Thank you to the Joint Review Panel for holding these important community hearings about the proposed Site C Clean Energy Project.

And thanks to the McLeod Lake Indian Band for hosting these hearings in their traditional territory.

My Background
I am a folklorist with professional experience working with First Nations in Alaska, and British Columbia since 2001; and I have extensive knowledge of subarctic Athapaskan cultures. Prior to my specialization in folklore I worked as a consulting archaeologist for eight years.

I hold an MA in Folk Studies (2002, Western Kentucky University), a BA in Anthropology and Geography (1992, University of British Columbia) and I am currently a PhD candidate at Memorial University of Newfoundland studying Danezaa (neighbours and relatives to the Tse’khene) use of technology for conserving and innovating their Dreamers’ song tradition.

I began working with the McLeod Lake Indian Band in 2004 on a Heritage Resource Overview study of their reserve lands, which involved extensive oral history documentation and traditional activity mapping.
2. **Figure (BC Hydro’s Current Use of Lands and Resources for Traditional Purposes Local and Regional Assessment Areas)**

**Study Area**

Today I am going to summarize the results of my recent Traditional Land Use Study (2013) which has identified McLeod Lake Indian Band heritage values associated with the Site C Clean Energy Project and associated areas of anticipated ecological impacts.

In addition to the development areas expected to be directly impacted by building and flooding activities associated with the proposed construction of the Site C Dam, (such as the dam itself, an 83 Km long reservoir, access roads, quarries and borrow areas, and transmission lines), the MLIB community is concerned about significant ecological effects extending beyond the Local and Regional Assessment Areas (LAA, RAA) outlined by BC Hydro for their valued component relating to Current Use of Lands and Resources for Traditional Purposes.

3. **Figure (Study Area Label)**

4. **Figure (Study Area)**

So that I could take into account all community concerns and traditional ecological knowledge put forward in relation to the Site C development I extended the study area to include community concerns outside of the area considered by BC Hydro in their EIS.

I suggest that the methodology used by BC Hydro to assess their development’s potential effects on Treaty Rights and practices is extremely problematic: The methodology restricts the area of assessment and does not provide room to consider ripple effects to adjacent plant and animal communities and their ecosystems.

My presentation will address MLIB’s relationship to the Site C development areas in terms of:

- Historical Use
- Present Presence, Traditional Use, and Heritage Values
- Damages to Access and Use caused by the W.A.C. Bennett Dam and the Peace Canyon Dam which were created in 1968 and 1980 respectively.
Historical Presence
Ethno-historical, ethnographic and Department of Indian Affairs documents identify the “Sekani” as nomadic kinship-based groups who followed seasonal hunting and gathering rounds within biologically diverse ecological zones associated with the Parsnip and Finlay River watersheds of the Rocky Mountain Trench and territories adjacent to the Peace River east of the Rocky Mountains (Robin Ridington and Jillian Ridington 2012:2). McLeod Lake people used the large rivers in their territories such as the Parsnip, Finlay and the Peace River as transportation corridors, and also used an extensive overland trail network.

An example of this historic presence in the Peace River area is contained in oral histories about “first contact” recorded by Diamond Jenness in 1924 which place a group of McLeod Lake people at Moberly Lake in the early 1800s, and clearly establishes their historical presence within the LAA and RAA associated with the Site C project.

Numerous genealogical connections between McLeod Lake people and communities closer to the site C project such as Moberly Lake, and Halfway River also show that McLeod Lake people had a historical presence in the area (Agnes Solonas 2013, Josie Tylee 2013, Sam Chingee 2012, Douglas Chingee 2012, Darlene Solonas 2012, Harry Chingee 2013).

Prehistory/Archaeology
The archaeological potential for significant, irreplaceable, archaeological resources in the development area is high.

This can be seen in the predictive models showing archaeological potential that have been prepared by archaeologists for the North Peace Region.

The Site C areas has High Potential for:

- Stratified sites establishing the record of how people have spread across North America since the last glacial period such as:
  - those found at Charlie Lake (one of the oldest sites of human occupation known in North America)
o HaRk1 at Farrell Creek which revealed the presence of stratified buried cultural components, separated by thick layers of sterile deposits – likely to be missed by methodologies which stop excavating when the first layer of “sterile” deposits are encountered.

9. Figure

10. Figure

11. Figure

12. Figure

13. Figure

- Proto-historical and ethno-historical sites that could inform recent occupation patterns:
  - A number of historic sites have not been assessed by BC Hydro’s archaeology team because they are located on private property or because of incomplete design plans at the time of assessment (Golder 2012:68).
  - This includes HaRl-4 (Rocky Mountain Portage House) which is a trading post that McLeod Lake people are known to have visited.
  - This historic site, along with most of the others, identified by Golder are of interest to MLIB because they are likely to reflect their involvement in the fur trade.

