stated that DKFN members travel there to hunt caribou and musk-ox, and that decreases in caribou numbers make it more necessary than ever to travel after the animals. She stated that “(t)he Thelon River basin is and always will be traditional waterways and traditional trails of the Dene Chipewyan of Akaitcho and Deninu Kue First Nations”.

Rob Rowbielle of the Athabasca Denesuline described the ongoing importance of the area for traditional pursuits, saying that “a lot of young people are continuing to go out on the land again for hunting, fishing, trapping (and) gathering and they still continue to use that area... A lot of young people are starting to go back there again”.

7.2.3 FUTURE USE

Many participants from Łutsël K’e told the Review Board that they want this area to maintain its traditional values because they want their children to inherit their heritage in the same way past generations have. Elder Madeline Drybones of the LKDFN said to the Review Board

We can’t let go of that land. We have to hang on to that land for our children. They have to follow in our footsteps.

Łutsël K’e Hearing, Day 2, p123

Elder Henry Calumet of Fort Resolution told the Review Board that his people have the right to decide about their own future, and decisions about the future have to be made now for the benefit of their children.

Gloria Enzo of Łutsël K'e described her concerns to the Review Board as follows:

You know, this is just one of the most beautiful places... And you probably see me today holding my child in my hand. My child's two years old. Will he be able to go hunting for his kids? It makes me cry because this is my kid. It's my child. There's nobody else that's going to help him but us. Us. Our people. Our Dene people and our leaders.

I want my kid to be able to have that choice if he wants to say, okay, I'm going to go hunting. You know? This is my way of life. This is my tradition. This is how my ancestors and people before me lived this way.

Łutsël K'e Hearing, Day 2, p259

Steve Ellis of the Treaty Eight Tribal Corporation emphasized a similar point:

(I)t's very important that we do not focus exclusively on the issue of current land use... What people here are talking about is future; the future. You heard from a very small child; and he talked about wanting to go there in the future.

What we're talking about is future land use here, not what trap lines are there or may have existed in the past, though that is important. What we're talking about is the trap line that's going to be there. That little boy twenty years from now is going to get set up and go out there to do that. People here want to preserve the opportunity for the youth to use the land like people have in the past.

Łutsël K'e Hearing, Day 2, p199

Rosie Bjornson of DKFN also raised this concern; asking the Review Board, all government agencies and the developer to “consider the unborn of the Akaitcho territory before making a final decision” (day 2, p109).

Thirteen-year-old Michael Lafferty of Łutsël K'e appeared before the Review Board to describe the concern in his own words, saying:

I'd like to talk about what you guys are doing. I don't think it's good that you're doing that to our land... because really you're just destroying it. We want to preserve it, we want to keep it there. Later on, when I'm older, it might not be there. I want it to be there. It's very nice, I want it.

If you do... find uranium, you'll try to get it. Right? It's better just not to check... just leave it there. The caribou lives there. We need the caribou.

And if the caribou die, we die too. We live off of it... We want the caribou. We want the land. We want to preserve it.

All I want to say is that I want the land to be here. It's my land.

Lutsël K'e Hearing, Day 2, p126

7.2.4 SPIRITUAL IMPORTANCE AND CULTURAL SIGNIFICANCE

Numerous presenters emphasized to the Review Board that the Upper Thelon is an area of great beauty, with high spiritual and cultural importance to aboriginal land users. This was repeated both in terms of the land itself and in terms of the importance of the Beverly caribou herd¹¹, which is also culturally important to the aboriginal users of the land.

The LKDFN stated that the cultural and spiritual values of this landscape were the highest priority issues to the people of Lutsël K'e.

(T)he most important thing about the Thelon is its cultural and spiritual value. The entire Thelon Basin is regarded as a birthplace, that it's the place where God began; and we heard that phrase a few times yesterday. It's a special place. It's a magical place and you can feel it when you're out there. There's something different about the Thelon, even if you're only out for a day.

Monica Kreiger, LKDFN
Lutsël K'e Hearing, Day 2, pp15-16

Sy Catholique of Lutsël K'e described to the Review Board her relationship with the land, and the connection the people of Lutsël K'e have with the area.

And my great grandfather... he used to live out on the Thelon. And there used to be... villages out there where our people used to live. And I've been out to the Thelon... and every time I go out there, it always feels like home, you know. I feel more at home out there than I do... anywhere else. It's just a part of me. (I)t's almost like I never left... when I go out to the Thelon. It's because of the connection, the spiritual connection that our people have with the land... And a lot of people feel like that when they go out to the Thelon.

It's -- it's safe, you know. It's a part of who we are as Denesuline people. That land, that's how close of a connection that our people have with that...that land out there...and my dad was telling me about that protected

¹¹ For the sake of clarity, comments concerning cultural impacts resulting from impacts to caribou have been described here, under the broader heading of “cultural impacts”, although these were often raised in the hearings alongside the caribou evidence described in section 8.2 of this report.

area out on the Thelon. And I was telling him what the elders were saying about that area, about how special it is.

And so he passed on those teachings to me... He said they say that that's the place where God began and how special that area is and how significant it is to our people, and I can understand that, you know. And we need to protect that area from exploration...

Lutsël K'e Hearing, Day 2, pp 268-269

Many participants described the special qualities of this area at length, including Elder Madeline Drybone, and Elder Bernadette Lockhart, who said:

Thelon River is where our ancestors lived for a long, long time at the very beginning ... Our ancestors respected Thelon River with their hearts and souls... Our ancestors are gone back to the land in a spiritual way. They are there. They are the holders of our land in Thelon River until today in year 2007, the people are still here, the ones that are alive and the ancestors that passed on.

This -- this place is very special to us. This place is a spiritual place... The important thing is to keep that paradise the way it is.

Lutsël K'e Hearing, Day 2, p42

Charlie Catholique of Lutsël K'e spoke of the special qualities of the land and its importance to the people of Lutsël K'e, saying:

You can go out there and see for yourselves... See how beautiful it is. Maybe you don't want to leave from there once you get there; that's how beautiful it is. And we don't want to do anything out there. No exploration. That's what these Elders are talking about... beautiful land like that—why do you want to destroy it? This Thelon, it's really, really important to our people here.

Lutsël K'e Hearing, Day 2, pp92-93

Other parties reinforced the outstanding qualities of the area. Tourism operator Alex Hall described that area as “The upper Thelon with its big treed eskers is one of the most beautiful places on Earth... still probably one of the most spectacular wildlife areas left on the planet... There are probably few places remaining in North America that could compete with it” (Day 2, p254).

Rob Rowbielle of the Athabaska Denesuline described the link between the caribou herds and culture to the Review Board, saying:

The proposed development is within the range of BQ caribou herds. The yearly migration of the caribou herds is integral to the Athabaska Denesuline economic, social, and cultural identity. Any potential disturbance to the caribou is a potential disturbance to the Athabaska; they're at risk. Our identity, our cultural, our way of life will be gone forever if the caribou disappears...(pp136-137)

This land that you talk bout here, some of our Elders describe it as heaven on Earth.(p146)

Lutsël K'e Hearing, Day 2

Monica Krieger of the LKDFN raised the connection of Dene people and culture to caribou, telling the Review Board:

The community has special concerns about the caribou herds in the Upper Thelon. Healthy caribou means the survival of Dene people and culture. Lutsël K'e does harvest the Beverly herd. They over-winter to the east of this community and any negative effects on those caribou in any part of their range will impact the ability of the Lutsël K'e people to harvest those caribou.

Lutsël K'e Hearing, Day 2, p21

Monica Krieger cited a quotation from the Platinex case [*Platinex Inc. v. Kitchenuhmaykoosib Inninuwug First Nation*, 2006], saying it was appropriate to the Board's considerations in this case as well:

"It is critical to consider the nature of the potential loss from an aboriginal perspective. The relationship that aboriginal peoples have with the land cannot be understated. The land is the very essence of their being. It is their very heart and soul. No amount of money can compensate for its loss. Aboriginal identity, spirituality, laws, traditions, culture, and rights are connected to and often arise from this relationship to the land."

Lutsël K'e Dene First Nation has a very special relationship with the Thelon. It is their heart and soul.

Lutsël K'e Hearing, Day 2 p31

Steve Ellis of the Treaty Eight Tribal Corporation asserted to the Review Board that the biophysical mitigation measures proposed by the developer are inappropriate to address cultural and spiritual impacts. Steve Ellis stated:

(T)he messages we're hearing are -- are not coming from the mind, they're really coming from the heart and it's -- it's like mixing oil and water. You cannot use arguments about (mitigations) to counteract a concern from First Nations people that they believe that their sacred heart, as someone called it, is going to be wrecked. You cannot use those arguments.

Łutsël K'e Hearing, Day 2 p204

Ray Griffith of the WWF reinforced that the academic literature supports the importance of this area to the Dene.

In more recent years Warburton Pike recorded a statement from a Dene by the name of Soltata who -- who was describing it as being the place where God began. It seems through the literature over many, many years whenever the Thelon is talked about or has been researched or -- or people have been in contact with the Dene around the Thelon it is always described in very mythical terms in -- in such ways as the place that God began. It is very clear from the literature that the Thelon and in particular the south Thelon area is a special place for the Dene and it has been for many, many years.

Another reason that it's a place of special value is because in fact it is an oasis on the barrens. You go for 150 miles through treeless rock country to reach this lush, rich valley full of eskers and wildlife... It is a very special place.

Łutsël K'e Hearing, Day 1, p97

Elder JB Rabesca summarized the cultural relationship of the people of Łutsël K'e with the area by saying "When you damage my land it's sort of like destroying me". (Day 1, p58)

The LKDFN summarized its views in a letter to the Review Board that concludes:

The proposed development is in an area... that is vitally important to the culture, history and spirituality of the Dene people, and that has been clearly identified by the LKDFN as an area they wish to keep off limits to resource development of any kind. The proposed project is extremely likely to cause significant adverse impacts on these environmental, cultural, spiritual and heritage values. Mitigation measures imposed as conditions of the land use permit would not be sufficient to prevent these adverse impacts from occurring.

LKDFN Letter of Dec. 15, 2006 (PR#58)

7.2.5 PLANNING ISSUES

Presenters repeatedly stated that conservation planning was essential to the protection to the area, and that communities were supportive of protecting the area, but never had the

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opportunity. The LKDFN stated that “Łutsël K’e Dene First Nation has consistently and repeatedly objected very strongly to any issuance of permits for uranium exploration in their traditional territory” (day 2, p13). The LKDFN described its attempts to protect the Upper Thelon. The LKDFN declared the Upper Thelon to be a special management area in the management plan of the Thelon Wildlife Sanctuary (PR#10), which has been signed-off by all authorizing groups except the GNWT (day 2, p17).

The LKDFN quoted the Thelon Management Plan as saying “This area is still recognized by many as an integral part of the ecological core of the (Thelon Wildlife) Sanctuary which should receive the highest level of protection. And it is critical in this special management area... that the values which are fundamental to the integrity of the Sanctuary... are protected”.

Steve Ellis of the Treaty Eight Tribal Corporation described the need for land use planning in the region, saying:

Conservation and land use planning in the Thelon region isn't complete. We have a clear, official statement from Akaitcho and specifically Łutsël K'e Dene that Thayene Nene, the Land of the Ancestors, is an area that must be protected for their livelihood and the ... continuance of their way of life.

