



## REPORT SUMMARY

### **LITERATURE REVIEW - IDENTIFICATION OF THE ENVIRONMENTAL AND SOCIAL CONCERNS OF THE CREE**

**Contractor:** SNC-Lavalin – report submitted on August 29<sup>th</sup> 2014

#### **Context**

The JBACE commissioned the literature review as a preliminary initiative to obtain a clearer understanding of the Crees' environmental and social concerns per the JBACE's Strategic Plan 2013-2018. The initiative may assist the JBACE in identifying and proposing measures that may facilitate their consideration in the Section 22 regime.

SNC-Lavalin was selected, with instructions to report on Cree environmental and social concerns over the last 10 years available in the literature. Three criteria were used for the selection of documents:

- The documents had to be publicly-available;
- The documents had to include information that came directly from the Cree;
- The information on Cree concerns had to address environmental and social matters in the context of development projects carried out in the Territory.

The Cree concerns reported in the literature were then presented across six themes: 1. Environmental concerns; 2. Socioeconomic concerns; 3. Health and safety concerns; 4. Concerns related to land and resource use; 5. Concerns related to Cree involvement; and, 6. Other concerns. Each theme was also broken down across specific issues in order to further organize all of the concerns that were inventoried. This note summarizes the report submitted by SNC-Lavalin for discussion purposes. Note that I have integrated the 'Other concerns' in the five other themes for concision in this note.

#### **General overview of Cree concerns**

Cree environmental and social concerns have been 'framed' by their past experiences in dealing with the impacts of developments. But Cree concerns have evolved as they live through development projects, becoming more specific or arising and being qualified as they experience change. And so, while the empowerment of the Cree within the dominant society was a principal concern in 1975, the Cree are now particularly concerned about protecting the environment and wildlife, safeguarding their culture and society, and facilitating their increased involvement in development projects.

A healthy environment is a central concern for the Cree because of their close relationship with the land. The health and integrity of the land is the cornerstone of Cree governance, culture, identity, history, spirituality and way of life. Socioeconomic and environmental issues go hand in hand for the Cree. There is thus a cause-and-effect relationship between environmental damage and the social and health problems seen in Cree communities, for example.

The review outlines several major concerns relating to the protection (or degradation) of wildlife and wildlife habitats, of the forest, and of the landscape in light of projects and climate change. It underscores Cree health concerns that are inexorably linked to the health of their environment.

It also highlights the Cree's socioeconomic concerns which have multiplied in recent times. Here, the Crees want access to employment and assurances that the entire Cree population derives economic benefits, at the local and regional levels, from projects. The Cree want to be informed and participate in every stage of development projects to ensure that proponents fulfil their obligations regarding the environment, and as a means of collaboratively reaping local and regional benefits. Training, employment and business opportunities are now priorities for ensuring that Cree youth have a future.

However, the advent of development projects and the jobs they provide have influenced Cree community life, and have contributed to certain intra-community social tensions and inequalities. The development of the Territory has also modified the way that the Cree use the land, as well as how they interact with non-Aboriginals at project sites (e.g. workers) or on the land (e.g. hunters and tourists) in light of the increased access to the Territory. Indeed, the review also brings to light certain challenges that Crees and non-Crees have in working together.

Of particular note, the review mentions that project-related alterations to the landscape have had an influence on the transmission of Cree Traditional Knowledge to younger generations. Because Traditional knowledge is specific to a given area and because certain projects have irreversibly altered or destroyed certain traditionally-significant sites, the corresponding traditional knowledge becomes obsolete. On the other hand, and perhaps to avoid such situations, the Cree suggest that proponents for new projects make better use of traditional and local knowledge when planning their projects.