Because the pre-contact use of the western subarctic is poorly understood at this time significant archaeological resources documenting the heritage of the MLIB and other First Nations will be lost if the development is to be approved.

14. Figure

TLUS Oral History Interviews / Sample
A total of thirty-nine (39) MLIB community members from three generations were interviewed to identify traditional use areas and traditional knowledge maintained by the community of the lands that will be directly and indirectly affected by the proposed Site C hydroelectric development, should it go ahead as proposed.

The study sampled twenty-one percent (%21) of the 180 adult MLIB members living in northern BC, plus one band member living in southern BC.

The band members consulted include twelve elders, fourteen middle aged adults, and thirteen young adults.
TLU Findings / Present Presence and Traditional Use
I found that fourteen of the thirty-nine (14/39) adults consulted, or thirty-six percent (%36) of the sample, have traditional use activities within the areas that will be directly affected by the Site C Clean Energy Project.

15. Figure

16. Figure

Traditional Use Activities
These traditional use activities include:
- hunting,
- fishing,
- gathering,
- habitation (camping),
- travelling (foot, boat, vehicle, ATV)
- other intangible heritage activities.

17. Figure Species harvested-animal

18. Figure - Species harvested-plant

19. Figure – Traditional Activity Map

All (39/39 or %100) of the band members consulted maintain historical heritage values which are attached to the Peace River Landscape within the proposed project zone through oral histories about the place. These oral histories refer to specific people (relatives) and events that have taken place there. Many of these oral history connections date back multiple generations. This type of intangible heritage value has been mapped here as “other heritage values.”

Generational Use Trends
Trends emerged from the oral histories showing similarities in traditional use and experiences based on the consultant’s age group, or generation.

Elders
Elders describe their traditional seasonal rounds integrated with the fur trade that brought them along the large river network in their traditional territory (Parsnip, Finlay, and Peace). They used the big rivers as travel corridors to access riparian areas along tributary drainages and worked family traplines along these tributaries during the fall and winter months. In the summer they would transport their furs to a fur buyer at a trading post. They also travelled by foot into the mountains in the summer months to hunt, fish, gather berries and medicines, and to meet up with
relatives utilizing different areas and resources such as people from Moberly Lake, and Halfway River.

Elders tended to have detailed knowledge and personal experiences directly related to places they spent time at and travel corridors (river and overland trails) leading up out of the mountains towards the plateau areas north and east of McLeod Lake. They often mentioned Tse’khene place names and traditional means of transportation such as dog sleighs on frozen rivers, foot paths, portages, rafts, dugout cottonwood canoes, and river boats. They talked about learning how to craft boats, rafts, fishnets, snowshoes, stone tools and many other objects associated with their traditional practices from family members, and learned through doing.

I don’t have enough time to share information from all the consultants, and I expect that they will share details here today.

**Middle Generation**

The following generation of adults who are now middle-aged tended to spend less extended periods of time on the land after they were school aged. Their generation was routinely forced to attend the Lejac Residential School, and were taken away from their families and traditional lifestyle for 10 months of the year.

Compounding this separation from traditional practices on the land, their families traditional activities along the Parsnip, Finlay and Peace River drainages were massively disrupted by the flooding of their main hunting and trapping areas by the creation of the Williston Reservoir and the W.A.C. Bennett Dam when they were still young.

The disruption in personal use of some traditional areas can be explained by the effects of residential school and the construction of the W.A.C. Bennett Dam and Williston Reservoir and the collateral social disruption.

However a great deal of traditional knowledge has still been passed along through oral histories. For instance, Alec Chingee recalls his grandpa, Duncan Toodick, talking about going east of the mountains to hunt buffalo. He also recalls his grandpa telling him about taking his furs to Fort Dunvegan on the Peace River close to the Alberta border because that fort had better goods for trade there – better than the trade goods available at the McLeod Lake post closer to home. This is just one example of how oral histories establish MLIB historical presence and use of the Peace River and Site C development areas.
Young Adults

Within the younger generation of adults that I interviewed, there seems to be a resurgence of traditional hunting and gathering activity, along with a push towards vitalizing traditional practices associated with cooking and preparing game, and with traditional childcare and child education.

Because of cumulative effects of deforestation, road construction, mining, transmission lines, and pipelines in their more southern territories, McLeod Lake’s northern territories along the Peace River are indeed valued for their diversity of animals, plants and birds, and abundance of natural resources.