Łutsël K’e Hearing, Day 2, p207

The LKDFN passed a band council resolution to try to get the area protected within the boundaries of Thaydene Nene, described as “Łutsël K’e’s conservation vision” (day 2, p18). Much of Thaydene Nene falls within Parks Canada’s area of interest for the proposed national park on the East Arm, but the proposed national park does not extend as far as the Upper Thelon. The area is also in step two of the eight-step NWT Protected Areas Strategy, but this is an early stage of a multi-year process.

Two parties described to the Review Board why this area was not withdrawn under the Akaitcho Interim Land Withdrawal. The LKDFN stated that it wanted to have the area withdrawn under the interim land withdrawal process, but the area was staked during these negotiations. This was raised both during the hearing and in a written response to information request IR0607-003-04 (PR#58). The Treaty Eight Tribal Corporation elaborated on why the area was not withdrawn, despite the broad support that it requires protection:

The Thelon Basin area was one of the contentious issues during the negotiations because that was an area that was identified by Łutsël K'e specifically to be included in the interim land withdrawals. But while Łutsël K'e was sitting there negotiating to have those interim land withdrawals and those negotiations are still going on, were still completed, that area was staked.

So, very clearly, in the interim land withdrawal protocol, it says that existing interests will be respected. So where existing interests have already gone on or been -- been given out prior to the interim land withdrawal, the interim land withdrawal's protocol respects those interests. So while the negotiations ensued, those areas were staked. There was a limited amount of land quantum to be used in this land withdrawal, so the decision was made by the Akaitcho negotiators to use that quantum in areas where there weren't existing interests. Withdrawal wouldn't even apply anyways.

Lutsël K'e Hearing, Day 2, pp234-5

The Caribou Management Board stated that regional land use planning for the region is required, along with a range wide system of conservation planning (Day 1, p169). The World Wildlife Fund also identified the lack of planning for the area as a problem, and stressed the importance of conservation planning prior to development in the area, stating:

One of the problems of the South Thelon is in fact that the -- the planning process has not been completed. In fact, it has hardly even started.

In terms of getting the process right in terms of planning the -- the main thing that WWF would like to promote is that you can plan for conservation only before development starts. You cannot plan for... for conservation after the development is over; it's already too late.

That is another reason to pause and plan. Get the planning done before development, which includes exploration in this case, goes ahead. The longer it's left, the more difficult it is to do your planning and the more angry the developers become.

Lutsël K'e Hearing, Day 1, pp80-3

The World Wildlife Fund is providing conservation planning support to Lutsël K'e at the community's request. WWF stated in its letter to the Review Board of Aug. 16, 2006:

WWF is not opposed to uranium exploration or mining, but to allow it at this time in the Upper Thelon Basin, over the expressed opposition of the people who live there, before they have had the chance to deliver on a signed agreement with the federal government to negotiate withdrawal of areas important to them, is not morally or legally defensible.

(PR#19. p2)

7.2.6 WILDERNESS VALUE AND ECO-TOURISM

The Review Board heard that this is an important area in terms of eco-tourism, which comes from the global recognition of the ecological and wilderness values of the area.

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Parties in the Łutsël K'e hearing described how the wilderness value of this place is very high because the area is in its original state, retaining its singular ecological richness. Many parties described the ecological richness of the Upper Thelon Basin to the Review Board in terms similar to those of the WWF:

It has been described as a northern paradise, an oasis on the barrens... To get there you go through many miles of rock and treeless barrens and you come to a valley that is treed... The South Thelon valley, the region that is being proposed for development here is—is an area that has the highest concentration of eskers in the barren lands, and it is very, very rich in wildlife of all types.

Łutsël K'e Hearing, Day 1 p80

Parties described the area as being important not only to caribou, but also to moose, musk-ox, raptors, wolf, fox, wolverine, lynx, migratory songbirds, waterfowl and others, and described how this area contains diversity that greatly exceeds the surrounding barrens (eg. PR#58). The ecological richness of the area was emphasized as was the density of wildlife in the area. Longtime canoe tripper and eco-tourism operator Alex Hall of Canoe Arctic described encountering 100,000 caribou, 100 musk oxen, 20 wolves, a dozen moose and half a dozen grizzlies in a single trip on the Upper Thelon River (p254, day2). The Review Board heard that the international significance as a wilderness destination is tied to the same extraordinary density of wildlife that caused the area to be so important historically, culturally and spiritually to aboriginal peoples. Eco-tourism companies know that they can consistently observe wildlife in large numbers in the Upper Thelon area, and this is one factor that makes the area an exceptional eco-tourism destination (day 2, p172).

Several submissions to the Review Board emphasized that the Upper Thelon valley is significant partly because it is a globally important and internationally recognized wilderness area. Tom Foess, of Great Canadian Ecoventures, is a eco-tourism guide of thirty years in the area, with a camp on the Upper Thelon River at Whitefish Lake. Based on his experience as an eco-tourism professional who has guided thousands of clients, he told the Review Board that “The entire Thelon is already being recognized worldwide as a prime wilderness destination. Being in the business, I can tell you that people come from all over the world... They need the purity that comes from true pure wilderness” (day 2, pp164-5). Alex Hall told the Review Board that the “Upper Thelon country is still probably one of the most spectacular wildlife areas left on the planet” (p254, day 2).

This sentiment was repeated in numerous letters on the public record from concerned people from Nunavut, BC, Alberta, Saskatchewan, Ontario, Quebec, various states in the USA, and from overseas. For example Dennis Fast, wildlife photographer, wrote to the Review Board on Jan. 11, 2007, “As far as I'm concerned, the region should be declared a natural treasure and held up for the world to see as one of the truly magnificent natural regions of the world” (PR#88). In the words of Canoe Arctic, “This is one of our nation's special places, a sacred place that we need to keep intact not just for northerners,

but for future generations of all Canadians and for the rest of the world.” (Day 2, p255). Several other submissions emphasized the ecological and wilderness value of this area (eg. PR#9, PR#19, PR#57, PR#58, PR#91).

An argument that the area is important for all Canadians was submitted to the Review Board by in a letter by David Pelly, former NWT resident and author of the 1996 book *Thelon: A River Sanctuary*. The original letter is on the public registry, and it was quoted by Alex Hall during the Łutsël K’e hearing:

The Thelon Basin today at the very heart of the largest tract of wilderness left in North America has an importance to Canadians who do not even know exactly where it is. It is part of the Canadian psyche, part of our national identity and culture that we have in this country a vast untouched wilderness to the north. We erode that wilderness at our peril. Eventually, when the map of northern Canada is dotted with mines and then roads and the infrastructure which would inevitably follow, there would no longer be a distinct Canada.

The popular Canadian singer songwriter Murray MacLaughlin sang that ‘the soul of Canada lies out past the timber line’. He is right. And when that soul is destroyed, there will no longer be a Canada. There will only be USA North. I would argue... that if we want to preserve this country's cultural identity for future generations, we have no option but to protect that vast sweep of wilderness where our soul resides, precisely, the area surrounding the Thelon Basin.

Letter from David Pelly
May 30, 2005, p2 (PR#16)

In the same letter, Pelly emphasizes the broad national importance of this area when discussing impact equity, stating that “apart from a few people (Ur Energy) making money, this proposal does little to serve Canada... It is , in fact, designed to benefit only a tiny handful of Canadians (Ur Energy employees and shareholders) by exploiting land that has no other value to them as individuals and ignoring the many more Canadians for whom this land has immensely greater and more diverse value” (p3).

Great Canadian Ecoventures emphasized the linkage between the global significance of the Upper Thelon and its wilderness value as follows:

What is the value of the last wilderness? I think something is being missed in the approach by government... Somewhere along the line, people are being clouded from the fact that the Thelon represents the last true wilderness left up here... We are at the face of losing the last true wilderness we have left. The Thelon has special importance. I think it would be in everyone’s best interests to listen to what the Elders here are saying because they know. They are the keepers of the land. The people

here are the keepers of the land and they have a grave responsibility to protect that wilderness for themselves, for their own heritage, but also for the entire world. The last wilderness... has a special value globally. The whole world should be watching these proceedings.

Lutsël K'e Hearing, Day 2, p174-175

The theme of “true wilderness” and its importance to the eco-tourism in the area was emphasized to the Review Board. In the Lutsël K'e hearings, Great Canadian Ecoventures stated “People spend thousands of dollars to go there... People are paying that kind of money to experience wildlife and the true last wilderness, and there is no compromise to that. If it is compromised in any way, they're not going to go” (p189, day 2). Canoe Arctic, in describing the importance of wilderness values to its clientele, told the Review Board the following:

The Thelon is legendary among wilderness aficionados and is recognized internationally as one of the greatest wilderness canoeing rivers on Earth, second only in popularity to the much more accessible South Nahanni River... They come to experience one of the most remote pristine wildernesses left in the world... Mineral exploration, of course, is incompatible with what these tourists come to experience- solitude and untouched wilderness. Over 100 miles of the Upper Thelon south of the Sanctuary has now been staked for uranium and anyone who paddles down that stretch of river today will find it to be bust in places with plenty of man-made noise in the form of diamond drilling, helicopters and fixed-wing aircraft.

Lutsël K'e Hearing, Day 2, P252-3

Canoe Arctic stated that although trips on the Upper Thelon represent one third of its annual business, it has been forced by industrial activity to reroute these trips to avoid one-hundred miles of the Upper Thelon river.

Great Canadian Ecoventures also told the Review Board of its concerns regarding the disturbance from increased industrial activity in the area during its trips. This included disturbance from helicopter traffic from fuel hauls to uranium camps, as well as fixed-wing aircraft buzzing its wilderness camps. These have disturbed clients and have chased (denning) wolves off the esker at Whitefish Lake, near the Great Canadian Ecoventures camp. In response to the recent staking rush, the company has “stopped running canoe trips through that section of the river because of the helicopter traffic disturbing the wilderness experience for our clients” (Day2, p188).

In response to an information request by the Review Board (IR0607-003-03 (2)), the GNWT describes the operating tourism season in the Upper Thelon areas as occurring from June 1st to October 31st (PR#53).

7.3 Review Board Analysis and Conclusions

The Review Board concludes, based on the evidence, that the area surrounding the proposed development (the Upper Thelon basin) is of very high cultural significance to the aboriginal peoples that have historically used, and continue to use the land. This is demonstrated in part by the archaeological record and historical and current use of the area. The record indicates that it has been an important area to the people of Łutsël K'e and their ancestors since pre-historic times, and that it continues to be important to the people of Łutsël K'e, the DKFN, and the Athabasca Denesuline. This evidence was not contested by the developer.

The Review Board recognizes the increasing demand from communities that their social, economic and cultural well-being be taken into full consideration during environmental impact assessment. In s.111 of the MVRMA, "impact on the environment" is specified to include "any effect on the social and cultural environment or on heritage resources".

The Review Board has reflected on questions related to socio-economic impact assessment including the following:

- Are the trade-offs between potential adverse social and cultural impacts and potential beneficial economic impacts acceptable to the people most affected by the development?
- Will potential impacts support or undermine the affected communities' aspirations and goals? How does the development fit into existing community or regional plans? Is the community ready for and comfortable with this type of proposed development?
- Are there locations of special spiritual significance located near the proposed development?
- Are there traditionally harvested animals in the area of the proposed development? What is their sensitivity to disturbance and importance to local communities?

The Review Board notes that the developer concluded in its hearing presentation that the development would cause net positive social impacts. This conclusion is not justified given the evidence on the public record. The mitigation measures proposed by the developer can not, in the opinion of the Review Board, adequately mitigate the potential social and cultural impacts of the development.

