Adapting Project Descriptions for Climate Change

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Introduction

• We will describe the observations on Climate Change and the possible effects on the Cree and their environment
• Then we will outline the ESIA Review Process
• Establishing where projects can best consider both Climate Change concerns and the EISA process
The Cree of Northern Quebec have been an integral part of their environment since time immemorial.

The Cree rely on understanding the various seasonal cycles, and patterns, and the ability to anticipate and know where and when to carry out the traditional harvest.
Eeyou Istchee – 450,000 Km Square

Montreal

These are the boundaries for the JBNQA
Eeyou Istchee – Cree Family Trapline Map

Community Land Category Map as described in JBNQA
Findings based on TK - Traditional Knowledge

• The traditional hunting, trapping and harvesting practices of the Cree people are contingent on annual, seasonal, and natural cycles.

• In the north, there is extreme variation from season to season.

• Ice formation on rivers and lakes enables access to areas that are further inland. However, earlier break up of ice, and the later formation of ice cover, and inconsistent coverage has some loss of predictability.

• The wildlife migrate and move based on the conditions in their environment.
Climate Change - Cree Concerns

- Changing behaviour of wildlife, migration patterns and range
- Ice arrives later, is not as thick, and leaves earlier
- Extreme variation from season to season, and between the years less predictability
Precipitation Change Maps

These maps show that in Eeyou Istchee, precipitation will increase in the summer and in the winter.

- Darker blues indicate an increase in precipitation

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Temperature Change Maps

These maps show that temperatures will increase both in winter and summer, especially in the southern part of Eeyou Istchee.

- Darker blues indicate colder winter temperatures.
- Darker red and orange indicate warmer summer temperatures.

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Extreme Weather

• Increase in number of extreme weather events
• Elevated forest fires risk due to longer hotter summers
• Increased flooding due to variations in weather patterns and the release of precipitation on the land
• Erosion due to increased precipitation
• Wind throws
• Peak water levels in rivers and lakes due to heavier rains
• Rapid variation in temperature on a regular basis affecting ice, wind, weather patterns
In spring 2014, the Temiscamie river experienced a 100 year flood, that flooded cabins, washed out bridges and over flowed a float plane base carrying drums and fuel downstream.

Five years earlier in the same watershed there was a previous 100 year flood
Other Climate Change stresses on Traditional Practices and the Environment

Invasive species, new to the territory
• Moose ticks, entering southern part of territory
• Concern for Rabies, Lime disease,
• Insects infestations,
• Species adapting and changing to new habitat realities, (fish, skunks, racoons)
Concerns Regarding Insects

The Winter Tick

The Black Legged Tick

Source: MFFP
Army Worms -2012  Source: Mistissini
Background of ESIA in Northern Quebec.

In 1975 the Crees of Quebec, along with Canada, Quebec, the Inuit, and Hydro Quebec/SEBJ, signed *The James Bay and Northern Quebec Agreement* - JBNQA

The JBNQA introduced an Environmental Review Process in Section 22 that would govern ESIA in relation to development in the Cree Territory.
The major provisions of Section 22 establish:

1. A procedure whereby environmental and social laws and regulations and land use regulations may be adopted to minimize the negative impact of development in or affecting the Territory upon the Native people and the wildlife resources of the Territory (s. 22.2.2a);

2. An environmental and social impact assessment and review procedure (s.22.2.2b);

3. A special status and involvement for the Cree over and above those provided for the general public wherever necessary to protect the rights and guarantees of the Native people in other procedures (above and beyond that provided for the general public through consultation or representative mechanisms) (s.22.2.2c);

4. The right to develop the territory (s.22.2.2f).
Section 22 establishes the environmental and social protection regime for Cree people, societies, communities and economies with respect to developmental activity on the Territory.

Quebec’s Environmental Quality Act, chapter II, also embeds the JBNQA provisions.

- Section 24 establishes the hunting, fishing and trapping regime.
- Section 22 protects Cree hunting, fishing and trapping rights established in Section 24 (s.22.2.2d).
THE 5 STEPS OF THE ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT PROCESS
JBNQA, Section 22

STEP 1: Project Notice
- The proponent* sends a Project Notice (preliminary information) to the Administrator.*

STEP 2: Guidelines
- The Administrator sends Guidelines to the proponent, according to the Evaluating Committee (COMEV*') recommendations.

STEP 3: ESIA Underway
- The proponent prepares an Environmental and Social Impact Assessment (ESIA) study and sends it to the Administrator.

STEP 4: Review
- The Administrator forwards the ESIA study to the Review Committee (COMEX* and/or COFEX*'), who verify the conformity of the ESIA with the guidelines, analyze the ESIA, and make a recommendation to the Administrator on whether the project should proceed or not.

STEP 5: Decision
- The Administrator makes a decision according to the Review Committee recommendation (with terms and conditions).

Authorized
or
Unauthorized
Administrators Rendering Decisions

When the project is located on **CATEGORY I LAND**:
- *Cree Regional Administrator of the Environment*

When the project is of **PROVINCIAL** jurisdiction:
- *Deputy Minister of the Ministère du Développement durable, de l’Environnement et de la Lutte contre les changements climatiques*

When the project is of **FEDERAL** jurisdiction:
- *President of the Canadian Environmental Assessment Agency (CEAA)*

**There is also the Eeyou Marine Impact Review Board governing the Eeyou Marine Region.**
Adapting ESIA with Climate Change

• Within the ESIA process there are a number of areas that can be targeted for improving and adapting a response to the effects of Climate Change.

• Each of the Canadian and Quebec governments are implementing Climate Change programs and can influence on aspects guiding the consideration of projects.

• While there are many levers that can be used to modify projects to help mitigate the environmental impacts, effective modification comes at the beginning, when the projects are being planned.
Adapting ESIA with Climate Change

• The proponent should design the project from the outset in a way that will help mitigate the damages by extreme weather and climate change.

• Projects being proposed should consider the foreseeable climate change effects, and adapt accordingly, to reduce the risks of impacts of fire, floods, erosion, etc. and avoid exacerbating impacts to the environment where the projects are located.
• In order for the proponents to adapt and scale projects to meet future considerations, they need access to data, and to consult and involve those who have been collecting the data, including TK.

• Baseline data to determine water rates, flood plains, 100 year flood events, storms, wind, ice accumulation is essential to assist planning.

• Seeing the trend to warmer weather, and increases in precipitation, adapting project description for climate change trends will ensure that infrastructure such as future roads, dams, erosion abatement, will be resilient and avoid damages
Projects designed with a clearer understanding of what the impact of climate change will have on the environment, and the Cree, will have more flexible and resilient projects. This should be a standard component of future projects reviewed under the ESIA process.
Thank you!  Meegwetch!  Merci!
References/Sources

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- MFFP [http://mffp.gouv.qc.ca/](http://mffp.gouv.qc.ca/)
- Arctic Net [http://www.arcticnet.ulaval.ca/media/iris_reports.php](http://www.arcticnet.ulaval.ca/media/iris_reports.php)
- Ouranos [https://www.ouranos.ca/en/](https://www.ouranos.ca/en/)