# Indigenous Knowledge in Impact Assessment: The Inuvialuit Example

**Title of Paper:** ID1137 Indigenous Knowledge in Impact Assessment: The Inuvialuit Example **Session:** ID353 Integrating Indigenous rights and knowledges into impact assessment **Authors<sup>1</sup>:** Bengt Pettersson, Gerald Inglangasuk, David Livingstone, Shannon O'Hara, Ray Ruben Sr., Todd Slack, Ron Wallace, and Michel Lindsay.

### Abstract

In 1984, the Inuvialuit people of Canada's Western Arctic region signed a land claim agreement with the Government of Canada, establishing an innovative system of resource co-management.

The co-management system includes both governments and Inuvialuit, and is designed to ensure that Inuvialuit Traditional Knowledge ("ITK") and values are incorporated in all stages of resource management decision-making. The environmental impact assessment process is led by two bodies:

- i) the Environmental Impact Screening Committee ("EISC"), which conducts initial project screenings; and
- ii) the Environmental Impact Review Board ("EIRB"), which reviews projects referred from the EISC that are considered to cause significant environmental effects or to have the potential to interfere with Inuvialuit harvesting activities.

Inuvialuit appointees sit on both bodies, and Inuvialuit communities and organizations are consulted throughout the screening and review processes. Projects reviewed in recent years range from research and tourism proposals (including cruise ship traffic) to major oil and gas and infrastructure developments.

This paper describes these processes with a focus on incorporation of ITK, and describes the application of ITK in a case study of a new highway.

A short video about the highway is available at: <a href="https://www.inf.gov.nt.ca/en/ITH">https://www.inf.gov.nt.ca/en/ITH</a>

**Key Words:** Inuvialuit, Indigenous knowledge, Inuvialuit Traditional Knowledge, impact assessment, Canada, co-management.

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# 1 Introduction

# 1.1 Inuvialuit Final Agreement

The Inuvialuit Final Agreement<sup>1</sup> ("IFA") was signed on June 5, 1984 by the Inuvialuit and Government of Canada. It was the first comprehensive land claim agreement signed north of the 60th parallel and only the second in Canada at that time<sup>2</sup>. It was made into law through the *Western Arctic (Inuvialuit) Claims Settlement Act*<sup>3</sup>. The IFA enabled the Inuvialuit to be meaningful partners in decision-making processes to manage the environment and wildlife within the Inuvialuit Settlement Region ("ISR").

The goals and guiding principles of the IFA are to:

- a) preserve Inuvialuit cultural identity and value;
- b) enable Inuvialuit to be equal and meaningful participants in the northern and national economy and society; and
- c) protect and preserve the Arctic wildlife, environment and biological productivity.

# 1.2 Inuvialuit Settlement Region

The IFA created the ISR, located in the Northwest Territories except for the Yukon North Slope, which is located in the Yukon Territory (Figure 1). Land uses transcend political boundaries and are protected through management processes, described in Yukon and IFA-based claims. The ISR encompasses some 435,000 km<sup>2</sup>, of which about 90,650 km<sup>2</sup> is land with the remainder being marine areas. It has a total population of about 5,000 distributed in six communities: Aklavik, Inuvik, Tuktoyaktuk, Paulatuk, Sachs Harbour and Ulukhaktok. The area includes geographic areas such as the Mackenzie Delta, the western Arctic islands and the Yukon North Slope. The latter is an area afforded special protections. The ISR has a cold climate with extensive permafrost and is characterized as a fragile environment.



Figure 1: Inuvialuit Settlement Region, NWT

# 2 Inuvialuit Structure and Organizations

The IFA enabled a system of "co-management" by federal and territorial governments and the Inuvialuit. This is considered a world-class example of integrated resource management<sup>4</sup>. At the foundation of this process are five co-management boards (Figure 2).

This paper focuses on the roles of the EISC and EIRB, and how ITK is incorporated their respective processes. The composition of each body guarantees the inclusion of Inuvialuit values, ITK, and cultural sensitivity in wildlife and environmental management.

#### Figure 2: The IFA Co-management System



## 2.1 Environmental Impact Screening and Review Process

The Environmental Impact Screening and Review Process plays a vital role in achieving the aims of the IFA using a two-stage assessment process delivered by the EISC and the EIRB. (Figure 3). The EISC and EIRB are comprised of an equal number of Inuvialuit and government appointees. The EISC and the EIRB are established as non-partisan organizations with each member expected to bring their personal expertise to the process, and not as a representative of the appointing body.

The first step in the process requires the EISC to determine whether a development could have a significant negative environmental impact or affect wildlife harvesting. The EISC conducts a "pre-screening" of all projects in the ISR, after which it may conduct full screenings of those that are deemed a "Development".