7.3.1 CULTURAL AND SOCIAL ISSUES

The Review Board considers the assessment of social and cultural impacts to be an important aspect of environmental assessment. Section 115(b) of the MVRMA states that the Review Board is required to consider the social and cultural well-being of the residents and communities of the Mackenzie Valley. This must be considered in both the project-specific and the larger cumulative contexts. Section 117(2)(a) of the MVRMA

specifies that every environmental assessment “shall include a consideration of... any cumulative impact that is likely to result from the development in combination with other developments”. The Review Board considered these requirements when reviewing the evidence before it and forming determinations about this proposed development and its impacts.

Findings on Cultural Impacts

A. Nature of the Cultural Impacts

The Review Board has heard ample evidence from many parties that the culture of aboriginal peoples is linked to the caribou. As one presenter put it, “Our identity, our cultural, our way of life will be gone forever if the caribou disappears...”^{12, 13}. The Review Board has also heard that the Upper Thelon is of immense importance in terms of historic and current traditional land uses, and that there is a direct spiritual connection with the people of Łutsël K’e and this area. The Review Board particularly notes that Elders spoke powerfully of how spiritually significant the Upper Thelon basin is, for example telling the Review Board that “our ancestors are gone back to the land in a spiritual way. They are there. They are the holders of our land in Thelon River until today”.¹⁴

In the view of the Review Board, the testimony presented by Elders on cultural impacts was not based only on their personal views as individuals, but rather was based on traditional knowledge- the collected knowledge, values and beliefs that have been passed across generations. The Elders were speaking as holders of traditional knowledge. The Review Board takes such evidence very seriously. Section 115.1 of the MVRMA explicitly instructs the Review Board to consider traditional knowledge made available to it alongside scientific information. When identifying cultural impacts, the Review Board relies heavily on the testimony of the people who are a part of that culture.

The evidence presented by the Elders was further supported by the potentially affected aboriginal parties. The LKDFN has consistently maintained that the Upper Thelon basin is “vitaly important to the culture, history and spirituality of the Dene people”¹⁵, and describe this area as the “heart and soul” of the people of Łutsël K’e¹⁶. Many members of the LKDFN all provided similar testimony to this effect.

Both the scientific evidence and evidence from traditional knowledge converge to support the conclusion of a cultural impact. There is compelling culturally relevant scientific evidence about potential impacts to caribou (see section 8); evidence from

¹² Rob Rowbielle, Athabaska Denesuline (Day 2, pp 136-137)

¹³ The potential impacts of this development on caribou are examined in detail below, in section 8 of this document.

¹⁴ Elder Bernadette Lockhart, LKDFN (Day 2, p42)

¹⁵ LKDFN Letter of Dec. 15, 2006 (PR#58)

¹⁶ Monica Kreiger, LKDFN (Day 2, p31)

traditional sources about the same impact; and there is compelling evidence, from traditional knowledge as presented by the Elders, of the spiritual and cultural importance of the Upper Thelon to aboriginal peoples.

The Review Board notes that the developer failed to document, describe or acknowledge the importance of the area to the LKDFN. This importance was made abundantly clear to the Review Board during the hearing in Łutsël K'e. The Review Board heard from a broad cross-section of the community spanning three generations, from Elders to community leaders to youth. In both content and tone, aboriginal presenters spoke unanimously and eloquently in their testimonials that the Upper Thelon is of high spiritual and cultural importance. The people of Łutsël K'e in particular have recognized the Upper Thelon as a vital part of their traditional identity and heritage. They wish to pass it on to their children as they inherited it from previous generations. People fear that if the landscape of the Upper Thelon is subjected to increased industrial development, it will reduce their ability to transmit their heritage and traditional practices across generations as has been done for centuries. In the view of the Review Board, this speaks to the heart of cultural identity, and would represent a serious cultural impact.

To the people of Łutsël K'e, the potential for increased industrial development in this area is not compatible with the values of the Upper Thelon basin as a cultural landscape. They view this as a desecration of a spiritual landscape. They want the Review Board to help protect it from the impacts of industrial activity by the proposed development in combination with all other industrial activities (such as claim staking, aerial surveys, diamond drilling, other exploration activities and air traffic associated with most of these activities) that potentially affect it. Other aboriginal groups have expressed similar concerns and support the position of the people of Łutsël K'e.

Although it is possible for the development as proposed to affect traditional harvesting activities¹⁷, many of the potential cultural impacts the Review Board has heard about do not relate to direct impacts on traditional activities. These predicted cultural impacts go beyond the disruption of traditional activities. Traditional land users of the Upper Thelon basin continually expressed to the Review Board that it is culturally important to aboriginal peoples that this spiritually valued area continues to exist in its current state. Based on the evidence, the Review Board finds the importance of the Upper Thelon basin cannot be defined solely by its practical utility, because it is a spiritual area with an intrinsic and intangible cultural value to aboriginal peoples.

Similarly, the Review Board is of the view that the degree of biophysical impact on the area is not always commensurate with the magnitude of the cultural impact experienced by the people who value it. The scale of the project is not the main consideration in this case. The project is small, but the issues are much bigger because the proposed

¹⁷ For example, cumulatively affecting caribou, in combination with other activities, could affect the success of traditional harvesting. In section 8.3 the Review Board addresses the potential for this development, as proposed, to cause impacts to caribou.

development is located in a landscape of such vital cultural importance. In this case, the Review Board heard that this development, regardless of its size, cannot be reconciled with the values placed on the area where it is proposed. The Review Board recognizes that spiritual matters are an important part of culture. This landscape has a spiritual importance in its current state, and this development in combination with other foreseeable developments (as described below) would erode its cultural value to aboriginal peoples. The Review Board has heard and accepts evidence that this particular landscape, the Upper Thelon basin, holds such special value to aboriginal people that changes to it will cause significant cultural impacts.

B. Cumulative Context

The people of Łutsël K'e have made it clear to the Review Board that although their history with this area is extensive, their primary concern is the future. For this reason, the Review Board finds it necessary to consider the cultural impacts described above in the cumulative context of the proposed development in combination with all other present and reasonably foreseeable developments on the same cultural landscape.

The Review Board accepts that exploration projects do not necessarily result in mines, and that the development being assessed is not a mine. This does not, however, mean that there are no reasonably foreseeable future developments which may cumulatively, in combination with the proposed development, have an impact on aboriginal land users' culture, or on culturally important wildlife such as caribou.

The Review Board has heard evidence of the recent increase in the price of uranium, the extensive staking of the Upper Thelon, the presence of many known uranium prospects and showings, and the geological similarity of the area to the Athabasca geological basin, which is an area of world-class uranium potential. It has heard presentations of relevant case studies of development patterns that followed similar situations in northern Saskatchewan and in the Slave Geological Province. The Review Board also notes that although the probability of any given mineral claim becoming a mine is low, over the past five years there have been over 1000 new claims registered in the Upper Thelon geological basin. This is more than a seven-fold increase in the number of claims in this area, and each new claim brings an increased likelihood that the Upper Thelon will be further developed. In the time between the hearings for this environmental assessment and the release of this report, the Review Board notes that two new applications for land use permits for uranium projects in the vicinity of the proposed Ur Energy development have been received by the MVLWB¹⁸.

Taken individually, any one of these considerations indicates that there could be reasonable foreseeable future developments, but taken as a whole they provide a more compelling case. For all these reasons, the Review Board finds that the people of Łutsël

¹⁸ These two new applications are MV2007C0009 (PR#103) and MV2007C0010 (PR#104), received by the MVLWB on April 2, 2007.

K'e and other land users are understandably concerned with the impacts of reasonably foreseeable future developments.

The Review Board notes that the people who presented at the hearing in Łutsël K'e spoke of their concerns about cumulative impacts to the Upper Thelon as a whole. They did not specify particular points of potential disturbance within it. These concerns are directed at the entire landscape in the Upper Thelon basin, and are not limited to a collection of individual points on a map. In the Review Board's view, the potential cultural impacts it heard about are cumulative because they relate to the combined effect of the proposed development in combination with all other human activities, including reasonably foreseeable future developments, that act in combination to change the cultural value of the landscape throughout the Upper Thelon.

C. Conclusions on Cultural Impacts

In the view of the Review Board, it is appropriate to consider the Upper Thelon as a culturally important landscape.

The Review Board finds that the potential for industrial development of the area is not compatible with the aboriginal values for this cultural landscape. The Review Board concludes that the impacts of the proposed development in combination with the combined impacts of all other past, present and reasonably foreseeable industrial developments in the area are likely to have a significant adverse cultural impact on the aboriginal peoples who value the Upper Thelon. In the opinion of the Review Board, informed by the evidence on the record, the likely adverse cultural impacts of a cumulative nature are so significant that the development cannot be justified. The Review Board therefore recommends that the project be rejected without an Environmental Impact Review, as per s128(1)(d) of the MVRMA.

The Review Board does not believe that proceeding to an Environmental Impact Review would serve any purpose in this case, because the information most relevant to this decision is already captured in the evidence on the public record. The Board notes that this decision relates to the effects of the predicted cultural impact that would occur if this development went ahead in this spiritually significant area. This is a decision between competing values in the context of a culturally important landscape. More information is unlikely to provide new insights into this assessment of significance.

Findings on Social Impacts

Although the Review Board has decided to recommend that this development be rejected primarily on the basis of cumulative cultural impacts; in the view of the Board, the cultural significance of the Upper Thelon basin is further supported by evidence of related social impacts in Łutsël K'e. To categorize the statements voiced in Łutsël K'e as mere expressions of public concern fails to capture the degree and depth of the anxieties voiced. The Review Board is of the opinion that these were powerful and clear

expressions of widespread distress (meaning widespread and severe trouble, anxiety, sorrow or anguish). The people of Łutsël K'e are confronted by the potential for rapid industrial change in an area of immense importance to them. However, the people of Łutsël K'e are unable to exert any control, or even have substantive input, over the activities of mining companies on this land. This, in the opinion of the Board, is certainly one of the sources of the distress that was demonstrated during the hearing.

Psychological well-being is clearly an important part of mental health. Based on the evidence heard in this proceeding, the Board concludes that the distress exhibited by residents of Łutsël K'e is of such magnitude as to constitute a significant social impact—that is, a significant undesirable effect on the well-being of these people. It is a significant cumulative social impact, resulting from impacts on culture and people, arising from anxiety over the proposed development in combination with other industrial activities in this culturally significant area. This is due to the presence of industrial development activity on land of very high cultural importance, coupled with the inability of the people of Łutsël K'e to directly influence what happens on the land through conservation efforts or land use planning. Although this impact is not the primary basis for the Review Board's recommendation to reject this development, the Review Board notes that the rejection of this proposed development helps to mitigate this impact.

Land Use Planning Issues

The Review Board accepts that the Upper Thelon basin is of primary concern for the people of the LKDFN and other aboriginal users of the area, even though these areas were not selected for withdrawal by the Akaitcho government. It is clear, based on the evidence, that these areas were not selected for interim withdrawal because mineral claims had already been issued. The Review Board notes that the Canada Mining Regulations give extensive rights to the owners of mineral claims, and that interim withdrawals do not affect existing rights. It appears to the Review Board, that the benefits to the LKDFN of selecting these lands for protection through withdrawal at the land claims table may have been compromised by the allocation of mineral rights in the area. The Board was advised that there was a limited amount of land available for Akaitcho land claim negotiators to withdraw. As a result, areas where mineral rights had not been allocated were chosen by the Akaitcho negotiators for interim land withdrawal. Given this information, the fact that the Upper Thelon area was not selected does not, in the view of the Review Board, detract from the assertion that the area is of high importance to the people of Łutsël K'e.