⇒ **See the summary table on the following pages for greater details on the Cree concerns. Note that SNC-Lavalin did not establish a hierarchy for the concerns expressed in the literature.**

#### **Avenues for reflection as suggested by SNC-Lavalin**

The Section 22 regime is no longer the only forum for the consideration of Cree concerns in the context of projects. Agreements between proponents and communities, and the implication of various local and regional authorities have an increasingly important role to play. However, within the context of Section 22 JBNQA, the following may prove helpful:

1. Clarify the linkages between the environmental and social protection regime and the assessment and review procedure of Section 22 to more clearly define how, and ensure that, Cree concerns are integrated in the decision-making process.
2. Review Schedule 3 of Section 22 to more clearly define the content of impact statements, including certain key Cree concerns that should be addressed therein, among other things.
3. Develop publicly-available sectoral 'directives' / guidelines for impact statements.
4. Define opportunities for consultation with the Cree before the preparation of impact statements, including exchanges on the impact statement 'directives.' And, setup permanent 'upstream' liaisons between the Section 22 assessment and review bodies and the Cree communities;
5. Establish a registry and tool to track all of the developments affecting the Territory;
6. Address the issue of 'social acceptability' in the specific context of projects in the Territory.

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Attached items: Summary table (7 pages)  
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Date: **March 13<sup>th</sup> 2015**

## Theme nº 1 – Environmental Concerns

Issue	Specific Cree Concerns
1. Land and environmental protection	<ul style="list-style-type: none"> <li>- The way proponents treat the environment.</li> <li>- Contamination of surface and groundwater, soil, plants and animals from petroleum, oil and chemical products.</li> <li>- Fear that any harm to the environment is irreversible.</li> <li>- Protection of traditional pursuits and culturally-significant areas by establishing protected areas.</li> <li>- Cree capacity to support tourism and potential conflicts between tourism and traditional pursuits.</li> </ul>
2. Cumulative impacts	<ul style="list-style-type: none"> <li>- Difficult to balance economic development and protection of the land in light of various types of development (e.g. hydro, mineral).</li> <li>- More projects heighten all of the concerns expressed.</li> </ul>
3. Climate change impacts	<ul style="list-style-type: none"> <li>- Affects travel (less snow and ice cover and weather is less predictable –snowmobiling, for example, is more hazardous).</li> <li>- Affects wildlife behaviour.</li> </ul>
4. Protection of air quality	<ul style="list-style-type: none"> <li>- Contamination from the dusts produced from the transportation of wood or ore, for example.</li> </ul>
5. Protection of water quality	<ul style="list-style-type: none"> <li>- Any projects that alter water flows, levels and courses (e.g. hydro) alter plant and animal habitats and affect travel safety.</li> <li>- Bank and shoreline exposure and erosion, landslides, and shoal / sandbar emergence.</li> <li>- Fear that projects will pollute water bodies and that the contamination might spread within and between watersheds, thus contaminating the resources they depend on. Certain specific activities, such as drilling in lakes, use of chemical products, or erection of structures in waterways such as diversions, dams, and so forth, can heighten this fear.</li> <li>- Fear that any harm to water resources is irreversible.</li> </ul>
6. Protection of flora and forests	<ul style="list-style-type: none"> <li>- Difficulty of achieving successful co-management with forest companies.</li> <li>- Opening up of the Territory, primarily via forest roads, may favour logging and potential overharvesting of wildlife.</li> <li>- Dusts at project sites may contaminate adjacent flora that are part of the Cree diet and culture (e.g. berries, medicinal plants).</li> <li>- Concern for invasive species and assertion that proponents must use native species in revegetation programs.</li> </ul>