If the EISC finds negative impacts that cannot be mitigated, the project may be referred to the EIRB for review. This review must consider whether a project should proceed, under what terms and conditions, and whether wildlife compensation, mitigation and remedial measures

are required. Projects cannot receive regulatory authorizations until the EISC or EIRB have completed their duties.

Approximately 80 project proposals are pre-screened annually, and about 20% of these projects go through full screening. In comparison, a review by the EIRB is rare; since 1989, the EIRB has completed reviews of seven projects in the ISR.



#### Figure 3: Environmental Impact Screening and Review Process

## 3 The Inuvialuit People

#### 3.1 History and Lifestyle

Inuvialuit ("real people" in the Inuvialuktun language) are the Indigenous people of the western Canadian Arctic. They share similar lifestyles, cultures, and languages with Inuit in Arctic Canada and Greenland, with the Inupiat of northern Alaska and the Yupik of Alaska and the Russian Far East.

Inuvialuit participate fully in modern Canadian society, yet retain strong ties to the land. Travelling and camping on the land and harvesting wildlife (country food) are part of traditional life. Environmental knowledge and respect for the land and its resources continue to be important elements of modern Inuvialuit culture.

### 3.2 Inuvialuit Traditional Knowledge

ITK includes knowledge in the following areas:

- Camp sites for seasonal gatherings and celebrations, hunting, fish, whaling, berry picking, egg gathering and other traditional activities
- Heritage sites traditional sites of cultural importance
- Wildlife (mammals and birds including caribou, bears, geese and ducks), their locations and migration patterns
- Fishing and whaling sites and migration routes of marine species including beluga whales, Arctic char, and others.

## 3.3 Incorporation of Inuvialuit Traditional Knowledge into Screening and Review

ITK is incorporated into the EISC and EIRB processes in a number of ways:

- Individual Inuvialuit members may provide oral comments to their respective Hunters and Trappers Committees, Community Corporations, and Elders Committees in the six communities. These organizations forward written information to the EISC and EIRB.
- Information may be provided verbally to the Inuvialuit members of the EISC and EIRB. The Inuvialuit members provide this information and their own observations during the screening and review processes.
- Other IFA co-management bodies, including the two Wildlife Management Advisory Councils and the Fisheries Joint Management Committee ("FJMC") also provide comments and feedback, including ITK.
- ITK available in Community Conservation Plans, marine protection plans, wildlife management and conservation plans, and similar documents may form part of the information base for the screening and review processes.
- Proponents may hold workshops to gather ITK for a particular project.

# 4 Case Study: the Inuvik-Tuktoyaktuk Highway

## 4.1 Background

The all-season, 138 km "Inuvik to Tuktoyaktuk Highway" (figure 4) was completed in November, 2017. Previously, Tuktoyaktuk was accessible only by air and water in summer and by air and ice road in winter. The highway was the first in Canada to reach the Arctic Ocean, thereby connecting Canada "from sea to sea to sea". This was a joint project by the Hamlet of Tuktoyaktuk, the Town of Inuvik, and the Government of Northwest Territories, Department of Transportation (jointly named the "Proponent"). A Panel of the EIRB reviewed the project and issued recommendations that were considered by the Government of Canada as the final decision-maker.

Figure 4: the Inuvik-Tuktoyaktuk Highway



### 4.2 Impact Assessment Process for the Inuvik-Tuktoyaktuk Highway

#### Important milestones for the project:

- February 2010: the Proponent applied to the EISC for screening.
- April 2010: the EISC screened the project and determined that the development could have a significant negative impact on the environment and on Inuvialuit wildlife harvesting, and referred the project to the EIRB.
- 2010-2012: A Panel of the EIRB reviewed the project in accordance with s.11 of the IFA.
- January 25, 2013: the EIRB Panel issued its Final Report.

## 4.3 Inuvialuit Traditional Knowledge and Outcome for this Project

In its review, the EIRB committed to ITK being secured and given weight equal to other sources of information; and instructed the Proponent to consider ITK in their EIA.

The Proponent commissioned project-specific ITK studies that consisted of i) a summary report of existing ITK in the study area; ii) workshops with ITK holders to gather information specific to the Project; and iii) a final report of the workshops.

Participants identified potential impacts on harvested resources and harvesting activities during construction and operation of the highway activities.<sup>5</sup> The Wildlife Management Advisory Council (NWT) identified potential negative effects on wildlife populations and harvesting as a result of increased access<sup>6</sup>, while the FJMC expressed concerns that improved access from the

highway would have significant impacts on fisheries, particularly the Husky Lakes<sup>7</sup>. The impact assessment approach used by the Proponent did not recognize post-construction impacts such as increased access.