Section 115(c) of the MVRMA states that one of the guiding principles of the Review Board's environmental assessment process is to have regard to "the importance of conservation to the well-being and way of life of the aboriginal peoples". The Review Board considered this principle when reviewing the evidence before it and forming its opinions about this proposed development and its impacts.

It is reasonably foreseeable that future developments in the Upper Thelon will contribute to cumulative impacts. As noted above, the future is of primary concern for the people of Łutsël K'e. The Board is of the view that the following suggestion should be carefully considered to help manage these impacts.

In the opinion of the Review Board, an appropriate *interim* land use plan for the Upper Thelon basin should be undertaken to manage the area in a way that ensures that its cultural value is not significantly compromised. The more development allowed in the Upper Thelon prior to the implementation of such a plan, the less effective a plan will be in mitigating cultural impacts, because the cultural values of the area will be incrementally lost. Appropriate interim land use planning could also contribute to a reduction of the cultural impacts identified in this environmental assessment.

The Review Board sees an immediate need to identify and manage the cumulative effects of current and future human activities in the Upper Thelon watershed. This is necessary to ensure that effective management options still exist when land use plans are completed under the Akaitcho settlement. In the opinion of the Review Board, land-use planning may mitigate the cumulative impacts of future developments only if the opportunity to conserve the cultural landscape has not been foregone. Economic development can happen over the land's original state, but it is much harder to re-create the original state of the land over an industrial landscape. The Review Board accepts the evidence of the LKDFN, the Treaty Eight Tribal Corporation, WWF and the Caribou Management Board that land use planning should precede development, instead of occurring after the fact.

Suggestion 1:

An Interim Land Use Plan should be developed and implemented incorporating the cultural values of the area. This exercise should be completed as soon as possible, and provide management prescriptions for the future development of the Upper Thelon River basin.

The Mineral Tenure Regime and the Review Board's Role in Consultation

The evidence presented to the Review Board by WWF and confirmed by DIAND indicates that the upper Thelon Basin was the subject of a "staking rush" in the period between 2002 and the filing of the land use application by the Developer. Representatives of the LKDFN and the Treaty Eight Tribal Corporation advised the Review Board that they were caught by surprise by the allocation of mineral interests in this area, most of them related to recent mining interest in uranium.

The Review Board notes that the allocation of mineral interests in this area is based on the Canada Mining Regulations which provide two means for mineral interest allocation, both based on the "free entry" system. They include the staking of claims by a licensed prospector or the issuance of prospecting permits which then provide exclusive access to an area for purposes of staking claims.

The only real mechanism for protecting sensitive or special lands from activities such as prospecting, exploration or mining is withdrawal of those areas from disposition under section 11 of the Canada Mining Regulations. If an area is open for prospecting it is not, for the reasons set out below, possible to prevent the allocation of mineral interests. Once claims are staked or leases granted, the Crown faces the possibility of demands for compensation if development is foreclosed.

Once the decision is made to make mining lands available, one of the characteristics of the free entry system is the lack of discretion it provides to the representatives of the Crown. Assuming the basic requirements of the Canada Mining Regulations are met, a properly staked claim must be registered by DIAND. Once a claim is registered, representation work must be conducted and again, assuming the holder of a claim meets the minimum requirements set out in the regulations, the Crown must grant the claim holder a lease.

Prospecting permits are issued annually in January. Because the applications for these permits are received in a priority sequence and held until issuance this approach to mineral interest allocation can provide an opportunity for Crown officials to consider other interests in the areas which may be released for staking under such a permit.

The Canada Mining Regulations framework combined with the provisions of the Mackenzie Valley Land Use Regulations, which exempt prospecting activities from the requirement of a land use permit, means that prospecting is almost always a legally authorized use of Crown lands which have not otherwise been withdrawn. Because the staking of a claim requires no land use permit, communities like Łutsël K'e have no way of knowing that a staking rush is on.

Once a claim is properly staked it must be registered and there is no opportunity in the Canada Mining Regulations system for consideration of the environmental or social effects of development in the areas claimed before allocation of the mineral rights takes place. Likewise, it appears that consideration of the effects of any activity associated with the mineral claim or lease on the exercise of aboriginal or treaty rights is postponed by DIAND until later in the development process.

At the hearing in Łutsël K'e, DIAND staff advised the Board that they do not consult aboriginal rights holders until after the Review Board environmental assessment process is completed. This approach to consultation under section 35 of the *Constitution Act, 1982* allows DIAND to conduct a "gap analysis" to determine whether the environmental assessment process has resulted in accommodation of concerns related to infringement of aboriginal rights. If in the opinion of DIAND the mitigation resulting from the environmental assessment process satisfactorily addresses any infringements, no further consultation may be necessary.

The Review Board notes that there are strong expectations among aboriginal rights holders that they will be consulted directly by government early in the development process when regulated activities may threaten the exercise of their rights. Section 125 and 126 of the MVRMA provide for preliminary screeners, and a variety of other authorities, to refer developments to environmental assessment simply on the basis of public concern. The MVRMA provides little direction on the interpretation of public concern. In these circumstances, it is possible that developments may be referred to environmental assessment because the Crown is choosing not to consult until later in the regulatory process and because unaddressed concerns about infringement of aboriginal rights generates public concern among aboriginal rights holders.

The Review Board does not have the jurisdiction to address the effects of development on aboriginal rights under section 35 of the Constitution, that is the Crown's responsibility. In the end, when consultation issues arise, Review Board proceedings may be the only venue for a public examination of these concerns. As a result they are more complicated and much information of questionable relevance related to Crown consultation can be presented as evidence before the Board at hearings. This situation affects the Review Board's ability to meet the requirements of section 115 of the MVRMA and to carry out its proceedings in a timely and expeditious manner. It appears to the Review Board that if consultation issues could be addressed earlier in the process, all parties might benefit.

Returning to the question of mineral interest allocations, the Review Board notes that the use of prospecting permits has, in other parts of the NWT, enabled DIAND and aboriginal organizations to plan for mineral exploration activity on traditional lands and to avoid consultation issues by ensuring in advance that activity in areas of interest to the mining industry is discussed with aboriginal organizations in affected communities. Such an approach should be considered for the traditional lands of Treaty Eight communities as well even if amendments to the Canada Mining Regulations (which are under review) are required.

Suggestion 2:

To reduce the potential for conflict between the duty to consult when aboriginal rights are infringed by mineral exploration and development and the free-entry system set out in the *Canada Mining Regulations*, the Government of Canada should adapt and apply the prospecting permit process to areas in the Akaitcho Territory, particularly in the Thelon Basin, in order to provide notice and ensure opportunities for consultation with aboriginal users of that area, before mineral interests are granted.

Tourism Issues

With respect to the socio-economic issue of impacts on tourism operations, the Review Board accepts the evidence of Great Canadian Ecoventures, Canoe Arctic, and the numerous members of the public. These groups stated that the wilderness value of the Upper Thelon basin is of national and international significance, and that this wilderness value is a very important part of its status as an ecotourism destination.

The Review Board agrees that industrial activity and related disturbances are not compatible with the wilderness experience, and that this wilderness experience is key to the operations of ecotourism businesses such as Great Canadian Ecoventures and Canoe Arctic. The Review Board notes that these ecotourism operators have already had to significantly change their schedules and routes to avoid industrial activities.

In its January 2007 response to an information request by the Review Board, the developer raised the possibility of conducting a summer program as an alternative time period for exploration activities (PR#67, p3). The Review Board notes that this would conflict with the timing of the peak ecotourism season in the area, and would introduce activities incompatible with a wilderness ecotourism experience. The Review Board has heard evidence that a substantial portion of the local ecotourism companies' business is in the area of the Upper Thelon basin, and would likely be affected. In the opinion of the Review Board, this would be a relevant and significant impact on the tourism operators and their clients. The Review Board therefore finds that the development as proposed is likely to cause significant adverse socio-economic impact on ecotourism businesses and their clients using the Upper Thelon area. Although this impact is not the basis for the Review Board's recommendation to reject this development, the Board notes that this impact is prevented by the rejection of the development. Were this development not to be rejected, mitigation measures would be required for this significant impact. Because of the rejection recommended by the Review Board, no measures or suggestions are identified here.

8 Caribou Issues

Impacts to caribou have been an on-going issue throughout this environmental assessment. These include project-specific impacts and cumulative impacts arising from the potential effects of this development in combination with other human activities in the area.

The workplan for this environmental assessment noted this in s.3.3.2, stating that “the review of the record indicates that caribou is the environmental component of greatest concern. Cumulative impacts on caribou (and associated harvesting and cultural impacts) are an important consideration in this assessment”.

The workplan notes that “the proposed development is within the migration routes of the Beverly and the Ahiak caribou herds”. It goes on to state:

This issue was raised in almost all submissions to EA0506-003 (the previous assessment for a related application from this developer) and in comments on the draft of this work plan. It appears there is great concern among aboriginal groups, the Beverly and Qamanirjuaq Caribou Management Board (BQCMB), the GNWT, environmental organizations, and the general public. Impacts on caribou are a relevant consideration by themselves and may also play a role in the consideration of social or cultural effects. The Review Board will consider evidence of impacts on caribou from all development components, including aircraft movements.

Several of the Information Requests issued by the Review Board on Nov. 15, 2006, focus on impact prediction and mitigation with respect to caribou, both on a project specific basis and on the cumulative level (e.g. IR 0607-003-08).

8.1 Developer's Submission

The developer provided one page of information on caribou in its attachment to its application, a study by Golder Associates entitled “Environmental Screening Study for Ur Energy Inc. Permit to Conduct Uranium Exploration at Screech Lake, Northwest Territories” (p25: PR#1).

The submission notes that most herds of barren-ground caribou (*Rangifer tarandus groenlandicus*) over-winter south of the treeline, although Ahiak and Cape Bathurst herds may over-winter on the tundra. Pregnant cows begin a migration northwards to calving grounds in March and April. After calving, usually in early June, cows and calves begin to migrate south again.

The Golder report noted that “the Screech Lake Program area is used extensively by the Beverly herd” and that the herd’s calving grounds include central portions of the Thelon Wildlife Sanctuary. Based on information from the Caribou Management Board, the report states:

(T)he Screech Lake Program area is located in the spring range of the Beverly herd and is used between mid-March and late May. Specifically, the data indicate that the Screech Lake Program area is situated within a primary migratory corridor and congregation area. Other herds known to occur in the area include the Qamanirjuaq, Bathurst and Ahiak.

In the January 16th hearing in Łutsël K’e, the Developer described the following as mitigation it would undertake to reduce or avoid disturbance to caribou:

- Maintain a minimum flying altitude of 300m, except on take-off and landing;
- Keep noise levels reasonably low ;
- Passing caribou will have right of way; and,
- Suspend drilling activities if caribou approach within 500m of the drill, using a spotter on the drill tower and a marker flag at 500m for comparison.

In response to information request IR0607-003-05(01) the developer described its willingness to operate from January to April to mitigate concerns about caribou migration (PR#67, p3).

An additional mitigation commitment was added in the developer’s submission of Feb. 7th, 2007, stating that, to avoid disturbing water crossing sites, the developer will not drill within three kilometers of the Thelon River during the 2007 post-calving period.

At the hearing, the developer also committed to maintaining a detailed log of sightings to contribute to research on caribou disturbance and behaviour.