## Theme nº 1 – Environmental Concerns

Issue	Specific Cree Concerns
7. Wildlife protection	<ul style="list-style-type: none"> <li>- Fear of projects having permanent negative impacts on wildlife resources, including:                             <ul style="list-style-type: none"> <li>a. Decreased quantity and quality of resources (e.g. habitat modification from forestry, filling of reservoirs for hydro).</li> <li>b. Decreased distribution of resources (e.g. wildlife avoidance due to project disturbance, change in migration corridors).</li> <li>c. Impact on the levels of harvesting guaranteed under Section 24.</li> <li>d. Decrease in the availability of traditional foods, changes in the character of harvested foods (e.g. change in taste), and adverse health effects in Crees that consume harvested wildlife.</li> <li>e. Increased hunting pressures on Cree traplines due to improved access to the territory, as a result of road development.</li> </ul> </li> <li>- Concern for wildlife capture and relocation techniques (namely, for Beaver).</li> <li>- Concern for the treatment of wildlife and for the hunting techniques used by non-Cree hunters.</li> </ul> <p>N.B. Many of the above concerns were cited in conjunction with the desire to preserve Moose, Beaver, and Woodland Caribou populations. Forestry-related habitat transformation, specifically from clear-cutting and road construction, was mentioned as a major factor influencing available Moose habitats and as the primary driver of the decline in Woodland Caribou numbers.</p>
8. Preservation of aquatic resources and their habitat	<ul style="list-style-type: none"> <li>- Fear of mercury contamination is tangible in relation to any new hydro project (legacy of mercury contamination is a major ‘scar’ on Cree collective memory). This is also the case for any new mining project, albeit not necessarily in regards to mercury.</li> <li>- Fear of any projects that may cause reduced flows in rivers, flooding.</li> <li>- Preservation of aquatic resources, particularly spawning grounds, is crucial and mirrors the concerns expressed for <a href="#">water quality</a>.</li> </ul>
9. Protection of avifauna and its habitat	<ul style="list-style-type: none"> <li>- Concern for the marked declines in populations of avifauna, primarily waterfowl.</li> <li>- Concern for the loss of feeding areas for geese (the Cree have noted that aquatic vegetation has given way to land vegetation, and that there has been a decrease in viable aquatic habitat, in some areas).</li> </ul> <p>N.B. The Cree attribute the changes affecting waterfowl to a set of factors that are not necessarily project-related (e.g. changing climate and related alterations to natural habitats and available food, altered hunting pressures and rotation of hunting sites).</p>
10. Protection of landscapes	<ul style="list-style-type: none"> <li>- Concern for the loss of cultural, traditional and recreational sites, as well as scenic landscapes due to projects.</li> <li>- Specific apprehension for unsightly open-pit mines, and particularly concerned about mine closure, site restoration and/or re-use.</li> <li>- Feeling that many impacts can be avoided at the project design stage (e.g. siting of installations can be changed to reduce a project’s footprint). The Cree are interested in novel means of sustainable resource use and in new technologies to mitigate impacts or that improve management methods.</li> </ul>

## Theme n° 2 – Socioeconomic Concerns

Issue	Specific Cree Concerns
1. Education and vocational training	<ul style="list-style-type: none"> <li>- The Cree welcome the training opportunities that stem from projects (promote employment).</li> <li>- Concerns are for ensuring that training is adequate, particularly for young Crees, and that the programs are tailored to Cree sociocultural realities (e.g. training should be in Cree communities instead of in training centres in southern Québec).</li> <li>- Training opportunities for forestry jobs and in protected areas are lacking (mining-related trainings occur frequently enough).</li> </ul>
2. Employment for Crees	<ul style="list-style-type: none"> <li>- Job opportunities are a major concern, but there is little info about future or upcoming job openings in the Cree communities.</li> <li>- Difficulty balancing jobs, family life, and traditional activities due to distance and full-time work schedule.</li> <li>- Crees generally occupy unskilled jobs with a low level of responsibility.</li> <li>- Hiring criteria should reflect the nature of the Cree labour force and adequate training should be offered.</li> <li>- The need to speak French, produce competency cards and credentials, undertake safety courses or drugs and alcohol tests.</li> <li>- There are few jobs available for women, and there are few Crees employed in the forest sector.</li> <li>- Communities may lose a segment of their labour force when Crees leave to take jobs with outside companies.</li> </ul>
3. Business opportunities for Cree communities	<ul style="list-style-type: none"> <li>- Current process for awarding contracts does not allow equal opportunity for bidders (e.g. Crees cannot compete with large companies or with firms created in partnership with Band Councils). And, proponents may have procurement protocols that restrict contracting with Cree companies. There is a need for economic development plans that are in the best interest of Cree communities and contractors, as well as local and regional procurement policies.</li> <li>- Cree companies are not always able to obtain contracts for large projects due to the lack of a skilled workforce, or of organizational support to obtain them (e.g. certification needed to vie for public contracts).</li> <li>- Proponents may not consider or be aware of local and regional know-how or of the services that Cree companies can provide.</li> <li>- Intra-community conflicts may arise when contracts are awarded. Some feel that affected Tallymen should be given preference.</li> </ul>
4. Absence / maximization of local and regional economic benefits	<ul style="list-style-type: none"> <li>- Resource exploitation occurs in Cree territory, but others reap the majority of the economic benefits. However, some Cree stakeholders may not have the capacity to derive maximum benefits from projects.</li> <li>- More jobs must be reserved for the Crees and local companies must be more involved.</li> <li>- Fly-in / fly-out operations should be avoided, and the recycling of mining by-products and the development of new 'green' sectors such as ecotourism should be promoted.</li> <li>- The Crees appreciate that fluxes in metal prices affect the fate of mineral development projects. They fear that the boom-and-bust cycle of mineral development will threaten jobs as well as the potential economic benefits of individual projects.</li> </ul>