Terra Tylee and Ben Jackson, Andrea Jackson, Teddy Inyallie, Yasmin Prince and Jolene Solonas all rely on hunting, fishing and gathering along the Peace River as a major source of food – and feel like they are running out of viable hunting, gathering and fishing areas within MLIB territory. They are also very concerned about opening up the Peace River area to additional hunters via the proposed access roads and transmission lines.

All the young people I consulted with have either begun, or plan to, show their children the Peace River and teach them Tse’khene traditional practices there.

Traditional Ecological Knowledge (TEK)

TEK is informed by a great deal of intergenerational knowledge as well as personal observations of an ecosystem. It tends to have a holistic perspective that comes from long term practices that monitor changes in the environment and ecology.

Because of their first-hand experiences of the effects of turning a large river system into a lake, as was done for the Williston Reservoir, MLIB people are aware of how managing the water supply for the proposed dam through a controlled water system will affect the land and its plant and animal ecosystems.

For example, Sundance Inyallie worries that the proposed reservoir for the Site C dam will create, “a huge wall... like the Great Wall of China” that will cut off important large-animal migration routes for Caribou, Moose, and Elk, already disrupted by the creation of the Williston Reservoir. Most other consultants shared these concerns about effects to sensitive ungulate riparian feeding grounds, river crossings, and migration routes as well (Sundance Inyallie 2012).

Sam Chingee expects that packs of wolves will move into this new extensive winter lake environment and will hunt the ungulates that try and cross the frozen reservoir during the winter months. He has seen that type of wolf behavior both on the Williston Reservoir and on McLeod Lake over the years. Sam explains that wolf habitat creation and expansion will further reduce the population of ungulates which McLeod Lake people rely on for meat (Sam Chingee 2012).
Similarly, Alec Chingee is concerned about the disappearance of moose calving areas on the islands in the Peace River. He notes that without these protected areas where moose can protect their young, more young moose will fall prey to predators. He, like all other consultants, is also concerned about reservoir bank instability and erosion within the proposed Site C reservoir.

Alec, like other MLIB members such as Jenine Solonas (2012) Ben Jackson (2012), Elizabeth Solonas and Fred Inyallie Sr. (2012) knows from his more than forty years observing the Williston Reservoir that fluctuating reservoir water levels and associated reservoir bank instability inhibits ecological stabilization and the rejuvenation of the riparian environments that support reliable animal populations for hunting and trapping (Alec Chingee 2012).

All consultants worry about increased mercury levels in fish as well as other wildlife living in and around the contaminated waters of the reservoir.

A recent study found that only one out of every six fish caught in the Crooked River had mercury levels that are considered safe for human consumption. Additionally, the study found that mercury concentrations were far higher, and far more dangerous for human consumption, in the larger bull trout sampled (West Moberly First Nations 2012).

Josie Tylee currently limits the amount of beaver meat, and moose meat that she eats, just as she limits her intake of fish, because beaver and moose eat the trees that grow in the riparian areas and wetlands associated with the contaminated Williston Reservoir and she feels that these animals are bound to be contaminated as well (Josie Tylee 2012).

There are only two McLeod Lake families reported to still trap in places along the Williston Reservoir.

20. Figure - Adverse Effects on Traditional Use and Heritage Values

I have concluded that development activities such as ground removal, ground alteration, and transformation of the headwaters of the Peace River into a hydroelectric reservoir, along with expected far-reaching ecological effects on plants and wildlife, will:

- have a direct economic effect on the segment of the population who harvest country foods from the area, as well as other band members who they share country food with.
- Further disrupt the transmission of traditional cultural practices resulting in an irreparable loss of Tse’khene culture.
• Impair the ability of MLIB people to exercise their treaty and aboriginal rights: To hunt, fish, trap and carry out other traditional activities in their preferred locations and by their preferred means.
• Result in the loss of significant, irreplaceable, archaeological resources.

21. Figure - Thanks

Summary
Overall, I found that the area of Peace River where the Site C project is proposed is a significant heritage landscape for McLeod Lake Indian Band members, and is the only remaining large river and riparian riverscape within their traditional territories.

The upper Peace River historically was one of the regions used by MLIB peoples during their seasonal rounds. It has become a favoured hunting, fishing and gathering location for many younger band members, who now prefer to travel to their northern territories to hunt, fish and gather because of concerns about overhunting in their territories closer to the MLIB reserve.

Cutting off MLIB access to their last large natural river and riverscape, and its associated wildlife, plant, and heritage resources, would affect their ability to continue with their traditional activities in their preferred locations. Additionally, anticipated wildlife and plant disturbances beyond the areas of the LAA and RAA will affect game animals, fish and plant communities and will have a negative impact on MLIB peoples’ ability to hunt, fish and gather in their preferred locations within their traditional territories.