In response to questions raised during the hearing, the Developer submitted a document entitled *Report on Qualitative Assessment of the Cumulative Effect from Ur Energy’s Exploration Program on the Beverly Caribou Herd* (PR#101). This document was submitted after the hearing, on February 7, 2007. In section 2.0 (p2), it emphasizes the importance of caribou, stating:

Barren-ground caribou have a significant social, cultural and economic value for the people and communities living in the Canadian arctic. Aboriginal people have a strong connection with caribou, and rely on the animals for food, clothing, and “cultural wellness”. In addition, caribou are likely a keystone species as they influence the landscape through their movements and feeding, and provide food for predators and scavengers...

This document goes on to say that the impact from industrial activities on caribou individual fitness and population demography is not known. It cites studies showing changes in distribution, movement and behaviour resulting from industrial development in the NWT. For larger developments, recent studies suggest a probability that this influence extends from 20 to 50 kilometers. Females with calves appear to be particularly susceptible to disturbance. Other studies have failed to demonstrate effects on caribou distribution.

The document submits that noise from drilling “should reach background levels within 500m to 1,000m from the rig” (p3). Information from the Ekati mine suggests that an instantaneous negative response of caribou to stressors such as truck traffic within one kilometer of the source. For the proposed development, Ur Energy will drill continuously for one week at each hole (PR#67, p4).

The developer’s report notes that the annual range of the Beverly herd is drawn on an approximation, based on admittedly few collared individuals in the herd (PR#101).

The cumulative effects assessment extended from 1990 to 2011 (when the Developer proposes to complete its program), and excludes mineral claim blocks in the analysis, because “it is not possible to predict the potential for future activity or magnitude and extent of activity in these areas” (p4).

Within the range of the herd, and within these time boundaries, the developer identified 37 past, current or future land use permits. Based on these, the developer estimated the proportion of the herd’s range likely to be directly disturbed by development to be 540 km², a relatively small portion of the herd’s range. This was compared favourably to natural disturbances such as fire. The report concluded that “fire can disturb much larger and more contiguous areas of caribou wintering habitat” (p8).

The report documents numerous natural challenges faced by caribou that could affect survival and reproduction of the Beverly herd. The report concludes that the herd may be more influenced by these natural challenges than by human activities, and that caribou are expected to be influenced, in terms of behaviour and movement, within 500m to one kilometer of past, current and predicted future exploration programs, campsites and communities. The impacts from this exploration program, the report predicts, will be negligible. Although there are predicted to be changes in behaviour and movement, these are predicted by the developer to not result in a measurable impact to the health or persistence of the population. “Overall”, the report concludes, “the residual impacts from the Screech Lake Exploration Program should have a negligible influence on the Beverly caribou herd and the associated traditional and non-traditional use of caribou” (p11).

8.2 Other Submissions

Much of the technical information on the movements of the Beverly caribou herd was presented at the January 16th, 2007 hearing in Łutsël K'e by the Caribou Management Board and the Government of the Northwest Territories (GNWT). In a joint presentation, the GNWT and Caribou Management Board emphasized that preservation of caribou herds and their habitats is essential for both the economic benefits they provide (\$17M per year for the Beverly herd) and for maintaining traditional lifestyles.

Knowledge of the Beverly herd is based on surveys from 1955 to 1993, collared caribou data from 1995 to 2006 and from traditional knowledge. The collar information supports the earlier survey information. That information indicates that the location of the proposed development is in the main migration pathway. The area is also used by caribou in late summer and in the middle of fall migration and rut (August to September). Ahiak and Beverly cows have used the area in all months except for June. Three water crossings used by migratory caribou are also in the project area. The area provides important habitat to caribou during most seasons, but is most important as a spring migration route and location of undisturbed crossings. The Caribou Management Board presentation also illustrated that the Beverly herd is subject to many impacts on various parts of its range.

Elder Madeline Drybones of Łutsël K'e emphasized that the land in that area is important to caribou, saying "That is the land of the caribou. In the fall, in the summer, there is caribou around that area" (Łutsël K'e Hearing, p124). The LKDFN reinforced this, saying that this area

...provides critical habitat for caribou herds and is on the primary migration route for both Beverly and Ahiak herds. (p16) Both the Beverly and Ahiak herds use the Screech Lake area in both their northward and southward migrations and some may overwinter in that area as well. And they use that area at critical times in their life cycle when they are especially vulnerable to disturbance. (p22)

Łutsël K'e Hearings, Day 2

Several elders stated that the LKDFN presentation was accurate, and that it was based on their recorded traditional knowledge.

Mr. Ron Robillard of the Athabasca Denesuline also emphasized that the area is important to caribou, saying that the area is "right within the range, the travel route there, it's been used by the caribou, year after year... Our Elders will tell you about that" (Day 2, p143).

The GNWT and Caribou Management Board stated that caribou are particularly vulnerable to disturbance at water crossings. If disturbed at a preferred crossing site,

caribou double back to cross at another location, expending additional energy or being diverted to less favourable habitat.

Disturbance and habitat impacts were two particular types of impacts cited during the presentation as being especially important. Disturbance impacts are especially important because disturbance of pregnant cows can affect calf size at birth, and this has been linked to calf survival. Disturbance can extend to effects on overall health and condition.

Habitat impacts include both direct loss from the project and indirect habitat loss from avoidance of an area.

In terms of how these impacts manifest in individual caribou, the Caribou Management Board and GNWT stated presentation stated:

Pregnant cows are often in poor physical condition due to demands placed on the cow by the fetus. During spring migration they're heavily pregnant, they have minimal fat reserves and they're moving long distances toward their calving grounds, so they need all their reserves for travel and development of their young. The impacts on cows and their unborn young can occur if they use more energy to (avoid) exploration activities. The stress to the cows could decrease calf production or survival in a number of ways. One is that they could prevent cows from reaching the calving area in time for calving. Another is that they could decrease the ability of the cow to feed newborn calves because of reduced reserves available for producing milk, or they could reduce the size and possibly the survival of newborn calves.

- Łutsël K'e Hearing Transcript, p.141-142

The presentation by the Caribou Management Board stated that the number of caribou in the Beverly and Ahiak herds near the development site could be small or large, depending on the migration route followed in a given year, in combination with a variety of naturally variable factors. The number of caribou that pass close to the exploration site could vary from hundreds to tens of thousands. Based on what is currently known of the herd ranges, these are most likely to be Beverly and Ahiak herds.

Caribou modeling by the GNWT shows that calf and cow survival may cause population impacts at the herd level. All five herds west of the Beverly herd have been demonstrated to be declining in numbers for the past decade. The last population surveys for the Beverly and Ahiak herds occurred over ten years ago, so current population size and trends for these herds are not known with certainty. However, because population cycles of different caribou herds can be similar in response to large-scale weather patterns, the GNWT and Caribou Management Board predict that

It is likely that the Ahiak and Beverly herds have also decreased in size... If the Ahiak and Beverly herds are declining, they'll be less able to cope with increased levels of disturbance... The models show that the recovery of the Bathurst herd

will happen only if both of these things increase; that is, the survival of adult cows and calves... The US Fish and Wildlife Service has estimated that reduction in annual calf survival of as little as five percent could cause a further decline in the Porcupine caribou herd... So this suggests that impacts that we may assume initially to be relatively small on pregnant cows could either intensify a possible decreasing trend in Ahlak and Beverly caribou, that is make it worse, or that it could slow down recovery of herds from a possible decline.

Lutsël K'e Hearing Transcript, pp144-145

A letter of October 5th, 2006 from the Caribou Management Board to the Review Board confirms that the GNWT and Caribou Management Board “agree that the Beverly herd is likely declining” (p2, PR#24).

The LKDFN also told the Review Board that current population trends in caribou warrant extra caution, saying “There is a huge lack of current information on the Beverly herd but they are presumed to be declining and that means they require additional protection above and beyond what they would normally do” (p22, day2).

Because of the decline of the population of the Bathurst herd, the Beverly herd is of increasing importance for harvesting by the people of Lutsël K'e (PR#58, p2).

The GNWT and Caribou Management Board stressed that their primary concern was with the cumulative impacts of the proposed development in combination with all other human activities affecting the herds. The health of caribou is collectively influenced by their ability to cope with stress or disturbance anywhere across their range.

The LKDFN, the DKFN and the Treaty Eight Tribal Corporation all emphasized that their concerns are primarily on the cumulative effect of this development in combination with all other activities in the area. As Steve Ellis of the Treaty Eight Tribal Corporation put it:

Exploration provides no certainty that there will be a mine. But what... I think everybody agrees here... is that there is certainty that there... will be increased exploration interest in the area and that the cumulative effects of that exploration may cause impacts upon not only aboriginal treaty rights but the animals and the water in that area... and the ability of the people to use that area in the present and in the future. So it's not a question as to whether mines will have impacts. The question is: Is exploration as a whole in the Upper Thelon Basin going to have impacts upon the people and the wildlife and the environment there? That's the question that's being asked.

Lutsël K'e Hearing Transcript (Day 1, pP118)

The GNWT and Caribou Management Board stated that shortcomings in the developer's material include the prediction of impacts, mitigations, significance and cumulative effects. This is in part due to a lack of recognition by the developer of the other activities that affect these caribou. The GNWT and Caribou Management Board stated that "the cumulative effects on caribou of the project in combination with both the local exploration program and other developments across the Ahiak and Beverly ranges are key", and emphasized the need for considering reasonably foreseeable future impacts in the region. It was noted that the developer did not, in the view of the GNWT and Caribou Management Board, consider all other human activities affecting the caribou.

In a letter to the Review Board from June 15, 2005, Monte Hummel of the WWF cited a 2004 position paper by the Caribou Management Board, in which the Board concluded that "current policies and measures are not adequate to ensure maintenance of the Beverly and Qamanirjuaq herds in the face of increasing levels of human activity on the caribou ranges", and "the need for action is urgent in light of increasing development" (PR#9, p4)..

The GNWT and Caribou Management Board put forth the following recommendations to the Review Board (Łutsël K'e Hearing Transcript, p150):

1. That the Review Board not accept the residual impacts to caribou will be minor or that cumulative impacts will have a negligible environmental consequence
2. If the permit is approved, exploration activities in future years should occur during January to April only.
3. For 2007 if work actually proceeds, it should occur until only April 30th. It must not occur during May and it may occur in June if completed by June 30th.
4. If the developer wishes to operate in the project area outside these time periods, additional assessment of potential mitigation options needs to be conducted in advance by the GNWT and by the Caribou Management Board.

The GNWT and Caribou Management Board requested that no activity occur within five kilometers when caribou are present at water crossings.

The Caribou Management Board described its concerns over cumulative effects in the area. It noted the recent increases in the price of uranium and the corresponding uranium staking rush. It noted other exploration activities on the surrounding land. It also noted that caribou are encountering increased human activity in other areas of the Beverly and Ahiak range, including activities associated with a number of mineral rights issued to uranium companies that has "increased hugely recently", including 163 new mineral claims recently issued by the federal government. The Board also heard that the post-calving area in Nunavut is experiencing increased human activities, including advanced exploration, and that Nunavut's first uranium mine is predicted to start in five years within the range of the herd. "So the potential for cumulative impacts... is already huge. We don't have to look at just future developments, we can look at past and present developments" (Day 1, p159).

The Caribou Management Board stated its view that mineral development in the Thelon basin is likely to increase. It based this in part on federal Minerals and Metals Policy, which promotes the industrial development where a mineral deposit is found. It also based its opinion on case studies of mineral development patterns in the Athabasca Basin in northern Saskatchewan and Alaska's north slope (day 1, p161-162). The Treaty Eight Tribal Corporation offered the mineral development in the Slave Geological Province as another relevant case study of mineral development patterns that provide insight into the potential future (day 2, p209).