## Theme nº 2 – Socioeconomic Concerns

Issue	Specific Cree Concerns
5. Community life and the creation of socioeconomic inequalities	<ul style="list-style-type: none"> <li>- The Crees often associate development projects with a loss of control over their ancestral land. This feeling is partly due to the unequal power relationship between, for example, the local communities and large mining companies. The Cree feel that they do not negotiate as equals, on an equal footing, and question how much influence they actually have over development projects.</li> <li>- Developments pose risks to the integrity of Cree culture and health due to their connection with the land. Projects can cause serious psychological effects if they cause environmental impacts.</li> <li>- Project-related jobs have raised incomes of certain families, but have created unprecedented socioeconomic inequalities and tensions within the communities. Financial compensation should be distributed equitably in order to avoid the stated socioeconomic inequalities.</li> <li>- Higher incomes may be partly responsible for new relationships of ‘power’ within communities and may have contributed to the diminishing recognition of the traditional skills of Tallymen and Elders</li> <li>- Increased incomes have led to a ‘non-traditional’ system of social stratification, manifested in increased consumption of consumer goods, overspending and indebtedness, substance abuse, and marital problems.</li> <li>- Men have generally gained more from employment opportunities and higher incomes than women (concern for gender inequality).</li> <li>- Crees who take jobs outside of the community are not implicated in community life.</li> <li>- The influx of non-Aboriginal project workers in Cree communities has raised concerns regarding the capacities of local infrastructures to support them (especially health and social services).</li> </ul>
6. Issues related to workplaces and employment / working conditions	<ul style="list-style-type: none"> <li>- Employment at distance from Cree communities affects Cree family-life and the pursuit of traditional activities.</li> <li>- Discrimination / racism, lack of respect for Cree culture, and the language barrier are major obstacles to Cree integration in the workplace and to sound inter-worker relations. Employers should adopt policies that promote cross-cultural relationships.</li> <li>- Habits of non-Cree workers have raised concerns (e.g. illegal hunting and fishing, big game hunting from helicopters, excess snowmobiling and the disruption of Cree activities).</li> <li>- Poor living conditions in work camps have been raised (e.g. insufficient space and housekeeping, few traditional meals, rare opportunities for practising traditional pursuits, noise).</li> </ul>
7. Protection of important cultural and ecological sites	<ul style="list-style-type: none"> <li>- The protection of culturally-significant sites preserves the history and identity of the Cree, and ensures that knowledge is passed down to future generations. Archaeological surveys must be conducted with the collaboration of the Cree before in-field project-related works begin (artifacts should be preserved in an appropriate manner).</li> </ul>