References
Please refer to my 2013 TLUS report on file with MLIB and BC Hydro:

Heritage Values Summary
McLeod Lake Indian Band TLUS for
BC Hydro's Proposed Site C Clean Energy Project

Site C Joint Review Panel Presentation
December 18, 2013

Amber Ridington
BA, MA, PhD Candidate Memorial University of Newfoundland
BC Hydro Defined Assessment Areas
Traditional Land Use (TLU) Study Area

- Site C plans / development footprints (LAA)
- Site C Traditional Land Use Assessment Boundary (RAA)
- MLIB traditional territory boundary marker
- McLeod Lake IR 1

Map prepared by DPI Territorial, 2013.
Traditional Land Use (TLU) Study Area

- Site C plans / development footprints (LAA)
- Site C Traditional Land Use Assessment Boundary (RAA)
- MLIB traditional territory boundary marker
- McLeod Lake IR 1
- Map prepared by DPI Territorial, 2013.
Historic Trail Networks mapped by:
- G.W. Dawson (1881)
- A.G. Morice (1907)
- MLIB members (2004)

Shows overland travel networks recorded ~100 years after 1st white contact in 1793
Tse'k'emene men with Moose Skin Boat, Fort Graham, 1920s.

Fort Graham is now flooded out by the Williston Reservoir.

Joe Iglint, 2nd from left, identified by Zepheria Isodore and Ivor Smooslet.
Archaeological Potential Map showing Predictive Model Results:

- high potential areas in red
- moderate potential areas in yellow
Archaeological Potential Map showing Predictive Model Results:
- high potential areas in red
- moderate potential areas in yellow
Diagram showing the location of Charlie Lake Cave & radio-carbon dated bison remains from two separate bison populations which merged in the area. This diagram shows the significant potential of the Peace River area to contribute to world history and the migration of people into North America. Image courtesy, Dixon 2013:60.
Spear head located by Elizabeth Solonas and Fred Inyallie Sr. on the eroded bank of the Williston Reservoir. Ongoing disturbance to these archaeological resources from erosion compromises their ability to contribute to the record of human history. Photo by Amber Ridington. Catalog No. MLIB-TLUS-DP-5D-11_21_2012 (7).
Fort McLeod in 1879. This trading post was first built in 1805 by the Northwest Company. The location for the post was chosen by Tse’khene people who the Company men had met earlier that year along the Upper Parsnip River (Jenness 1924:45). The fort is now a National Historic Site of Canada. Photo courtesy Parks Canada and the Geological Survey Collection: http://www.historicplaces.ca/en/rep-reg/place-lieu.aspx?id=16523.
Fort Dunvegan on the Peace River, Alberta. The trading post was built in 1805 and has been recognized as a National Historic Site of Canada because of its role in the fur trade. Some MLIB-Tse’khene people travelled to this fort to trade. Photo courtesy, Provincial Archives of Alberta (B. 2828) available online at: http://www.historicplaces.ca/en/rep-reg/image.aspx?id=18983.
All traditional activity areas currently used by the 14 MLIB Members who utilize the Site C development areas (LAA and RAA).

See activity key below.
Animals hunted in the Site C area by the 14 MLIB consultants

Species harvested include:

| Fungus from diamond willow trees | Valsa sordida (probable willow fungus)  
| Salix bebbiana (diamond willow tree) |
| Labrador tea | Ledum groenlandicum or Ledum palustre decumbens |
| Muskeg peat | Sphagnum sp. |
| High bush cranberries | Viburnum edule |
| Saskatoon berries | Amelanchier alnifolia |
| High bush blueberries | Vaccinium corymbosum |
| Low bush blueberries | Vaccinium caespitosum |
| Raspberries | Rubus sp. |

Plants gathered in the Site C area by the 14 consultants.
All traditional activity areas currently used by the 14 MLIB Members who utilize the Site C development areas (LAA and RAA).

See activity key below.
Adverse Effects on MLIB Traditional Use and Heritage Values

- Negative economic effect on the segment of the population who harvest country foods from the area, and other band members who they share country food with.

- Landscape, riverscape and ecosystem destruction will disrupt MLIB peoples' traditional cultural practices in the Site C area and result in an irreparable loss of Tse’khene culture.

- Impair the ability of MLIB people to exercise their treaty and aboriginal rights: To hunt, fish, trap and carry out other traditional activities in their preferred locations and by their preferred means.

- Result in the loss of significant, irreplaceable, historic and prehistoric archaeological resources.
Thanks to

- All the MLIB consultants who contributed to this study!
- DPI Territorial for map production