The Caribou Management Board described what it viewed as important information gaps that limit the ability of assessors in making good cumulative effects predictions. It cited a paucity of information on herd health, growth, sustainability, how the herd is affected by past mineral development and contaminants, how recent reductions in effective habitat affect the herd, how changes in hunting pressure will affect the herd, and how all of these things will interact (day 1, p162-3). In light of these uncertainties, the Caribou Management Board submits that the Review Board should apply the precautionary principle in its decisions, so that:

...the permit and others for exploration work in the Upper Thelon should not be issued until substantial work has been undertaken to allow MVEIRB to make informed decisions... This does not mean that we think all the answers need to happen before anything happens at all, but... we need to do some planning to figure out what really should be going on that will not impact negatively on caribou herds and caribou range communities.

Lutsël K'e Hearing Transcript (Day 1, pp168-9)

Steve Ellis described to the Review Board the concerns of the Treaty Eight Tribal Corporation regarding unanswered questions that are relevant to understanding cumulative effect, saying the following:

Is exploration as a whole in the Upper Thelon Basin going to have impacts upon the people and the wildlife and the environment there? That's the question that's being asked. And I think what you're hearing from a lot of people today is that people don't know the answer to that. People don't have the information in front of them to make those determinations, whether that be the people around this table or the Board or INAC or anybody. So that's... a big issue in reference to this program here.

Lutsël K'e Hearing Transcript (Day 1, pP118)

There's a complete lack of information... that's been expressed by a lot of people. The BQ Board talked about a lack of information about caribou, the status of the caribou herds, the health of the caribou herds, and what

exploration in that area may do to them. We have heard about the lack of information about the potential or what's reasonably foreseeable with regards to exploration activity in that area. We can make some guesses and it looks like there's going to be lots of activity in that area or there's certainly renewed interest in that area for uranium purposes. But we don't really know how much activity's going to happen there and that's something that people should be more informed about. What are the prospects? What's the real potential for some sort of development in that area? We don't know that. We don't have that information.

Łutsël K'e Hearing, Day 2, p201

Monica Krieger of Łutsël K'e First Nation stated its concern about the “huge lack of information about the Beverly herd” (p16 day 2) to the Review Board, saying:

There have been a lot of models and frameworks proposed to assess cumulative effects and you require the results of those studies to make informed decisions... But the information to plug into those models is not available yet. We don't have good population data or health status data for these caribou herds. We don't know how drilling activities or mining activities affect caribou in the long-term but it is critical to evaluate the caribou ability to buffer environmental conditions and human activity.

The Board's own guidelines... state: "Research can help identify thresholds of manageable change, what consequences of crossing them might be. In cases where the impacts are uncertain or unknown the precautionary principle should apply."

Łutsël K'e Hearing, (Day 2, pp 24-25)

The Caribou Management Board emphasized throughout its presentation that the information available on the herd is quite limited, due in part to the small number of collared animals. It described its concern about decision making without an adequate understanding of the caribou, stating:

So... why the Caribou Management Board is concerned... is that we don't really know a lot of things about Beverly and Ahiak caribou. So we believe we don't really have adequate information to make predictions about the cumulative effects of all this mineral development and other human activities across the caribou range. We don't really even have the most basic information about these herds to determine if they're healthy, are they growing, are they likely to continue to do so, can they support the harvest. We don't know the population size and trend, sustainable harvest levels, annual harvest.

There's a huge long list of other things we don't know. I'll just read out a few other ones. We don't know how disturbance or contaminants from past mineral development have already affected caribou. We don't know how the effect of the loss of winter habitat in Saskatchewan and Southern Northwest Territories due to forest fires is affecting them. We don't know how the demand for Beverly and Ahiak caribou will increase because of growing communities on the caribou ranges, greater access to the winter range for hunters from the south, and perhaps even reduced availability of Bathurst caribou. And most of all we don't know how all these environmental influences interact.

Lutsël K'e Hearing (Day 1, p163)

Regarding the timing of the most sensitive period for caribou, the LKDFN advised that the developer should not operate in May to avoid a peak time of caribou use of the area. The LKDFN is concerned because the timing of caribou movements can vary across years and the timing of caribou migration is unpredictable and widely variable (Day 2, p23). This was based on both direct community observation and traditional knowledge. Elders Joe Michel, Bernadette Lockhart, Albert Boucher and Pierre Marlowe expressed their support for the information presented by the LKDFN, and specified that the views of the Elders had been carefully recorded and presented by Monica Krieger.

A letter from the Caribou Management Board on the public record corroborates this timing explicitly. Although May is the most vulnerable time, the letter further states:

(T)he use of this area by caribou during the spring migration from mid-March to late May was well documented by government surveys during the 1970s through the early 1990s... (the) March to May period is the time when pregnant cow caribou and their fetuses are most vulnerable to disturbance from direct and indirect impacts from exploration activities... This may result in reduced calf production, which could potentially result in much more than 'minor' impacts on the herd.

Caribou Management Board Letter of Aug. 18, 2006 (PR#25).

Elder Albert Boucher described to the Review Board his views based on previous experience with mineral development and caribou, saying “(w)e know after the mining development happened on our land that the caribou are affected. The caribou are not healthy... I got to say it's because of the mining. That's why our caribou are unhealthy”. (Day 2, pp66-67)

8.3 Review Board Analysis and Conclusions

The Review Board has responsibility to look at both project specific impact and impacts arising from project in combination with other human activities. In this section, the Review Board will consider these different types of impacts separately.

8.3.1 PROJECT SPECIFIC IMPACTS ON CARIBOU

Findings on Proposed Mitigations

On a project specific basis, the Review Board agrees with the developer and DIAND that this is a small activity, and is not a mine. In the Board's view, some of the mitigation measures proposed by the developer would help to reduce or avoid impacts on caribou. Particularly helpful is the developer's mitigation of shutting down operation for May. Although the mitigation measures may be helpful, they are not, in the Board's opinion, sufficient to ensure that this project will not have a significant adverse project-specific impact on caribou. This is in part due to numerous questions about the confidence in the mitigation measures' effectiveness.

The developer has indicated that it will avoid disturbing caribou by shutting down when caribou are spotted within 500m of drill rigs, that staff will look for caribou, and that flags will be placed 500m away to aid their judgment in deciding when to shut down.

Parties have raised questions regarding the effectiveness of this mitigation, considering that much of the work is proposed during dark winter months when accurately observing caribou at that distance would be difficult if not impossible. Questions of topography were also raised, because the drilling will occur in an esker complex, which could well affect lines of sight. Based on these concerns, the Board finds the mitigation measures inadequate to fully prevent disturbance to caribou, and accepts evidence from GNWT and Caribou Management Board that disturbance can affect caribou energetics in a potentially significant way.

The Review Board accepts the evidence of the GNWT and the Caribou Management Board that caribou migrating towards the calving grounds in spring are particularly vulnerable to energetic impacts from human disturbance, which may affect calf birth weight and survival. This is important because of the influence of calf survival on herd population trends at a time when the Beverly herd is likely in decline.

Findings on Development Timing and Caribou Vulnerability

Concerning the timing of the proposed development activity, the Caribou Management Board and GNWT have stated that May is a particularly vulnerable time for pregnant cows moving through the vicinity of the project. The Review Board notes that evidence based on traditional knowledge submitted by the LKDFN indicates that the timing of caribou movements is widely variable. The Board notes that this is corroborated by the Caribou Management Board letter of Aug. 18, 2006 (PR#15), which documents use of the area by caribou starting at mid-March, identifying the period from mid-March to late May as “the time when pregnant caribou and their fetuses are most vulnerable to disturbance from direct and indirect impacts of exploration activities”.

In the view of the Board, this is strong support for the traditional knowledge evidence. The Board also has strong evidence that May is the month when these impacts are at their most potentially severe, indicating that vulnerability increases over the mid-March to May period. In considering this, the Board bears in mind the precautionary approach in consideration of scientific information gaps regarding the timing of Beverly caribou movements. However, the rejection of this proposed development will prevent any significant adverse impacts on pregnant caribou in the immediate vicinity of the development. Even though May is likely the period of the most severe potential impacts, the Board accepts the traditional knowledge evidence of the LKDFN and the expert testimony of the Caribou Management Board that the middle of March through April is also an important period for spring migration of caribou that are pregnant and vulnerable to disturbance.

Because of low confidence in the mitigation proposed by the developer to prevent disturbance, in the view of the Board, the developer has not proven that this project is unlikely to cause a significant adverse impact on pregnant caribou during the vulnerable period of spring migration. The Board accepts the evidence of the GNWT, Caribou Management Board and Łutsël K'e in concluding that a precautionary approach is warranted, in light of the outstanding information deficiencies and importance of caribou as a valued component.

Although project-specific impact on caribou is not the basis for the Review Board's recommendation to reject this development, the Board notes that project-specific impacts on caribou are prevented by the rejection of the development. Were this development not to be rejected, mitigation measures would be required for this impact. Because of the rejection recommended by the Review Board, no measures or suggestions are identified here.

8.3.2 CUMULATIVE IMPACTS ON CARIBOU

Board Expectations and Considerations on Cumulative Impact Assessment

The Review Board considers cumulative effects assessment to be an important aspect of Environmental Assessment. Section 117(2)(a) of the MVRMA specifies that every environmental assessment “shall include a consideration of... any cumulative impact that is likely to result from the development in combination with other developments”. The Review Board explains the importance of conducting good cumulative effects in the Review Board’s 2004 *Environmental Impact Assessment Guidelines*, (Appendix H) as follows:

People in a given community would likely care more about the overall effects of development on a caribou herd than they would about the impact of any particular development on a caribou. For these reasons, the Board will pay attention to the cumulative effects of a development and other human activities in deciding whether or under what conditions to approve the development. To evaluate the contribution of a development to a larger impact, it is necessary to take a big picture view. Cumulative effects assessment is the way that this is done in EIA.

The Guidelines also state:

The cumulative effects assessment should include all other human activities that may substantially affect the valued components... These should include past, present and reasonably foreseeable development, as long as they have the potential to affect the same components as the proposed development.

Findings on the Developer’s Cumulative Assessment Submission

Much of the information presented by the Developer on potential cumulative impacts on caribou is in the post-hearing submission entitled *Report on Qualitative Assessment of the Cumulative Effect from Ur Energy’s Exploration Program on the Beverly Caribou Herd*. The document concluded that the cumulative impacts of the proposed development on the Beverly caribou herd will be negligible. In the environmental assessment process, the onus is on the developer to establish their case. The Review Board notes the following regarding the developer’s cumulative effects assessment:

- 1) The developer’s submission did not consider human activities associated with mineral claim blocks in an area completely claimed in a recent staking rush. However, the Canada Mining Regulations requires by law that certain activities occur on mineral claims;

- 2) The submission did not consider the impact of the proposed development in combination with all other potentially relevant human activities in the range of the Beverly herd, including claim staking, aerial surveys, diamond drilling, trenching, bulk sampling, the Taltson hydro power line, Gahcho Kue Diamond Mine, Saskatchewan uranium mines, other industrial development in Saskatchewan, traditional harvest, commercial harvest, tourism, and air traffic associated with most of these activities;
- 3) The developer's cumulative effects assessment considered a time span limited to the duration of the development, but not the duration of potential impacts, which is necessary to predict how impacts will cumulatively overlap;
- 4) No reasonably foreseeable future developments were included in the assessment, which contained only an incomplete description of *current* permits in its consideration of "future human-related land use permits";
- 5) The developer's quantitative analysis of the portion of Beverly caribou range that is affected by human activities focused only on the *amount* of disturbance without any consideration biogeography-- that some areas (such as calving grounds or migration bottlenecks) are of greater importance than others, and
- 6) Comparison of the development's impacts with natural phenomena known to pose major challenges to caribou survival, such as weather and fire, is irrelevant to cumulative effects assessment because it does not deal with additive effects of human activities. Impacts from human activities and survival challenges from natural phenomena will be experienced by caribou additively.