### Theme nº 3 – Health and Safety Concerns

Issue	Specific Cree Concerns
1. Ecotoxicology risks	<ul style="list-style-type: none"> <li>- Risks of contamination by project-related accidents, effluents, and emission – e.g. chemical spills, water contamination by radioactive materials or toxic metals, and air pollution – are a major concern given that they may affect human health, especially when near Cree communities. The Cree want to be informed of all potential contamination risks.</li> <li>- Crees should have access to the emergency measures and evacuation plans established by proponents.</li> </ul> <p>N.B. The past experiences of the Cree have had a major influence on their great concern regarding contamination (e.g. Mercury from the hydro projects, and the discharge of mining wastes following the Opemiska dyke failure).</p>
2. Security of the project site	<ul style="list-style-type: none"> <li>- Measures to ensure the safety of land users and wildlife near projects are required(e.g. security barriers around the perimeter)</li> <li>- Measure to limit noise from project-related facilities and operations as well as project-related facilities are also a concern.</li> </ul>
3. Community and worker health and safety	<ul style="list-style-type: none"> <li>- Occupational health at project sites is a constant concern, especially if workers are in contact with hazardous materials or contaminants (e.g. radioactive materials, nefarious chemicals).</li> <li>- Health problems associated with a ‘modern’ and increasingly sedentary lifestyle are major concerns (e.g. diabetes, obesity).</li> </ul>
4. Impacts of projects on land users’ safety	<ul style="list-style-type: none"> <li>- Safety concerns revolve primarily around travel safety and continued access to the land:               <ol style="list-style-type: none"> <li>a. Projects alter natural conditions and create unexpected hazards (e.g. unsafe boating / snowmobiling conditions due to reduced or altered flows of rivers);</li> <li>b. The siting of the projects may restrict access to areas where traditional activities were pursued and may contaminate such areas (e.g. Mercury contamination) thus posing a risk to workers and other land users ;</li> <li>c. Workers travelling on the land may not be clearly visible to other land users (a hazard whenever firearms or machinery are also present).</li> </ol> </li> </ul>
5. Effects of increased traffic on road safety	<ul style="list-style-type: none"> <li>- Vehicular accidents have increased in light of heavier traffic and the expanding road network. Safety measures may be inadequate.</li> <li>- Vehicular and aircraft traffic affects wildlife and poses risks of contamination (e.g. disturbance, flammable material hazards).</li> </ul>

## Theme nº 4 – Land and Resource Use Concerns

Issue	Specific Cree Concerns
1. Impacts of projects on land use	<ul style="list-style-type: none"> <li>- Traditional pursuits are still central to the Cree way of life / identity, even if the number of Crees pursuing them on a <u>full-time basis</u> has decreased. <u>The ability and freedom to use the land is a constant concern, one that hinges on ecosystem conservation.</u></li> <li>- Hydro projects affected vast areas. The land has been fragmented, camps, and sites of value have been lost. Harvesting carried out in these areas has been jeopardized. Camp relocations have concentrated harvesting in certain areas, impeding land protection and sustainable resource use.</li> <li>- Mistrust of the quality of wildlife resources in areas affected by mineral development due to contamination or destruction of the land, and their related disturbances. This concern is exacerbated by the legacy of abandoned mining sites and by the perceived lack of communication between proponents and the Cree regarding the contamination risks associated with such projects.</li> <li>- Forestry has affected water courses (e.g. poor culvert construction, more erosion and siltation), this pushing wildlife away, reducing harvests, and leading to economic hardships. And, because wildlife is seen to be in poor health in forestry areas, there are concerns for the health of those that consume them.</li> <li>- The Cree do not receive any royalties from forestry, they are not guaranteed forestry training or jobs, and there are no provisions made for community development under the forestry regime.</li> </ul>
2. General changes in land use / transmission of knowledge	<ul style="list-style-type: none"> <li>- Increased access to the territory via the expanding road network and new, faster, means of transportation have enabled Crees to pursue traditional activities closer to the communities and without having to stay on the land for long periods.</li> <li>- Increased access has enabled an influx of greater numbers of non-Aboriginal hunters. This influx has strained relations between the Cree and the said non-Aboriginals (e.g. the Cree have noted a lack of respect for game on the part of Non-Aboriginals hunters).</li> <li>- The role of the Tallymen has changed and their authority and influence has diminished. They have had to make room for ‘political’ actors, and proponents have not respected or listened to their insights. As such, some have stated that the Tallymen no longer have adequate control over the harvests of both Cree and non-Aboriginals hunters.</li> <li>- The changes incurred by projects have made transmission of traditional knowledge to Cree youth more difficult, if not impossible. Traditional knowledge is specific to a given area. When the area has changed irreversibly, destroyed or otherwise lost, the corresponding traditional knowledge becomes obsolete.</li> </ul>
3. Increased access to and opening up of the territory	<ul style="list-style-type: none"> <li>- Increased access to the land has advantages and disadvantages. Cree land users can more easily access areas for traditional pursuits, but it has also resulted in the fragmentation of the landscape and an influx of non-Aboriginal hunters and fishermen.</li> <li>- In light of the increased wildlife harvesting pressures due to an influx on non-Aboriginal hunting, the Cree fear overharvesting.</li> <li>- Concerns regarding the security of Cree camps (theft and vandalism has been reported).</li> </ul>