Community participants at a Proponent-sponsored workshop in February 2012<sup>8</sup> emphasized:

- Fish are fragile and important. Fish meat is the main source of food. Along the road, and in the study area, people catch trout and many other species. Increased access from the highway could result in long-term impacts on fish populations due to overfishing.
- There should be studies and monitoring on some of the lakes and creeks to monitor fish post-construction.
- The use of culverts rather than bridges at stream crossings was not supported by some participants due to anticipated risk for seasonal water flow, silt build-up and clogging. Recommendations 29-31 of the Final Report reflects these concerns<sup>9</sup>.

Tuktoyaktuk community participants provided the following information on caribou<sup>10</sup>:

- There are more animals now because there is less activity in the area. If activity levels increase, caribou numbers may decrease again.
- More caribou than any other species could be killed by road traffic.
- There could be increased harvesting of caribou if the road is constructed as some persons may use the road to hunt from.

Recommendation 21 of the Final Report reflects these concerns<sup>11</sup>.

**Outcome of the assessment:** the EIRB Panel determined that while there were important economic benefits from the Project it would cause negative impacts on the environment, including impacts on habitat and important wildlife species. Effects from highway construction and aggregate extraction activities included impacts on the sensitive permafrost terrain crossed by the highway.

The Panel concluded that the project could proceed subject to the commitments made by the Proponent and the 51 measures recommended by the Panel to prevent or mitigate the Project's adverse environmental effects. For instance, the Panel recommended an adaptive management approach, and that an Independent Environmental Monitoring and Oversight Committee ("IEMOC") be established to oversee the project. The Government of Canada accepted the majority of the 51 measures but rejected the recommendation to establish the IEMOC.

## 4.4 Lessons Learned from this Case Study

The Proponent rejected the recommended use of bridges rather than culverts because of costs. However, since the road was opened, several culverts have already been replaced due to clogging resulting from silt and gravel accumulation, and shifting of the culverts, preventing fish to migrate through the culverts. These replacements have been subject to subsequent screening by the EISC<sup>12</sup>. Recognizing that government did not support the IEMOC, the FJMC, local Hunters and Trappers Committees, and Oceans North instead developed the Imaryuk (Husky Lakes) Monitoring Program to monitor effects, to protect and conserve local fisheries, related community uses, and cultural activities adjacent to the highway<sup>13</sup>.

# 5 Conclusions

The co-management system under the IFA provides for ITK to be considered in impact assessments and given weight equal to scientific and other information. The ITK is usually provided as oral information from individual Inuvialuit members to their representative organizations or as input at workshops. Along the way, this information becomes documented as written information and included in the impact assessment. Decisions made by the EISC and EIRB incorporate ITK as a means of ensuring that projects proceed in a manner that reflects Inuvialuit values.

# References

- <sup>1</sup> Inuvialuit Final Agreement, June 5, 1984
- <sup>2</sup> Inuvialuit Regional Corporation, Inuvialuit Final Agreement: <u>https://irc.inuvialuit.com/about-irc/inuvialuit-final-agreement</u>
- <sup>3</sup> Western Arctic (Inuvialuit) Claims Settlement Act, S.C. 1984, c. 24
- <sup>4</sup> The Co-management System, as established by the Inuvialuit Final Agreement: <u>https://www.jointsecretariat.ca/about-comanagement</u>
- <sup>5</sup> ITH TK-TLU Workshops Final Report, Appendix A, registry item 199-1.
- <sup>6</sup> Inuvik Technical Sessions Transcript, August 22, 2012, pages 209-212, registry item 235-1
- <sup>7</sup> FJMC Follow-up letter to EIRB, registry item 326-1
- <sup>8</sup> ITH TK-TLU Workshops Final Report, Appendix A, registry item 199-1
- <sup>9</sup> EIRB Final Report of the Panel for the Substituted Environmental Impact Review of the Hamlet of Tuktoyaktuk, Town of Inuvik and GNWT - Proposal to Construct the Inuvik to Tuktoyaktuk Highway, pp 105-106: <u>https://eirb.ca/wp-content/uploads/2015/06/353-1-Final-Panel-Report2.pdf</u>
- <sup>10</sup> ITH TK-TLU Workshops Final Report, Appendix A, registry item 199-1
- <sup>11</sup> EIRB Final Report of the Panel for the Substituted Environmental Impact Review of the Hamlet of Tuktoyaktuk, Town of Inuvik and GNWT - Proposal to Construct the Inuvik to Tuktoyaktuk Highway, pp 96-97: <u>https://eirb.ca/wp-content/uploads/2015/06/353-1-Final-Panel-Report2.pdf</u>

<sup>12</sup> EISC Registry: <u>http://www.screeningcommittee.ca/</u>

<sup>13</sup> Imaryuk (Husky Lakes) Monitoring Program: <u>https://oceansnorth.org/en/where-we-work/imaryuk/</u>