In light of these shortcomings, the Review Board finds that the developer has not adequately supported its conclusions that the development will have negligible impacts on caribou.

Consideration of Information Gaps and Cumulative Effects Submissions of Other Parties

Additional evidence concerning cumulative effects of the proposed development on caribou at a landscape level was brought forward by the Caribou Management Board, the GNWT, the Treaty Eight Tribal Corporation, DKFN, the Athabasca Denesuline, WWF and the LKDFN. This concern is not just about the effects of this development in isolation on the land beneath its physical footprint, but also for what will happen to the larger landscape as a result of the proposed development in combination with all other human activities. This is a concern about cumulative effects.

The Board recognizes that that caribou are of key importance to aboriginal culture, tradition and identity, as many parties reinforced. Cultural and social impacts, including those arising from effects on caribou, have been addressed by the Board in this *Report of Environmental Assessment* in section 7.3.1.

The Review Board notes that there are many other past and present human activities in the area, and that some future developments can be reasonably foreseen. Its reasons for reaching these conclusions are described above in section 7.3.1 of this Report of Environmental Assessment.

The Review Board has considered the evidence it heard from the LKDFN the GNWT, the Treaty Eight Tribal Corporation, and the Caribou Management Board that there are several unknowns that are important for developing an accurate picture of regional cumulative effects arising from this development in combination with all other human activities in the area. Parties raised concerns about the difficulty of making accurate cumulative impact predictions without adequate information, including information on the following:

- the status of the caribou herds;
- the health of the caribou herds;
- population size and trends;
- the potential for future activity in that area;
- how drilling activities or mining activities affect caribou in the long-term;
- current annual harvest compares with sustainable harvest levels;
- how caribou are already affected by disturbance or contaminants from past mineral development have already affected caribou;
- how caribou are already affected the loss of winter habitat in Saskatchewan and Southern Northwest Territories due to forest fires;
- how the demand for Beverly and Ahiak caribou will increase because of 1) growing communities on the caribou ranges, 2) greater access to the winter range for hunters from the south and 3) reduced availability of Bathurst caribou; and,
- how all these environmental influences interact.

The Review Board has considered these information inadequacies, and recognizes that, in keeping with the precautionary approach, the absence of full scientific certainty is not a reason to avoid making decisions to safeguard the environment or people where there is a risk of serious or irreversible harm. In this case, there is, in the view of the Review Board, an absence of full scientific certainty. The Review Board has heard from many parties concerns about serious harm to the Beverly caribou herd, and the developer has not provided adequate evidence to counter these arguments. In the view of the Review Board the precautionary principle is an approach to sound environmental management that is applicable to the case before it.

Findings on Cumulative Impacts on Caribou

The Review Board accepts the expert views of the GNWT and the Caribou Management Board, as well as the statements by the LKDFN, that even with the mitigation measures proposed by the developer, the development as proposed is likely to disturb caribou, and that this disturbance carries with it energetic costs that have the potential to affect calf survival. Bearing in mind the precautionary approach, the Review Board accepts the evidence of the GNWT and Caribou Management Board that the Beverly caribou herd is likely in decline, and that calf survival may be particularly significant to population trends when herd numbers are low.

The Review Board has carefully considered the information gaps, the importance of caribou as a valued component, deficiencies in the developer's predictions, views of traditional knowledge holders, expert evidence, and the precautionary approach.

The Review Board has decided to recommend rejection of this development due to potential cultural impacts (see above in section 7.3). The Review Board notes that this prevents any potential contribution of the proposed development to cumulative impacts on caribou. The Review Board further notes that it has heard extensive evidence of concern regarding the potential for other developments, including reasonably foreseeable developments, to cause cumulative impacts on the Beverly caribou herd. The Review Board is of the view that a regional assessment of cumulative effects on caribou, and corresponding planning and management of the area, could help mitigate cumulative impacts on the Beverly caribou herd in the future.

Suggestion 3:

A regional Caribou Cumulative Effects Study should be conducted on the status and sustainability of the Beverly caribou herd. It would be helpful if this study examined:

- a) the state of the herd, its range and population trends;**
- b) all human activities affecting the herd (including past, present and reasonably foreseeable developments);**
- c) the predicted cumulative effects of those activities; and,**
- d) actions to manage the predicted impacts.**

9 Conclusions

Through consideration of the evidence in light of the requirements of the MVRMA and the practice of sound environmental management, the Review Board has reached several conclusions regarding the proposed development by Ur Energy.

The Review Board agrees with the people of Łutsël K'e and other aboriginal parties that the potential for industrial development of the area is not compatible with the aboriginal values of this cultural landscape. The Review Board concludes that the impacts of the proposed development in combination with the combined impacts of all other past, present and reasonably foreseeable human activities in the area are likely to have a significant adverse cultural impact on the aboriginal peoples who value the area. This impact is so significant that the development cannot be justified. The Review Board therefore recommends that the project be rejected.

Other conclusions of the Review Board are as follows:

- Although the Review Board recommends rejection on the basis of cultural reasons, the Review Board also notes that this rejection will reduce the social impacts on aboriginal peoples, as well as preventing predicted impacts on ecotourism operators and their clients.
- To mitigate cumulative impacts to the cultural landscape from future activities, the Review Board suggests that an Interim Land Use Plan be developed and implemented as soon as possible, in keeping with the cultural values of the area. This exercise should be completed as soon as possible, and provide management prescriptions for the future development of the Upper Thelon basin.
- To help reduce the apparent conflict between the duty to consult and the free-entry system of the Canada Mining Regulations (see section 7.3.1), the Review Board suggests that the Government of Canada adapt and apply the prospecting permit process to areas in the Akaitcho Territory, to ensure opportunities for consultation with aboriginal users of the area before further subsurface interests are granted.
- Regarding caribou, the Review Board determines that the rejection of this development will prevent any project-specific impact of the proposed development on caribou and any potential contribution from the proposed development to cumulative impacts on caribou. To mitigate cumulative impacts on the Beverly caribou herd in the future, the Review Board suggests a regional assessment of cumulative effects on caribou, as well as corresponding planning and management of the area (see section 8.3.2).

Appendix A: Recommendation and Suggestions

Recommendation:

In the opinion of the Board, informed by the evidence on the record, it is likely that this development, in combination with the cumulative effects of other human activities in the Upper Thelon basin, will cause adverse cultural impacts of a cumulative nature that are so significant that the development cannot be justified. The Review Board therefore recommends that the project be rejected without an Environmental Impact Review, as per s128(1)(d) of the *MVRMA*.

Suggestion 1:

An Interim Land Use Plan should be developed and implemented incorporating the cultural values of the area. This exercise should be completed as soon as possible, and provide management prescriptions for the future development of the Upper Thelon basin.

Suggestion 2:

To reduce the potential for conflict between the duty to consult when aboriginal rights are infringed by mineral exploration and development and the free-entry system set out in the *Canada Mining Regulations*, the Government of Canada should adapt and apply the prospecting permit process to areas in the Akaitcho Territory, particularly in the Thelon Basin, in order to provide notice and ensure opportunities for consultation with aboriginal users of that area, before subsurface interests are granted.

Suggestion 3:

A regional Caribou Cumulative Effects Study should be conducted on the status and sustainability of the Beverly caribou herd. It would be helpful if this study examined:

- a) the state of the herd, its range and population trends;
- b) all human activities affecting the herd (including past, present and reasonably foreseeable developments);
- c) the predicted cumulative effects of those activities; and,
- d) actions to manage the predicted impacts.

Appendix B: Public Registry Index

DocName	Description	Originator	PR#
Areva letter	Letter from Areva Resources Canada on operations of uranium mining in Saskatchewan in response to presentations made at the public hearing in Łutsël K'e January 16-17, 2007	Areva	0
Developer Letter February 07 Submission to MVEIRB	Post hearing submission by the developer responding to various questions raised during the January 16/17, 2007 public hearing, including a qualitative cumulative effects assessment.	Developer	0
UR Energy LUP Application	The developer's application to the MVLWB. This document contains a description of the environment, as well as the developer's analysis of potential environmental impacts.	Developer	1
Referral and screening report	The MVLWB's report of preliminary screening and referral to environmental assessment letter.	MVLWB	2
Company notification	Letter to notify Ur Energy of the environmental assessment	MVEIRB	3
UR Energy Location	Overview map showing approximate location of the proposed development	MVEIRB	4
Notification - ad	NewsNorth advertising of EA start up.	MVEIRB	5
General notification	Letter from MVEIRB notifying potentially interested organizations and individuals of the EA start up.	MVEIRB	6
Initial distribution list	Organizations and individuals who received the general notification of the EA start up.	MVEIRB	7
Draft workplan EA0607-003	Draft work plan issued September 2006. Describes the scope of the assessment and the proposed EA process.	MVEIRB	8
WWF EA0506-003	Submission from World Wildlife Fund to previous (cancelled) assessment (EA0605-003) of the proposed development.	WWF	9
Thelon Game Sanctuary Management Plan	Management plan for the Thelon Game Sanctuary transferred from the record for EA0506-003 a previous (cancelled) assessment of the proposed development.	MVEIRB	10
Thelon A River Sanctuary - place holder for book (EA0506-003)	This is a place holder for a book submitted to the previous (cancelled) assessment EA0506-003 of the proposed development.	David Pelly	11
Referral and screening report MV2005C0007	Original preliminary screening report and referral to EA of the proposed development. The resulting EA0506-003 was cancelled when the developer withdrew its application.	MVLWB	12

Plain language uranium exploration summary (EA0506-003)	Submission by developer to previous (cancelled) assessment EA0506-003 of the proposed development. Summary description of uranium exploration.	Developer	13
LUP Application MV2005C0007	Original application for the proposed development that resulted in a previous (cancelled) assessment EA0506-003.	MVLWB	14
Joan Pelly EA0506-003	Submission from Ms Joan Pelly to previous (cancelled) assessment EA0506-003 of the proposed development.	Joan Pelly	15
David Pelly EA0506-003	Submission from Mr David Pelly to previous (cancelled) assessment EA0506-003 of the proposed development.	David Pelly	16
Canoe Arctic EA0506-003	Submission from Canoe Arctic to previous (cancelled) assessment EA0506-003 of the proposed development.	Canoe Arctic	17
Treaty 8 submission EA0506-003	Submission to previous (cancelled) assessment EA0506-003 of the proposed assessment for the Akaitcho Treaty 8 Tribal Corporation.	Akaitcho Treaty 8	18
WWF screening submission	WWF submission to preliminary screening.	WWF	19
Workplan comments Golder (developer)	Comments on the draft work plan for the assessment from Golder Associates who represents the developer.	Developer	20
Draft work plan comments Łutsël K'e	Comments on the draft work plan for the assessment from Łutsël K'e Wildlife and Environment Committee.	Łutsël K'e	21
GNWT Regulatory Response Aug 18 06	Comments by GNWT to MVLWB's preliminary screening process. The GNWT submitted these as part of their comments on the work plan for this assessment.	GNWT	22
GNWT Comments on Draft Work Plan Oct 5 06	Comments on the draft work plan for the assessment from the GNWT.	GNWT	23
Draft work plan comments BQCMB	Comments on the draft work plan for the assessment from the BQCMB.	BQCMB	24
BQCMB screening submission	BQCMB submission to preliminary screening. Submitted as part of the BQCMB's comments on the draft work plan for this assessment.	BQCMB	25
BQCMB screening attachment	Attachment to BQCMB submission to preliminary screening. Submitted as part of the BQCMB's comments on the draft work plan for this assessment.	BQCMB	26
Work_plan_EA0607-003	The work plan for EA0607-003 Ur Energy environmental assessment. Defines the scope of the assessment and outlines the assessment process including a schedule.	MVEIRB	27
INAC work plan comments	Comments on draft work plan from INAC.	INAC	28
IR invite letter	Letter inviting parties to EA to submit information requests.	MVEIRB	29
IR_template	Template for information request submissions.	MVEIRB	30