## Theme nº 5 – Cree Involvement Concerns

Issue	Specific Cree Concerns
1. Cree involvement in projects	<ul style="list-style-type: none"> <li>- Despite the special status of the Cree during project assessments and reviews (art. 22.2.2 JBNQA), the Cree feel that they are not participating in a meaningful manner during the said assessments and reviews. They are rarely informed about the content of impact statements, and do not know if their concerns are reflected in the statements or in planned mitigation measures.</li> <li>- The Cree want to be informed, consulted and involved at every stage of a given project, and during the decision-making process. This includes before, during and after the preparation of environmental and social impact statements, and in environmental follow-up committees. Tallymen must also be systematically consulted for all projects that the affect their respective traplines.</li> <li>- The Cree want to be involved in determining compensation measures / funds to ensure that these cover all project-induced impacts.</li> <li>- The Cree want to be consulted on any planned activities on their traplines, on proponent-driven rules or protocols regarding the hunting and fishing practices of workers, and on forestry planning.</li> <li>- On the matter of ‘how’ to consult the Cree, several concerns were raised:               <ul style="list-style-type: none"> <li>a. In some cases, project schedules are too rigid or subject to overly-stringent deadlines; there is insufficient time to allow for meaningful participation and dialogue (i.e. project schedules should be more flexible).</li> <li>b. Some Crees prefer group consultations, while others prefer one-on-one interviews (i.e. proponents should be flexible)</li> </ul> </li> </ul>
2. Dissemination of project information	<ul style="list-style-type: none"> <li>- Dissemination of project info is decidedly lacking, it is a major deficiency in the communication between the Cree and proponents. The following info is often not provided to the Cree:               <ul style="list-style-type: none"> <li>a. Job openings and required services;</li> <li>b. Risk of accidents;</li> <li>c. Environmental data and the anticipated environmental impacts;</li> <li>d. Permits/licences issued and decisions to proceed with the project or not.</li> </ul> </li> <li>- Fear and scepticism regarding the facts, risks, and potential impacts of proposed projects is a constant. The Cree require a clear understanding of proposed projects and perceived impacts. They thus want a communication process that is transparent, in order to develop an open and ongoing relationship with proponents. In this perspective, the information transmitted to the Cree about projects must be translated, easy to understand and available at all times.</li> </ul>
3. Monitoring / follow-up programs	<ul style="list-style-type: none"> <li>- Follow-up and implementation of mitigation and compensation measures are decidedly lacking due to the infractions witnessed by the Cree over the years. The Cree, and especially Tallymen, want to be involved in follow-up committees to ensure that obligations are met and that traditional knowledge is integrated in project monitoring and follow-up initiatives.</li> </ul>