John Groves EA0506-003 submission	Submission to previous (cancelled) assessment EA0506-003 of the proposed assessment by Mr. John Groves.	John Groves	31
Party status notification October 06	Letter from MVEIRB announcing granting of party status to organizations that applied prior to October 21, 2006.	MVEIRB	32
BQCMB IR for Ur-Energy EA_1Nov06	Information Request submission from Beverly and Qamanirjuag Caribou Management Board.	BQCMB	33
Env Canada IR submission	Information Request submissions from Environment Canada.	Environment Canada	34
GNWT IR submission	Information Request submissions from GNWT.	GNWT	35
T8TC IRs for URNRG EA 2006	Information request submissions from NWT Treaty 8 Tribal Corporation.	Treaty 8 Corporation	36
LKDFN Information Requests-Nov06	Information request submissions from Łutsël K'e Dene First Nation.	LKDFN	37
IR_submissions_reasons_for_decisions	The MVEIRB's review of IR submissions how submissions were incorporated into IRs issued and reasons for not issuing certain IR submissions.	MVEIRB	38
Information_requests	Information requests issued based on submissions from parties and the Review Board's own information needs.	MVEIRB	39
IR_distribution_letter	Cover letter for information requests and IR submission review documents. Also includes timeline for IR responses	MVEIRB	40
INAC letter re IR submissions	Letter stating that INAC is not submitting information requests.	INAC	41
Ur-EnergyMtgMinutes-June7-06	Minutes of meeting between Łutsël K'e First Nation and Ur Energy June 7, 2006. The meeting was public. Notes provided by LKDFN.	LKDFN	42
<i>Watching the land</i> report	Watching the Land: Cumulative Effects Assessment in the Denesohne Territory. Report from Łutsël K'e Dene First Nation to NWT CEAM Steering Committee and CARC, August 2001.	MVEIRB	43
PHC_invitation_letter	Letter inviting parties to pre-hearing conference December 13, 2006.	MVEIRB	44
PHC_Agenda	Tentative agenda for pre-hearing conference December 13, 2006.	MVEIRB	45
NSMA_party_status_notification	Notification of party status for North Slave Metis Alliance.	MVEIRB	46
Akaitcho letter to INAC re consultation Ur Energy	Letter from NWT Treaty 8 Tribal Corporation to INAC regarding crown consultation in connection with the proposed Ur Energy mineral exploration development.	Treaty 8 Corporation	47
Łutsël K'e - Parks Canada MOU	Memorandum of Understanding between the Łutsël K'e Dene First Nation and the Parks Canada Agency on exploring the feasibility of establishing a National Park at the East Arm of Great Slave Lake.	LKDFN	48
IR0607-003-11 Environment Canada Response	Environment Canada's response to IR0607-003-11 in regards to noise impacts. IR originally directed to GNWT.	Environment Canada	49

Pre-Hearing Conference Reminder	Reminder notice for pre-hearing conference, includes agenda and development-caribou timelines graphic as attachments.	MVEIRB	50
Cover letter GNWT IR responses	Cover letter for information request responses from GNWT.	GNWT	51
IR0607-003-1 GNWT Response	Response to information request IR0607-003-1 from the GNWT.	GNWT	52
IR0607-003-3 GNWT Response	Response to information request IR0607-003-3 from the GNWT.	GNWT	53
IR0607-003-11 GNWT Response	Response to information request IR0607-003-11 from the GNWT.	GNWT	54
IR0607-003-13 GNWT Response	Response to information request IR0607-003-13 from the GNWT.	GNWT	55
Letter_announcing_two_day_hearing	Letter to all parties announcing change to hearing schedule from one day to two days.	MVEIRB	56
IR0607-003-4 WWF Response (Special Values of Project Area)	Response from World Wildlife Fund to IR0607-003-4 on special values of the project area.	WWF	57
LKDFN Response to IR's-Dec06	Response to IR0607-003-4 regarding special values of project area from the Łutsël K'e Dene First Nation.	LKDFN	58
IR0607-003-2 INAC Response	INAC's response to IR0506-003-2 on industrial developments and cumulative effects in the Thelon area. Map not included.	INAC	59
Athabaska Denesuline maps	Maps submitted by the Athabasca Denesuline as part of their request for party status.	Denesuline	60
Athabaska Denesuline submission to EA0506-003	Submission to previous EA of this project (EA0506-003) by Athabasca Denesuline. This submission was transferred after the scoping phase of the EA concluded.	Denesuline	61
Draft Hearing Agenda	Draft agenda for the community hearing January 16/17, 2007 in Łutsël K'e .	MVEIRB	62
Denesuline request for party status	Athabasca Denesuline have written requesting party status for the Ur Energy EA. They also express concern they have not been informed about the EA.	Denesuline	63
Denesuline letter response	The Review Board's response to the Athabasca Denesuline's request for party status and and explanation of steps taken to involve them in this EA	MVEIRB	64
Clarification-LKDFN Response to IR's-Jan07	A letter clarifying a statement in the Łutsël K'e Dene First Nation's IR response in regards to the project location being outside a proposed national park.	Monica Krieger, WLED-Lutsel Ke Dene First Nation	65
Jim Storey submission	Mr. Jim Storey of The Great Canadian Adventure Company expresses concern over allowing any industrial development in the Thelon area and his support for efforts to protect the area.	Jim Storey	66
Developer IR responses	The developer's response to information requests IR0607-003-5,6,7,8,9,10,12.	developer	67

WWF presentation	Presentation by World Wildlife Fund at the community hearing in Łutsël K'e January 16 and 17, 2007.	WWF	68
1169654499_Baker Lake HTO presentation	Written submission from the Baker Lake HTO to the Review Board.	Baker Lake HTO	69
Deninu Kue First Nation UR ENERGY Presentation	Presentation by Deninu Kue First Nation at the community hearing in Łutsël K'e January 16 and 17, 2007.	DKFN	70
INAC presentation	Presentation by INAC at the community hearing in Łutsël K'e January 16 and 17, 2007.	INAC	71
Lutsel Ke Dene First Nation presentation	Presentation by Lutsel Ke Dene First Nation at the community hearing in Łutsël K'e January 16 and 17, 2007.	LKDFN	72
Treaty 8 presentation	Presentation by Treaty 8 at the community hearing in Łutsël K'e January 16 and 17, 2007.	T8TC-Akaitcho	73
1169656124_Ur Energy presentation	Presentation by Ur Energy at the community hearing in Łutsël K'e January 16 and 17, 2007.	Ur Energy	74
1169661649_BQCMB_Ur-Energy hearing_PartA&B	Presentation by BQCMB at the community hearing in Łutsël K'e January 16 and 17, 2007.	BQCMB	75
1169661649_BQCMB_Ur-Energy hearing_PartA&B	Presentation by BQCMB at the community hearing in Łutsël K'e January 16 and 17, 2007.	BQCMB	75
1169659256_Bev spring conc areas	Map-spring Range of Beverly Caribou-Concentration areas and Primary Movement Corridors between 1955-1993	BQCMB	76
1169658989_Bev late summer	Map-Late Summer Range of Beverly Caribou between 1957 and 1981	BQCMB	77
1169658774_Bev fall migration-rut	Map-Range used during Fall Migration and Rut by Beverly Caribou: between 1957 & 1983	BQCMB	78
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1169663199_monthly_1 ocs_ur_area_ah+bv	Map-Collared Cows from the Ahiak and Beverly Caribou Herds (1995-2006)	BQCMB	81
1169661499_BQ water crossings_NWT	Map-Water and Ice Crossings used by Beverly Caribou in the Western Northwest Territories	BQCMB	82
1169660285_BQ total range & calving	Map-The range-wide context: Beverly and Qamanirjuaq Caribou Range: (1940-1995)	BQCMB	83
1169662901_Thelon_Basin	Map-Thelon Basin-Potential Uranium Deposits	BQCMB	84
1169662812_South Thelon claims	Map-South Thelon Basin Mineral Claims.	BQCMB	85
1169661860_Mineral rights on Bev&Qam calving grounds_Sep06	Map- Companies with Mineral Rights in the Calving Grounds of the Beverly and Qamanirjuaq Caribou Herd -Sept 2006	BQCMB	86
1169660645_BQCMB submission_info for cumefacts-caribou assessment_14Jan	Additional information submitted by BQCMB to the Review Board for cumulative effects and caribou	BQCMB	87

1169663543_public letters 1 to 33	Letters of public concern	Various	88
1169662573_Map___C arte_A	Map-A: Thaydene Nene	T8TC-Akaitcho	89
Barren Lands Sacred Lives	Equinox Magazine Article:October 1993	WWF	91
Canoe Arctic Inc. Presentation	Presentation by Canoe Arctic Inc. at the community hearing in Łutsël K'e January 16 and 17, 2007.	Canoe Arctic, Alex Hall	92
NWT Plain Talk: Akaitcho Interim Land Withdrawals	Newsletter published by INAC- winter 2006-" Akaitcho Interim Land withdrawals: making space to negotiate"	WWF	93
Protecting the B & Q Caribou	Bulletin from BQCMB: "Protecting Beverly and Qamanirjuaq Caribou for All time"	BQCMB	94
Letter from public (2)	Public opinions on development in the Thelon area.	Various	95
EA0607-003 UrEnergy additional IR	Additional information requests from the MVEIRB to INAC regarding a proposed cumulative effects study in the Thelon basin and the process for establishing mineral claims.	MVEIRB	96
BQCMB-GNWT recommendations	Recommendations from the BQCMB and the GNWT after the public hearing in response to commitments made by the developer to replace recommendations made earlier.	BQCMB	97
DKFN Exploration Agreements	In response to a question posed at the public hearing the DNKFN submitted this description of Exploration Agreements between developers and Akaitcho First Nations.	DKFN	98
Environment Canada recommendations summer work	Recommendations by Environment Canada in the event that the proposed development will be carried out during summer months.	Environment Canada	99
Areva letter	Letter from John Tosney, Areva Resources Canada Inc.	Areva Inc.	100
Developer Letter Feb.07	Letter from Ur Energy- Feb 07 submission	Ur Energy	101
INAC post- hearing responses	IR responses from INAC submitted after the hearing	INAC	102
Bayswater Uranium Crab Lake Application	Land Use Permit Application # MV2007C0009, for uranium exploration in the Upper Thelon basin	MVLWB	103
Bayswater Uranium El Lake Application	Land Use Permit Application # MV2007C0010, for uranium exploration in the Upper Thelon basin	MVLWB	104